

Final Evaluation Report of the NEST Project:

Implementation and Effects of an
Adaptive Mentor Training
Programme for Novice Teachers at
Disadvantaged Schools in Seven
European Education Systems

[5.3.4 REPORT 4]

[WP5]

Due date: 02/2024

Responsible Partner: University of Duisburg-Essen

Dissemination Level: Public



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Co-funded by the
Erasmus+ Programme
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Deliverable Description

This deliverable is the final evaluation report of the NEST project. The report is preceded by an abstract and general key takeaways. The report starts with an executive summary. It is followed by a chapter which consists of three sections. The first section gives an overview of the reasons for developing a mentor training programme and the subsequent development, implementation, and evaluation design of the NEST project. The second section outlines the NEST interventions and the theory of change. The third section describes the methodology of the evaluation. It includes the research design and the constructs and methods of analyses used. The section also includes guidance on how to read the report (e.g. how to interpret results or read figures). The methodology section ends with a description of the overall NEST sample and an overview of evaluation results. The following chapters comprise the individual reports for each education system which participated in the NEST project. These are ordered alphabetically first by country, then by region. All reports are structured into sections discussing context, preconditions, processes, and outcomes. The first section of each report starts by examining the role of mentoring in general in the context of the respective education system and analyses whether mentoring can be a promising strategy for this education system given the current preconditions for the NEST project. The next section analyses processes and examines how well the NEST mentoring was implemented compared to regular mentoring at schools in the respective education system. The last section of the reports observes the outcomes of the NEST project in terms of the effects of the NEST mentor training programme on the mentors and the effects of NEST mentoring on novice teachers. The evaluation reports for all education systems except Austria are based on quantitative data collected during the project via online surveys. The evaluation report for Austria is predominantly based on qualitative data. Due to the small sample size in Austria, it was decided to conduct an additional interview study. To provide context for the interviews, this country report begins with an overview of Austria's school education system followed by a selection of statistics concerning Austrian mentees and mentors. Relevant metrics were selected regarding their focus on mentoring processes and motivations for partaking in the programme. After a description of the interview methodology, the interview results are presented, highlighting both the positive and negative facets perceived by novice teachers and mentors who participated in the NEST programme. Each individual country report closes with a brief discussion of findings. This final evaluation report closes with an overall discussion.

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ABBREVIATIONS AND ACRONYMS

Abbreviation/Acronym	Description
CG	Control Group
EC	European Commission
IG	Intervention Group
M	Mean
M_{IG}	Mean for Intervention Group
$M_{CG_ment}; M_{CG_exp}$	Mean for Control Group with Mentor Support/Expert Support
$M_{CG_no_ment}; M_{CG_no_exp};$	Mean for Control Group without Mentor Support/Expert Support
M_{IG_m}	Mean for Mentor Intervention Group
M_{CG_m}	Mean for Mentor Control Group
Mdn	Median
NEST	Novice Educator Support and Training
N_{ctrl}	Number of Participants in Control Group
N_{int}	Number of Participants in Intervention Group
N_{Min}	Minimum Number of Participants who Answered a Question / Statement
ns	Not Significant
SD	Standard Deviation

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Abstract

The Novice Educator Support and Training (NEST) project is an ERASMUS+ policy experiment which is co-funded by the European Commission. Within the scope of the project, seven education systems (Austria, Belgium [Flemish Community and the Wallonia-Brussels Federation], Bulgaria, Romania, and Spain [Catalonia and the Community of Madrid]) planned the development and implementation of an adaptive mentor training programme to train mentors in supporting novice teachers who work at disadvantaged schools. The mentor training should subsequently facilitate the implementation of an effective mentoring programme for novice teachers working at disadvantaged schools using the specially trained mentors. This report describes the overall evaluation results of the NEST mentor training programme and of the resulting NEST mentoring. NEST mentors were followed over the course of two school years, and two consecutive cohorts of novice teachers were followed over the course of one school year each and filled out online surveys. This approach enabled the evaluation of the development of NEST mentors and their novice teachers. In addition, a control group of mentors and a control group of novice teachers were surveyed to allow for comparisons between the mentors who were taking part in the training and the novice teachers who received the resulting mentoring and comparable groups of mentors and novice teachers who did not have this opportunity. The evaluation yielded numerous positive results with regard to participants' satisfaction with the training programme and their professional development regarding professional competences and practices.

General Key Takeaways from the NEST Project...

...Regarding the NEST Training Programme

- NEST mentors in all education systems agree that the NEST mentor training helped them to adapt their mentoring approach to the personality of the novice teacher or the social situation in the classroom.
- NEST mentors (if they were also teachers) agree that the NEST mentor training improved their own teaching practice.

...Regarding Mentors

- In the education systems where experienced teachers can decide for themselves whether they want to mentor or not (Flemish Community, Wallonia-Brussels Federation, Romania), NEST Mentors want to spend a greater number of years mentoring than control group mentors.
- NEST mentors in most education systems have higher levels of enthusiasm for mentoring after two years than mentors in the control group.
- NEST mentors in most education systems have higher self-assessed mentoring competence after the NEST training, while control group mentors' mentoring competence either decreases or stays the same over the same time period.

...Regarding the Assessment of Mentors from the Perspective of Novice Teachers

- In most education systems, novice teachers with a NEST mentor perceive a higher level of focus of their mentoring on specific challenges than novice teachers in the control group.
- In most education systems, novice teachers with a NEST mentor perceive a better fit between their own mentoring needs and the mentoring practices used by their NEST mentor than novice teachers in the control group.
- In most education systems, novice teachers assess their NEST mentors' mentoring competence higher than novice teachers in the control group.

...Regarding Novice Teachers

- In some education systems, novice teachers with a NEST mentor have a greater level of professional resilience than novice teachers in the control group.
- In some education systems, novice teachers with a NEST mentor significantly increase their teaching competence over the course of one school year, while the teaching competences of novice teachers in the control group decrease or stay stable during the same time period.
- In some education systems, novice teachers with a NEST mentor declare a higher willingness to stay in the teaching profession than novice teachers in the control group.

1 Executive Summary

The Novice Educator Support and Training (NEST) project is co-funded by the European Commission as an ERASMUS+ policy experiment. For a policy experiment, governmental and non-governmental actors from several European countries which share a common challenge have to find a scalable solution to this challenge in terms of a new policy or intervention, which is then to be tested in comparison to the status quo.

In the case of the NEST project, the participating education systems (Austria, Belgium [Flemish Community and the Wallonia-Brussels Federation], Bulgaria, Romania, and Spain [Catalonia and Community of Madrid]) were struggling with high attrition rates among novice teachers, especially those working at disadvantaged schools. As a solution to this challenge, the seven education systems participating in the NEST project planned the development and implementation of an adaptive mentor training programme to train mentors in supporting novice teachers who work at disadvantaged schools. This training should subsequently facilitate the implementation of an effective mentoring programme for novice teachers working at disadvantaged schools using the specially trained mentors. The elaborate evaluation design included multiple instances of data collection for the same individuals. Mentors were followed over the course of two school years, and two consecutive cohorts of novice teachers were followed over the course of one school year each and filled out online surveys. This approach enabled the evaluation of the development of NEST mentors and their novice teachers. In addition, a control group of mentors and a control group of novice teachers was implemented to allow for comparisons between the participants who were taking part in the training and who received the resulting mentoring and the status quo of mentoring in the education systems.

In line with the NEST theory of change, the final evaluation of the NEST interventions considered data regarding *context*, *preconditions*, *processes*, and *outcomes*. Overall, the detailed evaluation of the NEST mentor training programme and NEST mentoring for novice teachers yielded numerous promising results.

Regarding context, the role of mentoring in general was examined in the participating education systems. For this purpose, data about the general level of acceptance of mentoring from the perspectives of the participating novice teachers and their mentors (*experts* in Bulgaria) was analysed. Furthermore, the expectations that both groups had about what attributes would be important for a good mentor were examined. The data analyses for the participating education systems show that novice teachers and mentors had very similar opinions about the general acceptance of mentoring in their education system. In most education systems, both groups thought that mentoring was generally accepted; however, in Catalonia and in the Community of Madrid, novice teachers and mentors were more sceptical. They did not think that mentoring was generally well accepted in their education system. Novice teachers and mentors in all education systems had mostly similar opinions about which attributes are important for a good mentor. In most education systems, empathy and trustfulness were the attributes chosen most often by mentors and novice teachers. In Bulgaria, respectfulness was one of the attributes chosen most often. Flexibility was chosen more often by mentors than novice teachers in all education systems. Courage and curiousness were chosen least often as important attributes in all education systems.

We also examined whether mentoring could be a promising strategy for the participating education systems given the current preconditions for the NEST project.

The analyses of data bring to light very positive preconditions for mentoring in most of the education systems. First, the attitudes of novice teachers in all education systems towards mentoring were positive. They were open to the idea of being mentored and also convinced that they could benefit professionally from being mentored. Second, mentors in all education systems were enthusiastic about mentoring and taking part in novice teachers' professional development. In the Community of Madrid, Catalonia, and Romania, mentors in the intervention group already showed significantly higher levels of enthusiasm for mentoring before the training started compared to mentors in the control group. Since high enthusiasm for mentoring was one of the important characteristics within the mentor profile that was used to select appropriate mentors for the intervention group, this result indicates that mentor selection worked especially well in those education systems. Although enthusiasm was quite high before the training already, in Bulgaria, Romania, the Community of Madrid, and Flemish Community, mentors' enthusiasm increased even further after the mentor training programme.

At the same time, there seems to be a real need for support for novice teachers, especially for novice teachers working at disadvantaged schools. The evaluation shows that novice teachers did not feel sufficiently prepared by their initial teacher training for challenges such as teaching in multicultural settings, dealing with language barriers, or supporting socially and/or emotionally challenged students. Additionally, induction at school was not offered to the majority of novice teachers in most education systems. The percentages of novice teachers who were not offered any induction at their school varied greatly. In some education systems, such as the Community of Madrid and Bulgaria, only very little induction was offered. While in Catalonia and Romania, only a minority of novice teachers had access to induction programmes, the induction activities that were offered seemed quite extensive. In the Wallonia-Brussels Federation, slightly more than half of novice teachers reported that they had taken part in induction activities, and the Flemish Community was the only education system that seemed to have implemented induction activities for the majority of novice teachers.

To learn more about the school environment and the conditions under which novice teachers have to work at disadvantaged schools, novice teachers were asked which factors were hindering quality instruction at their school. Novice teachers in all education systems thought that their school's capacity to provide quality instruction was only slightly hindered by infrastructural or material factors such as inadequate classrooms, lack of text books or materials, or insufficient internet access. In general, novice teachers in all education systems saw more severe hindrances resulting from challenges regarding staff shortages, such as shortages of teachers with competence in teaching students with special needs, shortages of teachers with competence in teaching students in a multicultural or multilingual setting, or shortages of support personnel.

The data analyses also yield evidence to answer the main research questions that guided the evaluation:

1. Does the NEST mentor training programme improve mentors' mentoring skills?
2. Do novice teachers who are mentored by a NEST-trained mentor assess the mentoring they receive higher than a control group who receives mentoring from a mentor who has not been specially trained?

3. Do novice teachers benefit from NEST mentoring in terms of certain outcome indicators such as teaching competence, resilience, and willingness to stay in the teaching profession?

The evaluation of the implementation of the NEST mentoring programme compared to regular mentoring brings forth several answers with regard to the first and second research questions. With regard to the first research question, the analyses of the data show that intervention group mentors in most education systems increased the frequency of use of their various mentoring practices over time. In most education systems where mentors increased their use of practices, this was in favour of facilitative practices; i.e. in most education systems, mentors used fewer directive practices after the training programme. However, in Bulgaria, increases in the frequency of use of the more directive practices were greater than for the non-directive practices. Intervention group mentors in most education systems also increased the extent to which their mentoring focused on specific challenges after the training. Lastly, mentors in all education systems reported that the NEST mentor training programme helped them at least to some extent to improve their ability to adapt their practices to the situation of the classroom and the personality as well as the professional development needs of the novice teachers. In essence, there are several areas in which NEST-trained mentors improved their mentoring skills after the NEST mentor training programme.

Concerning the second research question, the analyses of the data show that even though novice teachers in the intervention group in all education systems reported fewer formal and informal mentoring conversations than novice teachers in the control groups, they assessed the time allocation and organisation of their mentoring conversations more favourably than novice teachers in the control groups did. Thus, more novice teachers in the intervention group than in the control group thought that their mentor had taken sufficient time for classroom observations and for the scheduled mentoring conversations. This variable proved to be a strong predictor for novice teachers' assessments of their mentors' mentoring competence. Further, compared to novice teachers in the control group, novice teachers in the intervention group in most education systems perceived a significantly higher focus of their mentoring on different challenges which can be prevalent at disadvantaged schools, such as engaging hard-to-reach learners. For most education systems, the evaluation also shows that novice teachers in the intervention group and their intervention group mentors had very similar perceptions about the focus of the mentoring being given or received. However, in some education systems, mentors felt that they were focusing their mentoring more than was perceived by novice teachers.

There is also evidence in the data of most of the education systems that compared to the control group, novice teachers in the intervention group perceived a significantly better fit between the frequency with which their mentor used certain mentoring practices and their own perceived need for such practices. In Austria, the qualitative interviews with seven NEST mentees validated quantitative survey results by indicating high levels of satisfaction with the mentoring, both regarding mentoring processes and outcomes. Lastly, in most education systems, novice teachers in the intervention group assessed their NEST-trained mentors' mentoring competence significantly higher than novice teachers in the control group. A regression analysis showed that the mentors' mentoring competence from the perspective of the novice teachers was assessed significantly higher the better the novice teachers rated the time allocation and organisation of mentoring, all else being equal. This was true for Catalonia, the Community of Madrid, Bulgaria, Romania, and the Wallonia-Brussels Federation. In Bulgaria, the model yielded the most significant predictors. Here, the next strongest significant predictor of strong mentoring competence was the extent of mentoring focus, i.e. the stronger novice teachers perceived their mentoring to have been focused on specific challenges, the higher they rated their expert's mentoring competence, all else

being equal. Moreover, the perceived fit between the frequency of mentoring practice used and the novice teachers' need for the practice had a significant effect on the assessment of mentors' mentoring competence, all else being equal. Novice teachers who were mentored by a NEST-trained mentor assessed the mentoring they received higher regarding several aspects than control group novice teachers who received mentoring from a mentor who had not been specially trained.

Finally, the evaluation concentrated on the outcomes of the NEST project in terms of the effects of the NEST mentor training programme on mentors and the effects of NEST mentoring on novice teachers. First of all, there is evidence in the data that NEST mentors in most education systems increased their self-assessed mentoring competence over time. Regarding the third research question, the analyses show that novice teachers in most education systems felt quite resilient even though they felt moderately exhausted with regard to their work. They were also satisfied with their school as a workplace, and the vast majority reported that they were planning on staying in the teaching profession. With regard to exhaustion, resilience, and willingness to stay in the teaching profession, there were only a few significant differences between intervention group and control group novice teachers. For instance, in Catalonia, novice teachers in the intervention group were significantly more resilient than novice teachers in both control groups. But mostly, these results are true for all novice teachers who participated in the project (i.e. both in the intervention group and in the control groups). With regard to the teaching competence of novice teachers, it transpired that all novice teachers assessed their teaching competences concerning student interactions better than their competences concerning parent support; in most education systems, novice teachers thought they had average abilities regarding student interactions but only basic abilities regarding parent support. However, in Catalonia and Romania, novice teachers in the intervention group had significantly higher teaching competences at the end of the school year than the control group without mentor support; and in Catalonia, this was also true for the control group with mentor support. In Austria, interviewed novice teachers reported that the NEST mentoring had made them more confident or more aware of classroom processes. In short, in some education systems, novice teachers benefitted from the NEST mentoring in terms of teaching competence and resilience; however, in most of the education systems, there were no significant differences between the intervention and control groups.

In conclusion, analyses of the mentor data show that the first NEST intervention, i.e. the NEST mentor training programme, improved intervention group mentors' mentoring skills in various ways. Analyses of the novice teacher data corroborate these results as intervention group novice teachers assessed their NEST-trained mentors and the mentoring they provided more favourably than control group novice teachers assessed their control group mentors. However, only some evidence in the novice teacher data could be found that shows the effects of NEST mentoring on the outcome variables for intervention group novice teachers. This is not surprising, since in the hypothetical causal chain of the theory of change, these outcome variables are further removed from the initial intervention (the NEST mentor training), than more immediate variables related to the mentors themselves. This means that the weak presence of evidence for effects at the level of the novice teachers can be seen as a positive, albeit tentative, result. The qualitative interview study brought some areas to light which show room for improvement, namely the duration, intensity, and structure of the mentoring. Almost all interviewed mentees wished for a larger number of mentoring sessions. Integrating additional forms of support might further optimise the programme.

2 Development, Implementation, and Evaluation of the NEST Project

The following section describes the reasons for developing a mentor training programme, the NEST project and the implementation of its two interventions as well as the NEST theory of change. Further, the section on methodology details the research and evaluation design of the NEST project and offers general information on the overall sample of novice teachers and mentors as well as overall evaluation results.

2.1 Reasons for Developing a Mentor Training Programme

Mentoring can be defined as ‘a support structure in schools where more experienced teachers support less experienced teachers’ (OECD, 2020, p. 127). Mentors should support novice teachers with mastering the challenges they face at the start of their teaching career. Based on a review of studies on the effects of induction programmes for initial teachers, Ingersoll & Strong (2011) indicated that mentoring positively influences teachers' engagement, their teaching practice, and student achievement. Yet on average, only 22% of novice teachers across OECD countries have an assigned mentor, and access to mentoring is unevenly distributed between different countries (OECD, 2019). Since teacher turnover and attrition are higher at disadvantaged schools, not having access to mentoring might be especially detrimental for beginning teachers at disadvantaged schools (Hall et al., 2020; Allen et al., 2018; Long et al., 2012).

The promising results of research into mentoring for novice teachers combined with the limited availability of such mentoring have led to calls for educational systems to foster and mainstream mentoring as a key attribute of teachers' professional work, as well as to engage in further research into this area (OECD, 2020; Schleicher, 2011). However, to reap the benefits of mentoring, education systems first of all need qualified mentors (Richter et al., 2013). It is for this reason that the NEST project developed a mentor training programme that focuses specifically on mentoring novice teachers working at disadvantaged schools. By encouraging mentors to adapt their mentoring focus and style to the specific needs of the novice teachers they mentor, the NEST mentor training programme hopes to improve the quality of mentoring since according to Richter et al. (2013) it is the quality of mentoring rather than the frequency of interaction that determines the successful start of a teacher's career.

2.2 The NEST Project

The NEST project is an ERASMUS+ policy experiment which is co-funded by the European Commission. The term ‘policy experiment’ means that governmental and non-governmental actors from several European countries which share a common challenge have to find a scalable solution to this challenge in terms of a new policy or intervention, which is then to be tested in comparison to the status quo.

In the case of the NEST project, the common challenge was high attrition rates among novice teachers, especially those working at disadvantaged schools. As a solution to this challenge, the seven education systems participating in the NEST project (Austria, Belgium [Flemish Community and the Wallonia-Brussels Federation], Bulgaria, Romania, and Spain [Catalonia and the Community of Madrid]) planned the development and implementation of an adaptive mentor training programme as well as the provision of adaptive mentoring to novice teachers working at disadvantaged schools. The project is managed by

Bulgaria as the managing partner. Overall, the project includes 16 partners which form a project consortium. In each participating education system, there is one *Teach For All* partner and at least one other partner from the educational sector, such as the ministry for education or teachers' unions (see Table 1). Within this consortium, each partner has different responsibilities and manages different work packages. The University of Duisburg-Essen (UDE) in Germany was responsible for evaluating the project. Project evaluation encompassed assessing existing mentoring structures, researching and describing the characteristics of disadvantaged schools in the participating education systems, and assessing the needs of novice teachers working at those schools. Moreover, the UDE's evaluation team assessed the impact of the mentor training programme (Intervention I) and adaptive mentoring for novice teachers (Intervention II) in the participating education systems.

Table 1: Project Partners in the NEST Project

Countries	National Teach For All organisation	Educational authority and further national project partners
Austria	Teach For Austria	Board of Education for Vienna
Belgium (Flemish Community)	Teach for Belgium	<ul style="list-style-type: none"> Agency of the Flemish Community Commission (VGC)
Belgium (Wallonia-Brussels Federation)		<ul style="list-style-type: none"> Ministry of Education of the Wallonia-Brussels Federation (FWB) Brussels Education Centre (OCB), General Secretariat for Catholic Education (SEGEC)
Bulgaria	Zaedno v Chas (Teach For Bulgaria)	<ul style="list-style-type: none"> Ministry of Education and Science Teachers' Trade Union, Labour Confederation 'Podkrepa'
Spain (Catalonia)	Empieza por Educar	<ul style="list-style-type: none"> Department of Education
Spain (Community of Madrid)		<ul style="list-style-type: none"> Department for Education and Youth
Romania	Teach For Romania	Ministry of Education and Research
International partners		
US/UK	Teach For All Global Network	
Evaluators		
Germany	University of Duisburg-Essen (UDE)	

2.2.1 The Interventions of the NEST Project

The following sections give an overview of the NEST mentor training programme and NEST mentoring. The mentor training programme was the first intervention of the NEST project. It was designed to teach mentors to implement adaptive mentoring for novice teachers who work at disadvantaged schools. This adaptive mentoring for novice teachers, in turn, comprised the second intervention of the NEST project.

2.2.1.1 The NEST Mentor Training Programme

The NEST mentor training programme was developed by *Empieza por Educar* (non-governmental organisation in the education sector and one of the NEST partners in Spain) in line with the desired effects and objectives of the training as agreed by all project partners. The design of the training was based mainly on the books on coaching by Elena Aguilar (e.g. Aguilar, 2013; Aguilar 2020; Aguilar, 2021). Prior to implementation, the NEST mentor training programme was adapted slightly for each education system to make it suitable for use in each context. The description below is based on internal planning documents of *Empieza por Educar* (2021) and interviews with the individuals responsible for the development of the training programme.

Mentors took part in the NEST mentor training programme for a total of two years. Most of the training content was taught in the first year. The training was divided into three training sections per year. In the first year, each training section was further divided into a training phase, a practice phase, and a metacognition phase. The second year of the training programme followed the same basic structure. However, as the trainee mentors' mentoring skills developed, the trainers took a less active role compared to the first year.

At the beginning of each training section, an introductory or orientation meeting was held. The training phase consisted of modules that were worked on asynchronously by the trainee mentors in self-study. The virtual classroom not only offered greater methodological flexibility but also enabled participants to access the content at any time and to work on it according to their individual needs and availability. Moreover, they could explore and deepen the content of each module, and they could reflect on their learning and share their thoughts and experiences with other participants via the platform. The workload for trainee mentors was four hours in the first two training modules and two hours in the third. After completing each content module on the platform, the trainee mentors received an application task that related to the content of the module. The answers or solutions were shared in the forum to promote interaction and joint learning in the trainee mentor group.

Each training session involved a trainer-led meeting of the trainee mentors in small groups. The trainers were specialists in mentoring and in developing competence in adults as well as experts in education in disadvantaged school contexts. In the joint practice sessions, the trainers prepared the trainee mentors for the various mentoring tasks, such as conducting lesson observations or planning. In addition, the trainee mentors reflected on their own role as a mentor and learned various mentoring techniques. These included, among others, interview techniques and questioning techniques to stimulate reflection by beginning teachers. Trainers used case studies, role plays, videos, and a development portfolio.

During the practice phase, the trainee mentors conducted an observation and feedback cycle (lesson observation) with each of their novice teacher mentees, followed by one debriefing session per training period (approximately every six weeks). In total, trainee mentors who supervised three novice teacher mentees carried out nine such observations with debriefing by the end of the year.

During the observations, which lasted at least 30 minutes, the trainee mentors observed teacher-student interactions and the design of the learning environment without actively intervening in the classroom dynamics. The trainee mentors then prepared the debriefing. They used a development portfolio for each novice teacher mentee in which observations, learning goals, learning successes, reflections, etc., were recorded. Debriefings took place after the observations. Each observation and feedback cycle comprised three steps for the trainee mentor: observing the novice teacher mentee's practice, planning the debriefing, and conducting the debriefing. During the first observation and feedback cycles of the training programme, the trainee mentors were accompanied by a NEST trainer.

In addition to the observation and feedback cycle, each trainee mentor met with each of their novice teacher mentees once per training period for a 30-minute follow-up meeting at the novice teacher's school. The aim of these meetings was to foster an informal support structure between mentor and mentee to track the mentee's progress in implementing the agreed next steps.

The metacognitive phase was a session at the end of each training section which was intended to stimulate metacognitive processes. During the session, the novice teacher mentees' progress and the effects of the mentoring conversations (debriefings, informal meetings) were analysed. For this purpose, the novice teacher mentees used their development portfolio. The trainee mentors also used their own development portfolios to record and analyse the development of their mentoring skills, using feedback from their novice teacher mentees regarding the mentoring process. Mentors and mentees reflected on which mentoring techniques had proved successful in practice. At the end of the session, next steps for improvement were determined.

2.2.1.1.1 Examples of Adaptations Made to the Training Programme in the Different Education Systems

Empieza por Educar is based in Spain, so this partner had the Spanish context in mind when developing the training. This meant that it was possible to follow the curriculum of the training programme exactly both in Catalonia and in the Community of Madrid. However, in Austria and Romania, the kick-off meeting was held as an online event rather than as a face-to-face event due to the COVID-19 situation at the time. In addition, in Austria, the start of the training programme was delayed, which meant that mentors in Austria had only two instead of three observation and feedback cycles, and the modules were divided over two rather than three terms. Finally, in Austria, all mentors had only one mentee. Austrian mentors started at autonomy level 3 because they were Teach For Austria alumni, which means that most of them had already had practice of tutoring or mentoring during the Teach For Austria summer-institute, where they conducted classroom visits and coaching conversations with new fellows. In Bulgaria, neither the digital resources nor the online platform were used as active tools. The reason was that the level of digital literacy was not very high among the Bulgarian mentors; mentors preferred to go over the resources together and to receive the resources physically. Flemish Community kept the learning objectives of the NEST training programme and provided almost all of the content but changed the order. In addition, it

was decided to skip the portfolio task that was included in the training to give the mentors more freedom in the way in which they reflected on their mentoring. Finally, in both Flemish Community and the Wallonia-Brussels Federation, the observation and feedback cycles could not take place as planned. This was because in some schools, the trainer was not allowed to guide the mentor through the first observation and feedback cycles, and in other schools, the mentor was not allowed to observe a lesson taught by the novice teacher they were mentoring.

2.2.1.2 Adaptive Mentoring for Novice Teachers at Disadvantaged Schools

The second intervention within the NEST project was the adaptive mentoring that was provided by the trained mentors to novice teachers working at disadvantaged schools in the seven education systems. In their training, the mentors within the NEST project were taught to differentiate between mentoring approaches based on the needs of their mentees. The NEST mentors learned to differentiate between a directive (confronting, informative, and descriptive) and a facilitative (cathartic, catalytic, and supportive) mentoring approach based on the model by John Heron (2001). The expectation was that novice teachers within the NEST project would benefit from mentoring that was adapted to their personal situation and needs. This meant that each novice teacher within the NEST project was likely to experience a good fit between the mentoring they received and their specific personality and needs.

The mentoring provided by the NEST mentors was also adapted to the challenges that arise from teaching at a disadvantaged school. Therefore, the NEST mentor training programme not only concentrated on switching between mentoring approaches with regard to the personal needs of the novice teacher and the task at hand but also focused on enabling mentors to assess the challenges that were present at the mentee's school. In addition, the mentors were taught concrete strategies for dealing with the challenges related to the disadvantaged school context in which their mentees were teaching.

The second intervention consisted of mentoring tailored to the needs of the novice teachers teaching at disadvantaged schools. Within the NEST evaluation, novice teachers who received mentoring from mentors who received the NEST mentor training will be compared to novice teachers who received regular mentoring where it existed, or no mentoring at all.

2.2.2 NEST Theory of Change

The NEST model is part of a *theory of change* which was developed by Teach for Belgium in cooperation with researchers from UDE. In order to develop the theory of change, the partners from Teach for Belgium conducted a comprehensive literature review of studies about local and international mentoring practices and their impact. Furthermore, the Teach For All international expertise and the expertise of the five Teach For partner organisations of the NEST consortium were included in the development of the theory of change. Lastly, good practices of national and regional public authorities were collected and incorporated into the theory of change. In this manner, the whole consortium contributed to creating the theory of change of the NEST project.

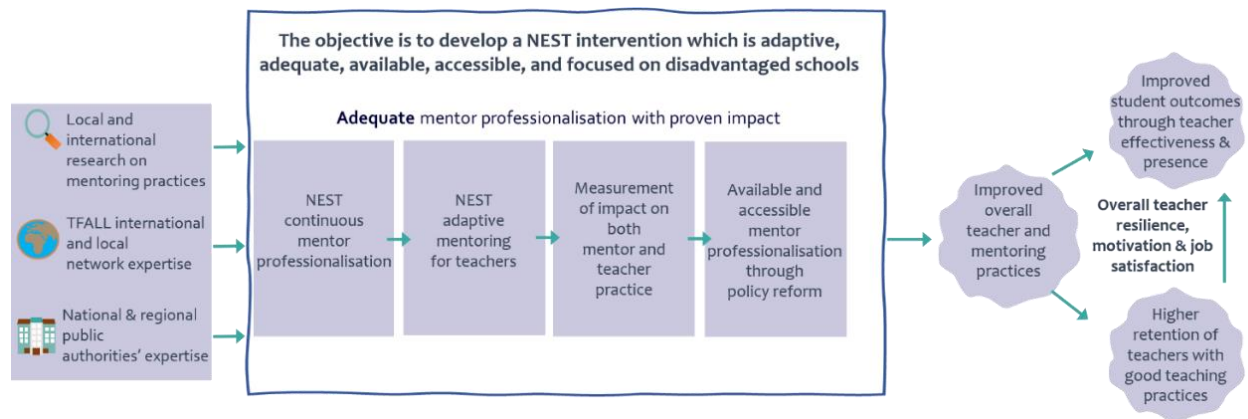


Figure 1: Theory of Change of the NEST Project

2.2.2.1 Research Hypotheses for Evaluation

In line with the theory of change, three main research questions will structure this evaluation report. We derived several hypotheses from each of the research questions. Hypotheses that concern novice teachers could be tested with the quantitative data we collected. However, hypotheses concerning the mentors could not be tested statistically; we can only show evidence in our descriptive results because the sample sizes in most education systems were too small to perform *t* tests.

1. Does the NEST mentor training programme improve mentors' mentoring skills?

H1_{a1}: The intervention group mentors' self-assessed mentoring competence will be significantly higher after the NEST mentor training programme than before the training.

H1_{a2}: The intervention group mentors' self-assessed mentoring competence will be significantly higher after the NEST mentor training programme compared to the mentors in the control group.

H1_b: The intervention group mentors' mentoring focus will be significantly higher after the NEST mentor training programme than before the training.

H1_c: The intervention group mentors' ability to adapt their mentoring will be significantly higher after the NEST mentor training programme than before the training.

2. Do novice teachers who are mentored by a NEST-trained mentor assess the mentoring they receive higher than a control group who receives mentoring from a mentor who has not been specially trained?

H2_a: The intervention group of NEST novice teachers will rate their mentors' mentoring competence significantly higher than novice teachers in the control group rate their mentors' mentoring competence.

H2_b: The intervention group of NEST novice teachers will rate the fit between the use of their mentors' mentoring practices and their own need for these practices significantly better than novice teachers

in the control group rate the fit between the use of their mentors' mentoring practices and their own need.

H2c: The intervention group of NEST novice teachers will rate the extent of their mentors' mentoring focus significantly higher than the control group of novice teachers rate their mentors' mentoring focus.

3. Do novice teachers benefit from NEST mentoring in terms of certain outcome indicators such as teaching competence, resilience, and willingness to stay in the teaching profession?

H3a: The intervention group of NEST novice teachers will have significantly higher teaching competences at the end of the school year than novice teachers in the control group.

H3b: The intervention group of NEST novice teachers will have significantly higher resilience at the end of the school year than novice teachers in the control group.

H3c: The intervention group of NEST novice teachers will be significantly more satisfied with their school as a workplace than novice teachers in the control group.

H3d: The intervention group of NEST novice teachers will have a significantly higher willingness to stay in the teaching profession than novice teachers in the control group.

2.3 Methodology

2.3.1 Research and Evaluation Design

As explained in Section 2.2.1, the NEST project entailed two interventions for two different groups of participants. In Intervention I, a group of experienced teachers (mentor intervention group) took part in the NEST adaptive mentor training programme. In Intervention II, a group of novice teachers working at disadvantaged schools (novice teacher intervention group) was supported by the mentors from Intervention I and received tailored, adaptive mentoring. In order to test our hypotheses, we implemented a control group of experienced teachers who did not receive special mentor training (mentor control group) as well as a group of novice teachers who received only the standard support prevalent in their education system (novice teacher control group). Thus, the NEST methodology followed a quasi-experimental design.

Moreover, the NEST project design was a panel design as all participants were surveyed at least twice. Mentors were followed over a period of two school years. Those in the intervention group completed three online surveys; those in the control group completed two online surveys. The first survey for both groups of mentors was planned for late September 2021, i.e. the beginning of the school year 2021/2022 (first year of the NEST project). However, this proved to be impossible due to recruitment issues. Mentors in Catalonia and the Community of Madrid were the first to receive their first online survey in late October 2021. Other education systems also had to postpone the first questionnaire; however, all education systems ensured that the intervention group mentors did not receive any NEST training before completing their first survey. This was because the survey was to serve as the baseline measurement which would be used to calculate the effect of the NEST adaptive mentor training on the mentors' professional development, such as mentoring competence.

A second survey for intervention group mentors was planned for April 2022. However, in view of the delayed implementation of the first survey round, the second survey was rescheduled for June 2022 (i.e. the end of the school year 2021/2022). The third survey was sent to mentors in June 2023. At that same time, the mentors in the control group received their second online survey to assess their professional development over time. Here, the time window was slightly larger again than the previous year because a lot of effort was put into reminding and motivating participants to fill out the final survey, especially in education systems where participation was low. Figure 2 gives a detailed overview of survey times and evaluation design.

As a high level of turnover of novice teachers in their first years was expected, this group was followed only over one school year. Consequently, the NEST project worked with two successive cohorts of novice teachers: one cohort for the school year 2021/2022, and one cohort for the school year 2022/2023. Each cohort consisted of one intervention group (receiving adaptive mentoring) and one control group (receiving standard, prevalent mentoring). Participants of both groups completed two surveys, one at the beginning and one at the end of the school year. For the novice teachers, the first online survey was planned for late September 2021. Again, problems with recruitment as well as the global pandemic led to a delayed survey date. Novice teachers in Catalonia and Spain were the first to receive the online survey in late October 2021. Countries which had to postpone the launch of the first online survey made sure that novice teachers in the intervention group did not meet their respective mentors before completing the survey in order to maintain the integrity of the baseline measurement. The next survey for the 2021/2022 cohort was scheduled for early June 2022. The surveys for the second cohort were scheduled for October 2022 and June 2023, respectively. Figure 2 gives an overview of the entire evaluation design. The abbreviations T1, T2, and T3 mark the measurement points when participants received online surveys.

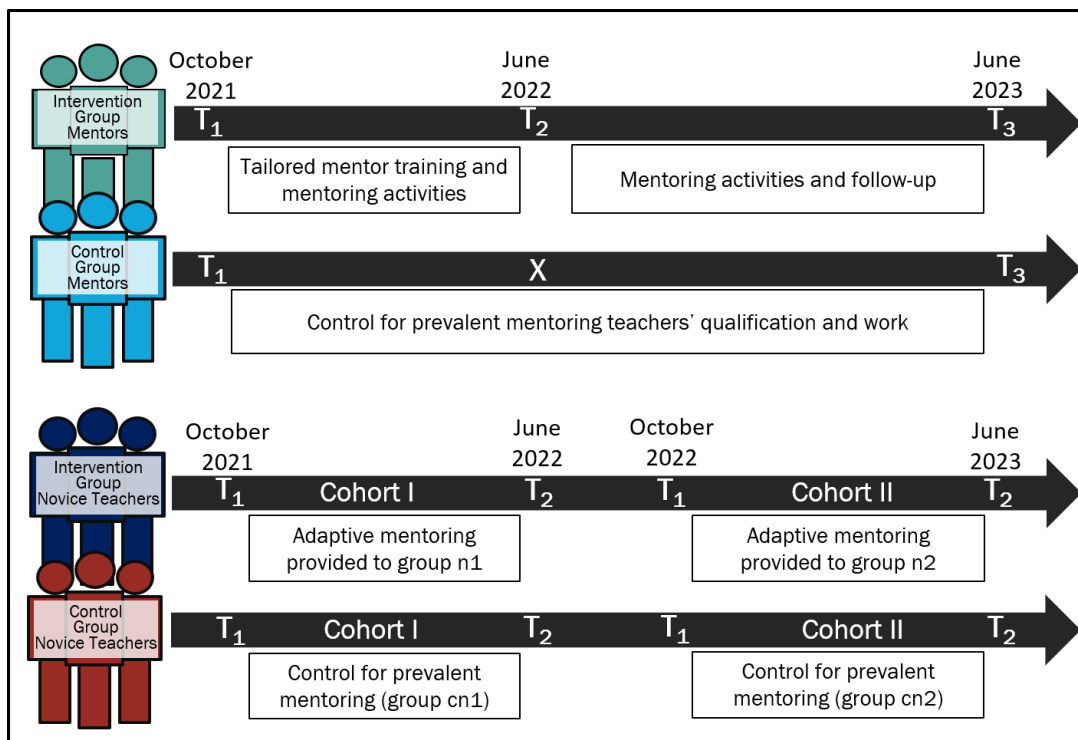


Figure 2: Overview of the Quasi-Experimental Design of the NEST project

2.3.1.1 Overview of Instruments Used

As explained in our first report titled Concepts and First Data of the NEST Project, the most important source of pre-existing survey instruments for the development of the NEST questionnaires was the Organisation for Economic Co-operation and Development’s Teaching and Learning International Survey (TALIS) (OECD, 2018), which surveys teachers and school principals in 34 countries.¹ Most of the education systems participating in the NEST project had already participated in TALIS 2008, and/or TALIS 2013, and/or TALIS 2018. The TALIS study is an international study that is similar to the NEST experiment in terms of the thematic issues it addresses, such as the learning environment, support and induction structures, teachers’ classroom practices, and job satisfaction.

In this final evaluation report of the NEST project, data from all three mentor surveys and both novice teacher surveys from the two respective cohorts will be used. Table 3 and Table 2 provide an overview of the constructs used in each of the surveys. The second survey (T2) for the mentors in the intervention group focused on the evaluation of the training for the mentors (how satisfied were they with the training, did they use the online platform); since these results were discussed extensively in the third report titled *Interim Results of the NEST Project: An Evaluation of the Mentor Training Programme and of Adaptive Mentoring from the Perspectives of Mentors and Novice Teachers*, they will not be discussed here. Table 8 in the Appendix provides an overview of the constructs that were used for the mentors in the intervention group in their second survey. The majority of instruments for novice teachers and mentors were designed in parallel so that we could ensure that topics were examined from the perspective of both the novice teachers and the mentors. For example, mentors were asked to self-assess their mentoring competences, and novice teachers were asked to assess those same mentoring competences from their own perspective. Statements were rephrased only slightly to fit the perspective of the respective group. Figure 3 depicts the different indicators examined in the final report.

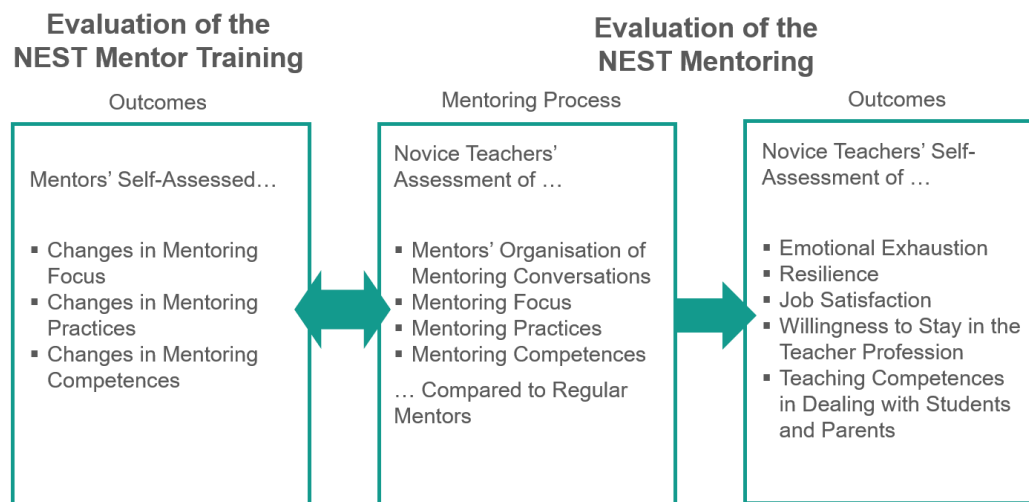


Figure 3: Indicators Used in the Final Evaluation Report

¹ In 2008, only 30 countries participated in TALIS.

Table 2: Constructs Measured in the Different Surveys for the Novice Teachers

Category	Construct	Source	Novice Teacher			
			Intervention Group		Control Group	
			T1	T2	T1	T2
Personal/ professional background	Gender, age, background	OECD 2018 (TALIS)	x		x	
	Qualification type, training		x		x	
	Work experience	OECD 2018 (TALIS)	x		x	
School characteristics/ working conditions	School enrolment	OECD 2018 (TALIS)		x		x
	Student body	OECD 2018 (TALIS)		x		x
	School challenges, school violence	OECD 2018 (TALIS)		x		x
Professional development	School challenges in everyday work as a teacher	Kunter et al., 2016 (BilWiss)	x	x	x	x
	Reflection on challenges in working as a teacher	Kunter et al., 2016 (BilWiss)	x	x	x	x
	Teacher competence, interaction with students/parents	Self-developed	x	x	x	x
	Teacher needs	Self-developed	x	x	x	x
Professional attitudes	Job satisfaction	TALIS 2018		x		x
	Resilience (buoyancy)	Kunter et al., 2016 (BilWiss)		x		x
	Emotional exhaustion	Kunter et al., 2016 (BilWiss)	x	x	x	x
	Intention to quit	Kunter et al., 2016 (BilWiss)	x	x	x	x
Evaluation of mentoring	Date of first meeting with mentor, number of mentoring conversations	Self-developed		x		x
	Organisation of mentoring	Self-developed		x		x
	Focus of mentoring	OECD 2018 (TALIS)		x		x
	Fit between mentoring practice and personal need for practice	Self-developed		x		x
	Assessment of mentoring competences	Self-developed		x		x

Table 3: Constructs Measured in the Different Surveys for the Mentors

Category	Construct	Source	Mentor				
			Intervention Group			Control Group	
			T1	T2	T3	T1	T3
Personal/ professional background	Gender, age	Self-developed ²	X			X	
	Mentoring experience	Self-developed	X			X	
	Elements of education, teaching experience	TALIS 2018	X			X	
	Qualification type, demands of profession, currently teaching	Self-developed	X			X	
	Previous mentoring experience, focus of training	OECD 2018 (TALIS)	X			X	X
Working conditions	Teaching hours	OECD 2018 (TALIS)	X			X	
	Reduced teaching hours for mentors, mentoring benefits	Self-developed	X			X	
	mentoring hours	Self-developed	X			X	X
General mentoring	Acceptability of mentoring, mentor attributes, adaption of mentoring	Self-developed	X			X	
	General mentoring practices	Van Ginkel et al., 2016; based on Crasborn et al., 2008	X			X	
Personal mentoring practice	Organisation of mentoring	Self-developed	X		X	X	X
	Number of mentees	Self-developed		X	X		
	Mentoring focus	Self-developed	X	X	X	X	X
	Mentoring practices/styles	Van Ginkel et al., 2016; based on Crasborn et al., 2008	X	X	X	X	X
	Mentoring competence	Self-developed	X	X	X	X	X
	Opportunities to learn, networking opportunities	Self-Developed			X		
Professional attitudes/ beliefs	Mentoring enthusiasm	Kunter et al., 2016 (BilWiss)	X		X	X	X
	Reflection on challenges in working as a teacher/mentor	Kunter et al., 2016 (BilWiss)	X		X	X	
	Resilience as a mentor	Kunter et al., 2016 (BilWiss)			X		X
Career plans	Intention to quit teaching/mentoring	Kunter et al., 2016 (BilWiss)			X		X

² 'Self-developed' indicates that the respective items and scales were developed within the scope of the NEST project by the UDE evaluation team.

2.3.1.2 Methods of Data Analysis

Participants had to rate different statements or answer questions mostly on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). There were some exceptions in which a 6-point scale was used, e.g. for assessing competences (1 = *no ability* to 6 = *very high ability*). There is scientific debate on whether to treat ordinal scaled survey data (such as Likert-scale data) as interval scaled data for the purpose of statistical analysis such as calculations of means or differences. However, in the social sciences, this is a standard procedure. Numerous researchers have shown that unless data are severely skewed, ordinal scaled data can be treated as interval scaled data (Baker et al., 1966; Labovitz, 1967; Marcus-Roberts & Roberts, 1987).

To ensure the quality of the theoretically constructed scales, we ran factor analyses and reliability analyses before presenting the descriptive data in the report where feasible. Factor analyses are used to check whether the individual statements comprised in a theoretical scale also correlate sufficiently in the analysed sample. Reliability analyses are used subsequently to check whether those statements which do correlate sufficiently and form a factor in the factor analysis also reliably measure this factor. The quality criterion for reliability is Cronbach's alpha. In educational research, a Cronbach's alpha higher than 0.8 is very good. The scales for the data presented in this report all have sufficiently high values for Cronbach's alpha. However, factor and reliability analyses could not be calculated for the samples that were very small (sample sizes smaller than 40). Therefore, scales for mentors are based on the factor structure in Bulgaria, as this was the only mentor sample large enough to conduct factor and reliability analyses. However, as explained in Section 2.3.1.1, the majority of the scales used have been already validated in other large studies.

The sample sizes varied widely between the different education systems. For the mentors, the samples in all education systems were relatively small. For this reason, we mainly use descriptive statistics when analysing the mentor data. In Bulgaria, Catalonia, the Community of Madrid, Romania, and the Wallonia-Brussels Federation, the novice teacher samples (combining the novice teacher data from the first and second cohort) were large enough to use not only descriptive but also inferential statistics. In Austria, it transpired quite early that the samples would be small. Therefore, we decided to conduct a qualitative study (interviews with seven of the Austrian novice teachers) in addition.

As the research design is a multiperspective one, both the mentors and the novice teachers answered the same questions in the survey for some of the constructs (e.g. general acceptance of mentoring, mentoring competences, mentoring focus). In these instances, the two perspectives will be compared using descriptive statistics and, where possible, also inferential statistics. In the sample of all education systems combined, only 33% of the novice teachers in the control group had an assigned mentor at the time of filling out the second survey. Therefore, we divided the control group into two—a control group with mentor support and a control group without mentor support—for outcome variables such as emotional exhaustion or willingness to stay in the profession. We expect more distinct differences between the intervention group and the control group who did not have any mentor support at all. For those questions which could only be answered if novice teachers had mentor support (e.g. assessing the mentoring competence of a mentor), we can compare the intervention group only to the control group with mentor support. The reports for the individual education systems state clearly what percentage of novice teachers in the control group had a mentor and which group is the respective reference group. Finally, in the five

education systems with the largest samples, we used ordinary least squares (OLS) regression analysis to discover which variables affected the increase in mentoring competences of the mentors and teaching competences of the novice teachers. We tried to use a very similar regression model for all education systems; however, the strength of correlations among the independent variables varied in the different education systems. Therefore, it was not always possible to include all independent variables that we would have liked to include based on our theoretical assumptions.

The implementation of the NEST interventions was dependent on conditions specific to the country or even the education system, i.e. interventions were not implemented to the letter in all participating education systems. In addition, the translation of the scales for measuring the different constructs such as mentoring competence can lead to a slightly different understanding or interpretation of the questions in each language. Last but not least, a certain but different level of acquiescence—the tendency to agree with statements—is culturally embedded in each country, and there is evidence in the data that acquiescence differs in the countries participating in the NEST project. Therefore, we prepared separate evaluation reports for each of the different education systems.

2.3.1.3 How to Read the Tables and Figures in this Report

In this report, we use data from different surveys in order to compare developments over time. We make explicit in the text which survey, i.e. measurement point, the descriptive statistics refer to. Intervention group mentors were surveyed three times, while all other groups were surveyed twice. The three measurement points for intervention group mentors were: a baseline measurement before the NEST mentor training programme started at the beginning of the school year 2021/2022 (T1); one measurement at the end of the school year 2021/2022 (T2) to measure the immediate effect of the training; and one follow-up measurement at the end of the school year 2022/2023 (T3). Each cohort of novice teachers was surveyed twice, once at the beginning of the school year (T1), and once at the end of that same school year (T2). Mentors in the control group were also surveyed twice, once at the beginning of the school year 2021/2022 (T1), and once at the end of the school year 2022/2023 (T3). In some of the figures, we refer to the measurement points using T1, T2, and T3 for brevity.

All figures in this report are colour-coded so that results referring to a specific group are always presented in the same colour. We use the NEST logo colours for the four different groups. Results for the intervention group mentors are coloured in turquoise; results for intervention group novice teachers are coloured in dark blue; results for control group mentors are coloured in light blue; and results for control group novice teachers are coloured in dark red. Furthermore, in figures which depict results for the mentor intervention group over time, we use different shades of the turquoise for the different points in time. We decided to use the full colour for the time period where the intervention had just taken place (T2). We used a faded turquoise for the baseline measurement point (T1) and a slightly less faded turquoise for the follow-up measurement (T3) to symbolise that the effect of the training had probably slightly faded by that time.

To avoid confusion when reading and comparing, for instance, the means of different groups, we use different notation to clarify which respective group the mean refers to. Thus, we use M_{IG} , when referring to the mean of the intervention group, M_{CG_ment} to label the mean for the control group with mentor support, and $M_{CG_no_ment}$ to label the mean for the control group without mentor support. For Bulgaria, where mentors are more commonly called experts, we use M_{CG_exp} and $M_{CG_no_exp}$ instead. In most cases,

we report means (averages) either for the entire scale, such as the mean for mentoring competences, and we report the means for the individual statements that were interesting, such as means for the statements with the highest level of agreement overall or means for statements that were rated particularly differently in the groups that are being compared. Sometimes, we also report the median (*Mdn*). The median is the value which splits the distribution of a variable into two halves. For instance, a median age of 27 means that half of the people in the sample are 27 and younger, and half are older than 27. The median is less affected by outliers than the mean, so if there are a lot of outliers in a specific variable, it is often more informative to look at the median.

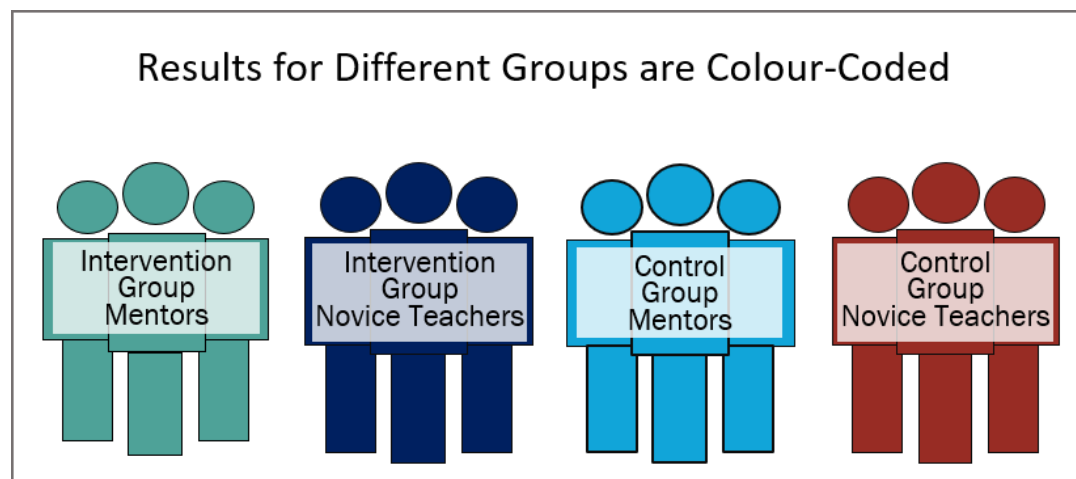


Figure 4: Colour-Coding for Results of the Different Groups in the NEST Project

When we are using test statistics such as the *t* statistic, we consider only results which are significant at the 1% and the 5% significance level. This means that we keep the Type I error under 1% and 5% respectively. A 1% significance level means that we allow a one percent chance of incorrectly rejecting a true null hypothesis. This means that if our *t* test calculates that the competence is significantly higher for one group than for the other at the 1% significance level, then in 1% of the cases there is probably no difference in competences. Or in other words, there is a very small chance that you would receive such a test statistic under the condition that the null hypothesis were true. If a result is significant at the 5% significance level, we allow for this error in 5% of the cases. Results that are significant at a lower significance level are less error prone. If a result is significant at the 1% significance level, we mark the value with two asterisks (e.g. 3.45**). If a result is significant at the 5% significance level, we mark the respective value with one asterisk.

2.3.2 General Information on the Overall NEST Sample

The overall sample of the NEST project consisted of NEST mentors who took part in the NEST mentor training programme and control groups of mentors who did not undergo a special training programme. The only exception was Bulgaria, where the intervention group consisted of so-called experts who work for the school inspectorates and who are responsible for the assessment and support of novice teachers. A control group of experts was not feasible. Apart from the group of mentors, the sample also consisted of novice teachers who had a maximum of five years of teaching experience. The intervention group of novice teachers consisted of those novice teachers who were supported by a NEST mentor, whereas the

control group of novice teachers consisted of the novice teachers supported by the mentors in the mentor control group.

2.3.2.1 Matched Sample and Survey Dropout Rates

This report presents data that were collected in all surveys. Since we examine developments over time, for instance the development of novice teachers' teaching competences, we compare data from the first survey to the corresponding data from the second survey. Therefore, the sample underlying the descriptive statistics and analyses included only those participants who filled in all scheduled surveys for the respective group. Except for the NEST mentors, who had to complete three surveys, all groups had to fill in two surveys. Since the NEST evaluation was based on a panel design, dropout of participants over time (panel mortality) was expected. Dropout in this context means not completing all required surveys. It does not mean that persons dropped out of the NEST project, although that may in some cases also be true. However, the dropout we report here refers only to uncompleted surveys. Overall, 502 mentors completed the first survey (242 control group mentors). Data from the second survey could be matched to 400 mentors (171 control group mentors). Overall, data from the third survey could be matched to 179 NEST mentors.

Table 4: Mentor Participation and Dropout by Group and Education System

Education System	Mentor Intervention Group			Mentor Control Group	
	T1: 2021	T2: 2022	T3: 2023	T1: 2021	T2: 2023
Austria	18	18 (0%)	15 (16.7% / 16.7%) ³	16	9 (43.8%)
Belgium (Flemish Community)	14	11 (21.4%)	8 (27.3% / 42.9%)	21	12 (42.9%)
Belgium (Wallonia-Brussels Federation)	34	27 (20.6%)	15 (44.4% / 55.9%)	61	36 (41%)
Bulgaria	64	58 (9.4%)	43 (25.9% / 32.8%)	-	-
Romania	43	40 (7%)	40 (0% / 7%)	75	73 (2.7%)
Spain (Catalonia)	41	36 (12.2%)	29 (19.4% / 29.3%)	28	18 (35.7%)
Spain (Community of Madrid)	45	39 (13.3%)	29 (25.6% / 35.6%)	41	23 (43.9%)
Total	259	229 (11.6%)	179 (21.8% / 30.9%)	242	171 (29.3%)

Table 4 shows the numbers of participation and dropout for mentors in the different education systems. While the overall dropout rate across all scheduled surveys was quite similar between the intervention and the control group (roughly 30 percent), the dropout rate for the intervention group mentors between the first and the second survey was much smaller. In Austria, all mentors who completed the first survey also completed the second survey. Of those, three did not complete the final survey. Romania was the only education system where dropout was very minor in the intervention and in the control group.

In total, 2,057 novice teachers with up to five years of teaching experience participated in the first survey (first cohort: 1,154). Of those 2,075 novice teachers, 889 were in the intervention group and received

³ The first percentage in brackets in this column refers to the dropout rate between T2 and T3, the second percentage refers to the dropout rate between T1 and T3

adaptive mentoring from the specially trained NEST mentors, and 1,168 were in the control group receiving whatever mentoring (if any) was available at their school. Data from the second survey could be matched to 1,603 novice teachers (957 control group novice teachers). Table 5 shows the participation numbers for novice teachers in each education system by cohort and group. It also gives the drop-out rate from T1 to T2 for intervention and control group. For all education systems, the recruitment of the first cohort was more successful in terms of novice teachers participating in the surveys. This was especially true for Flemish Community and the Wallonia-Brussels Federation, and to a lesser extent for the Community of Madrid and Catalonia.

Table 5: Novice Teacher Participation and Dropout in Consecutive Cohorts by Group and Education System

Education System	Intervention Group						Control Group					
	T1 (2021 /22)			T2 (2022/23)			T1 (2021 /22)			T2 (2022/23)		
	C 1	C 2	Total	C 1	C 2	Total	C 1	C 2	Total	C 1	C 2	Total
Austria	6	13	19	4	12	16 (15.8%)	11	0	11	8	0	8 (27.3%)
Belgium (Flemish Community)	44	18	62	24	6	30 (51.6%)	28	20	48	12	8	20 (58.3%)
Belgium (Wallonia- Brussels Federation)	60	25	85	37	6	43 (49.4%)	126	53	179	79	23	102 (43.0%)
Bulgaria	154	143	297	117	129	246 (17.2%)	221	214	435	205	206	411 (5.5%)
Romania	80	97	177	59	51	110 (37.9%)	75	105	180	52	75	127 (29.4%)
Spain (Catalonia)	79	38	117	70	24	94 (19.7%)	89	61	150	81	58	139 (7.3%)
Spain (Community of Madrid)	80	52	132	72	35	107 (18.9%)	101	64	165	90	60	150 (9.1%)
Total	503	386	889	383	263	646 (27.3%)	651	517	1,168	527	430	957 (18.1%)

Interestingly, keeping participation rates high was more problematic for the intervention group than the control group in most education systems. Overall, Bulgaria provided the largest sample of novice teachers for both the intervention and the control group and had the lowest drop-out of participants in terms of completing the surveys. Flemish Community and Austria had such small samples that we could only use descriptive statistics as quantitative data analyses. In Austria, the issue of low participation, especially for

the second cohort of control group teachers, was expected⁴, so it was decided to conduct an additional qualitative interview study to remedy the situation and gain valuable insights through the qualitative data.

2.3.2.2 Description of the Overall Sample

In all education systems combined, 179 mentors in the intervention group completed all three questionnaires. There were 171 mentors in the control group who completed both questionnaires. In Bulgaria, there was no control group for the mentors. The novice teacher intervention groups in all seven education systems combined consisted of 646 novice teachers, compared to 956 novice teachers in the control group.

There was no significant difference between the self-identified gender of the novice teachers in the intervention and the control group. In the intervention group, 24% of respondents identified as male, 76% as female, and 0.3% as other. The respective percentages for the overall control group were 24% (male), 76% (female), and 0.2% (other). A chi-square test of independence was performed both for the overall sample and for the education systems to check whether there was a difference in the self-identified gender between the control group and the intervention group. A significant relationship between gender and group was found only in Catalonia ($\chi^2(2, N = 232) = 8.98^*$, $p = 0.01$), with females being more likely to be in the intervention group than males, who were more likely to be part of the control group. For the overall sample of mentors, there was no significant relationship between gender and affiliation with the intervention or the control group. In the intervention group, 20% of the mentors identified as male and 80% as female. In the mentor control group, 19% identified as male and 91% as female.

The average age of the total novice teacher intervention group was 32.85, and of the novice teacher control group 32.88. This was not significantly different; however, in both Catalonia and Romania, there was a significant age difference. In Catalonia, the novice teachers in the intervention group ($M = 31.21$) were significantly younger on average than the novice teachers in the control group ($M = 33.94$, $t(231) = -2.66^{**}$, $p < 0.01$). In Romania, the intervention group novice teachers ($M = 29.19$) were also significantly younger than the novice teachers in the control group ($M = 31.86$, $t(234) = -2.35^*$, $p = 0.02$). The mentors in the total intervention group sample ($M = 46.25$) were also significantly younger compared to the mentors in the total control group ($M = 47.89$, $t(348) = 2.01^*$, $p = 0.05$).

In both the intervention and the control group, teaching was the first-choice career for only 47% of the novice teachers in all education systems combined. In Spain (both Catalonia and the Community of Madrid), however, there was a relationship between teaching being a respondent's first-choice career and the respondent being a part of the intervention or the control group. In Catalonia, novice teachers in the intervention group were more likely than novice teachers in the control group to pursue teaching as their first-choice career ($\chi^2(1, N = 233) = 22.09^{**}$, $p < 0.01$). In the Community of Madrid, on the other

⁴ In Austria, the majority of the participating novice teachers had entered the teaching profession via alternative pathways. At the start of the NEST project, the Austrian NEST mentoring programme was tailored especially to the characteristics of this group as these teachers did not have access to institutionalised support structures by way of mentoring at that time. However, due to a policy change, by the second year of the project, all novice teachers (including the lateral entrants) had to participate in obligatory mentoring as part of an induction programme.

hand, it was less likely for the novice teachers in the intervention group compared to the control group to have chosen teaching as their first career choice ($\chi^2(1, N=257) = 15.99^{**}, p < 0.01$).

Most of the novice teachers participating in the NEST project, 92% in each group, reported that they had a teaching qualification. The majority of novice teachers entered the teaching profession via a regular teacher education and/or training route. This was the case for 81% of the teachers in the intervention group and 82% of the teachers in the control group. In both the intervention group and the control group, 14% of novice teachers entered the teaching profession via an alternative pathway. In both groups, a small minority (4% in the intervention group and 4% in the control group) of teachers entered the teaching profession without any teacher education or training. Chi-square tests were performed to test whether there was a relationship between group (intervention or control) and whether or not the teachers had a teacher qualification and how they entered the teaching profession. For both the total sample and in the individual education systems, no significant relationship between these variables was found. This indicates that the intervention and the control group were similar with regard to novice teachers' teaching qualification and route of entry into the teaching profession.

Overall, teachers in the intervention group ($M = 1.92$) had significantly fewer years of teaching experience than teachers in the control group ($M = 2.16, t(1601) = -3.27^{**}, p < 0.01$). However, examining the data of the education systems separately, this was true only for Bulgaria ($M_{IG} = 1.74; M_{CG} = 2.25$), and the Community of Madrid ($M_{IG} = 2.34; M_{CG} = 3.13$). Teachers in the intervention group were significantly less experienced than teachers in the control group (Bulgaria: $t(655) = -4.51^{**}, p < 0.01$; Community of Madrid: $t(255) = -4.49^{**}, p < 0.01$). In Catalonia, it was the other way around: Catalanian ($M_{IG} = 2.29; M_{CG} = 1.71$) intervention group teachers had on average significantly more years of teaching experience than the control group (Catalonia: $t(231) = 3.36^{**}, p < 0.001$). In Romania, there was no significant difference in teaching experience between the intervention group and the control group.

Not all mentors who participated in the NEST project already had experience with mentoring. However, both in the mentor intervention group (66%) and in the mentor control group (71%), the majority of mentors had mentored at least one novice teacher during the previous five years. In the intervention group in Flemish Community, all mentors (100%) had mentored novice teachers in the previous five years, but in the Community of Madrid, only 35% of the mentors in the intervention group had already mentored during the previous five years. In the control group, mentoring experience during the previous five years was highest in Austria (100%) and lowest in Catalonia (28%). In sum, mentors' mentoring experience varied considerably between the education systems.

2.3.3 Overall Evaluation Results

The following results are presented in line with the direction of expected effects: from the effects of the NEST mentor training programme to effects regarding mentors, to effects regarding mentor behaviour (novice teacher perspective of mentor practices, etc.), to effects regarding novice teachers. We expect results to be less clear the further one moves along the hypothetical chain of effects and away from the initial intervention, i.e. the NEST mentor training programme.

The following Results for the mentors based on the mentor data include all education systems. As samples were too small overall for statistical testing, only on descriptive statistics are reported. Results regarding

mentors based on novice teacher data (novice teachers were asked to assess their mentors, i.e. there are data from the perspective of novice teachers about the mentors) include only the education systems with sufficiently large sample sizes to allow for t tests (Bulgaria, Romania, Wallonia-Brussels Federation, Catalonia, and the Community of Madrid). The same is true for the following results regarding novice teachers.

2.3.3.1 Results Regarding the NEST Training Programme

- NEST mentors in all education systems agree that the NEST mentor training helped them to improve their mentoring quite a bit or even a lot in a number of different aspects.
- In most education systems, mentors feel that the training helped them the most in improving their ability to give constructive feedback as well as using active listening as a strategy.
- NEST mentors in all education systems agree or strongly agree that the NEST mentor training was helpful for their mentoring practice.

2.3.3.2 Results Regarding Mentors

- In the education systems where experienced teachers can decide for themselves whether they want to mentor or not (Flemish Community, Wallonia-Brussels Federation, Romania), NEST mentors want to spend more years mentoring than control group mentors.
- NEST mentors in all education systems except for Austria are less likely than the control group mentors to want to quit mentoring after the school year.
- NEST mentors in all education systems except for Austria and the Wallonia-Brussels Federation find mentoring less exhausting than the control group mentors.
- NEST mentors had similarly high or higher levels of enthusiasm for mentoring than control group mentors at the beginning of the first school year before the NEST mentor training programme started. → Where the enthusiasm for mentoring is higher than that of the control group, this is an indicator that the NEST mentor selection was especially successful. This is true for the Community of Madrid, Catalonia, and Austria. Bulgaria did not have a control group; however, enthusiasm for mentoring is the highest for Bulgarian mentors overall.
- NEST mentors in all education systems except the Wallonia-Brussels Federation have higher levels of enthusiasm for mentoring after two years than the mentor control group.
- NEST mentors have similarly high or even higher levels of enthusiasm for mentoring after two years than before the NEST mentor training programme; increases in enthusiasm are highest overall in Bulgaria, Flemish Community, and Catalonia.
- NEST mentors have higher levels of self-assessed mentoring competence two years after the NEST training. → Mentoring competence increases over the two years, whereas control group mentors' mentoring competence either decreases or stays the same over the same time period.
- In most education systems, NEST mentors have higher levels of self-assessed mentoring competence after the training and after the second school year than mentors in the control group. However, in Flemish Community and Austria, mentoring competence in the intervention and the control group is very similar at the end of the second school year.

2.3.3.3 Results Regarding Mentors from Perspective of Novice Teachers

The results regarding mentors based on the novice teacher data are an added value. The perspective provided by the novice teachers can serve to either confirm or refute the results from the mentor data.

Table 6: Novice Teachers' Assessments of Their Mentors by Education System

Evaluation Questions	Bulgaria	Catalonia	Romania	Community of Madrid	the Wallonia-Brussels Federation
Do novice teachers in the intervention group feel that their NEST mentors spend significantly more quality time mentoring compared to the control group?.	Yes, significant	Yes, significant	Yes, significant	Yes, significant	<i>ns</i>
	N _{int} :238, N _{ctr} :65; <i>p</i> -value: 0.01	N _{int} :92, N _{ctr} :60; <i>p</i> -value: 0.01	N _{int} :109, N _{ctr} :32; <i>p</i> -value: 0.01	N _{int} :104, N _{ctr} :77; <i>p</i> -value: 0.01	
Do novice teachers in the intervention group perceive a significantly stronger mentoring focus on school challenges compared to the control group?	<i>ns</i>	Yes, significant	Yes, significant		<i>ns</i>
		N _{int} :91, N _{ctr} :60; <i>p</i> -value: 0.01	N _{int} :91, N _{ctr} :60; <i>p</i> -value: 0.01		
Do novice teachers in the intervention group assess their NEST mentors' mentoring competence significantly higher than the control group assesses their mentors' competence?	Yes, significant	Yes, significant	Yes, significant	Yes, significant	<i>ns</i>
	N _{int} :238, N _{ctr} :67; <i>p</i> -value: 0.01	N _{int} :92, N _{ctr} :60; <i>p</i> -value: 0.01	N _{int} :110, N _{ctr} :33; <i>p</i> -value: 0.01	N _{int} :106, N _{ctr} :77; <i>p</i> -value: 0.01	
Do novice teachers in the intervention group perceive a significantly better fit between the mentoring practices used by their NEST mentor and their own need for the practices compared to novice teachers in the control group?	Yes, significant	Yes, significant	Yes, significant	Yes, significant	<i>ns</i>
	N _{int} :239, N _{ctr} :67; <i>p</i> -value: 0.01	N _{int} :92, N _{ctr} :60; <i>p</i> -value: 0.01	N _{int} :110, N _{ctr} :33; <i>p</i> -value: 0.01	N _{int} :106, N _{ctr} :77; <i>p</i> -value: 0.01	
Overall results by education system (positive/neutral/negative)	3/1/0	4/0/0	4/0/0	3/1/0	0/4/0

2.3.3.4 Results Regarding Novice Teachers

Table 7 is based on the comparison between the novice teacher intervention group and the entire novice teacher control group. In the evaluation reports for the individual education systems, the results are more differentiated as the intervention group is compared to the control group with mentor support as well as to the control group without mentor support. Therefore, the results in Table 7 might differ in some cases compared to the more detailed results in the individual reports. Such differences underline that results must be interpreted cautiously as they show how the significance of a result depends on the size of the sample.

Table 7: Self-Assessment of Novice Teachers Regarding Various Outcome Variables

Evaluation Questions	Catalonia	Bulgaria	Romania	Community of Madrid	the Wallonia-Brussels Federation
Do novice teachers in the intervention group feel significantly more resilient compared to the control group at end of school year?	Yes, significant N _{int} :92, N _{ctr} :139; p-value: 0.01	ns	ns	Yes, significant N _{int} :102, N _{ctr} :149; p-value: 0.05	ns
Does emotional exhaustion decrease significantly over the school year for novice teachers?	ns	ns	IG: Yes, significant CG: no significant difference	IG: Yes, significant CG: Yes, significant	ns
			N _{int} :109; p-value: 0.05	N _{int} :101; p-value: 0.05; N _{ctr} :150; p-value: 0.01	
Do teaching competences regarding student interactions increase significantly over the school year for novice teachers?	ns	IG: Yes, significant CG: No, instead significant decrease	IG: Yes, significant CG: No, instead significant decrease	IG: Yes, significant CG: No significant difference	ns
		N _{int} :235; p-value: 0.01 N _{ctr} :408; p-value: 0.01	N _{int} :109; p-value: 0.01 N _{ctr} :123; p-value: 0.05	N _{int} :103; p-value: 0.05	

Evaluation Questions	Catalonia	Bulgaria	Romania	Community of Madrid	the Wallonia-Brussels Federation
Do teaching competences regarding parents increase significantly over the school year for novice teachers?	<i>ns</i>	IG: Yes, significant CG: No significant difference	IG: Yes, significant CG: No significant difference	IG: Yes, significant CG: No significant difference	<i>ns</i>
		$N_{int}:231;$ p -value: 0.01	$N_{int}:109;$ p -value: 0.01	$N_{int}:97;$ p -value: 0.01	
Are novice teachers in the intervention group significantly more satisfied with their school as a good workplace compared to the control group?	Yes, significant	No, instead significantly less satisfied	<i>ns</i>	Yes, significant	<i>ns</i>
	$N_{int}:93, N_{ctr}:139;$ p -value: 0.01	$N_{int}:239,$ $N_{ctr}:410;$ p -value: 0.05		$N_{int}:103,$ $N_{ctr}:150;$ p -value: 0.01	
Are novice teachers in the intervention group willing to stay significantly longer in the teaching profession compared to the control group?	Yes, significant	<i>ns</i>	Yes, significant	No, instead significantly fewer years	<i>ns</i>
	$N_{int}:94, N_{ctr}:57;$ p -value: 0.01		$N_{int}:106, N_{ctr}:75;$ p -value: 0.01	$N_{int}:102, N_{ctr}:60;$ p -value: 0.05	
Overall results by education system (positive/ neutral/ negative)	3/3/0	2/3/1	4/2/0	5/0/1	0/6/0

3 Individual Reports on the Educational Systems

As described in more detail in Chapter 0, due to variations in the implementation of the interventions, translation validity, and culturally embedded acquiescence, evaluation results should not be directly compared between education systems but understood within each education system's cultural context.

Therefore, the following chapters present evaluation results for each of the participating education systems separately. The individual reports are structured in line with the NEST theory of change. Each report presents evaluation results regarding the educational context in the different education systems—such as the acceptance of mentoring in general, preconditions for novice teachers and mentors working at predominantly disadvantaged schools, mentoring processes—and outcomes of the NEST project, such as mentoring competence or teacher retention. The focus of evaluation will be on novice teachers since the sample sizes for the teachers are much larger than those for mentors. However, the evaluation design was explicitly multiperspective; so, wherever possible, mentor data will be included to represent the mentors' views and at the same time validate the novice teacher data. In Austria, the sample sizes for both the mentors and the novice teachers were so small that it was decided to conduct a qualitative study with seven of the Austrian NEST novice teachers in addition to the completion of the surveys by their mentors and novice teachers. The country report for Austria includes some descriptive statistics but mainly describes the results of the qualitative interview study.

Reports are presented in alphabetical order by countries and education systems:

3.1 Austria

3.2 Belgium (Flemish Community)

3.3 Belgium (Wallonia-Brussels Federation)

3.4 Bulgaria

3.5 Romania

3.6 Spain (Catalonia)

3.7 Spain (Community of Madrid)

3.1 NEST Evaluation Results for Austria (Interview Study)

Key Takeaways

- Qualitative interviews with seven novice teachers validated quantitative survey results by indicating **high satisfaction with the mentoring**, both regarding mentoring processes and outcomes.
- Most interviewed mentees **valued having mentors from outside their school**. The external perspective often led to reduced feelings of judgement and/or provided a fresh viewpoint.
- Mentees differed in their reasons for joining the programme and in their perceived outcomes. The latter combined specific, cognitive insights with broader emotional dimensions, such as **increased confidence** or **classroom awareness** and **understanding of classroom processes**.
- Room for improvement was found regarding the **duration, intensity, and structure of the mentoring**. Almost all interviewed mentees wished for a **greater number of mentoring sessions**. Integrating additional forms of support might further optimise the programme.
- The issues novice teachers faced in disadvantaged school contexts were highly diverse even within the small interview sample. These challenges were often deeply **individual and specific**.

3.1.1 General Note on the Country Report for Austria

More so than other educational systems, Austria struggled with low participant numbers in the NEST programme. Originally, teachers who did not follow the standard teacher training programme (i.e. 'lateral entrants' into the profession) had been the primary focus for NEST mentoring in Austria as these teachers did not receive any formal mentoring prior to 2022. In the school year 2022/2023, however, a shift in teacher preparation policy mandated a formalised induction phase for onboarding teachers without formal pedagogical qualifications (Rechtsinformationssystem des Bundes, 2023). Since this innovation was communicated in 2021, the NEST programme in Austria suffered low participant interest right from the start. New teachers were concerned that they would experience a double burden or double track between the mandatory induction and the voluntary NEST programme. Notably, our interviews showed that this was not the case for those teachers who decided to participate. For them, the NEST mentoring acted as a supplementary resource.

The limited number of participants rendered any inferential analysis of quantitative data from Austria unfeasible. In this country report, we will therefore outline only a selection of descriptive statistics, mainly focusing on the perspective of novice teachers. A large part of this report homes in on insights from qualitative interviews conducted between May and June 2023 with seven Austrian NEST mentees. The results of our interview analyses should not be seen as representative of the whole Austrian group and should not be generalised or directly transferred to other NEST education systems. Nevertheless, they may offer valuable insights especially into mentees' subjective experiences and other aspects of the mentoring processes that were not directly attainable through our quantitative, questionnaire-based approach.

To provide context for the interviews, this country report begins with an overview of Austria's school education system, particularly highlighting the nuances of school disadvantage in the country and, more specifically, in the city of Vienna, where most Austrian NEST mentees taught. Afterwards, we will provide a selection of statistics concerning Austrian mentees and mentors. Relevant metrics were selected for

their focus on mentoring processes and motivations for partaking in the programme. Following this section, we will briefly outline our interview methodology before delving into the interview results, emphasising both the positive and negative facets perceived regarding participation in the NEST programme. We will conclude by discussing the insights gleaned from this report.

3.1.2 School Education and Disadvantaged Schools in Austria and in the City of Vienna

Austria has a free and public education system with a compulsory duration of nine years. After completing four years at a primary school, known as 'Volksschule', students move on to either a lower secondary school (Mittelschule) or a grammar school (Gymnasium) for an additional four years. Students not wishing to pursue a university degree but interested in apprenticeships will usually spend one year at a polytechnic institute (Polytechnische Schule) after finishing lower secondary school. Once they secure an apprenticeship, they can enrol in a vocational school (Berufsschule) for three years. The 'Mittelschule' and 'Polytechnische Schule' face numerous challenges, including low academic performance, a large number of students with special needs, and a large number of students who are not native German speakers (Bundesministerium für Bildung, Wissenschaft und Forschung, 2021)

In Austria, school disadvantage is quantified using the 'Index of Social Disadvantage' ('Index der sozialen Benachteiligung'). This index amalgamates four key indicators: the percentage of students for whom German is not the primary language, the percentage of students whose parents have attained only a lower secondary school education, the percentage of students with migration backgrounds, and the percentage of students from families in the lowest fifth of the Highest International Socio-Economic Index of Occupational Status (HISEI)⁵. Subsequently, this index is stratified into four distinct categories, denoting a gradient from minimal to pronounced disadvantage. These categories are associated with various educational outcomes, such as student performance in comparative maths assessments. The city of Vienna and the federal state in which it is located have a notably elevated proportion of schools within the higher disadvantage brackets when compared to the rest of Austria (Bundesinstitut BIFIE, 2019).

Projections indicate that Austria as a whole will grapple with teacher shortages in the coming decades (Bundesministerium für Bildung, Wissenschaft und Forschung, 2021). Vienna is already exhibiting challenges and stresses indicative of a strained teaching environment (Austria Press Agency, 2022). The city's school system increasingly depends on individuals without formal qualifications such as student teachers or those making a lateral entry into the teaching profession.

⁵ The HISEI is used as a measure of socioeconomic status and is based on international data on income and educational attainment of members of different professions.

3.1.3 Descriptive Statistics Regarding Austrian Mentors and Novice Teachers

3.1.3.1 Novice Teacher Reports

Sixteen novice teachers (twelve women, four men) with no more than five years of job experience participated in the NEST mentoring programme and filled out the questionnaires at the beginning and end of one of the two terms.

The NEST mentoring programme initially stipulated scheduling three mentoring sessions for participants. However, in practice, the number of formal mentoring interactions seemed to vary among the teachers. Twelve of them had three or four formal conversations, three engaged in five or more, and one reported only two formal sessions. When it came to informal discussions, the majority of mentees had between one and three of such interactions, although two mentees stood out with as many as fifteen informal conversations.

At the outset of the mentoring programme, responses regarding the mentees' readiness for various challenges indicated a sense of being insufficiently prepared. For questions about the areas 'teaching students with emotional and behavioural difficulties', 'involving parents in the learning process of their children', 'managing a diverse classroom effectively', or 'engaging hard-to-reach learners', at least half of the sixteen novice teachers indicated that they felt completely unprepared.

Most teachers had high expectations when they started the mentoring process. All novice teachers except one believed mentoring would positively influence their career, help identify challenges, guide them to viable solutions, offer insights for professional growth, and enhance their reflection skills. When asked how they would like their ideal mentor to behave in terms of the mentoring practices used, most teachers indicated that their ideal mentor would use concrete examples and provide constructive feedback on errors, direct advice and best practice examples, and support with trying out different teaching methods. On the other hand, non-directive mentoring methods, which focus on self-discovery, reflection, or providing structure, were less popular. Regarding mentor assessment of their teaching, opinions varied: while six teachers desired their mentor should do this 'a lot', the same number wished for this to be done 'not at all' or only 'to some extent'.

Overall, the response to the NEST programme was largely positive. All 16 mentees confirmed that they had received constructive feedback from their mentors. However, a few areas for improvement were highlighted. For example, five mentees believed their mentors had not adequately analysed their professional development needs. Additionally, four mentees felt that they had not received enough guidance on furthering their professional growth or specific insights on improving their instruction.

Asked about their schools' specific challenges, the teachers' median estimate regarding students who primarily speak a language other than German at home was 81%, with values ranging from 26% to 97%. Estimates regarding students from low socioeconomic backgrounds ranged from 6% to 100% (*Mdn* = 71%); those regarding students with parents who had not completed their secondary education ranged from 16% to 83% (*Mdn* = 77%). Three teachers highlighted substantial instructional challenges due to a lack of support staff and insufficient library resources at their schools.

3.1.3.2 Mentor Reports

In the concluding questionnaire, mentors were asked to evaluate the extent to which the NEST project had bolstered their mentoring competences. Of the 15 mentors who participated in this final survey, all unanimously agreed that the programme had helped them immensely in encouraging mentees to reflect on their teaching as well as in addressing the emotional concerns of mentees, empathising with their mentees' perspectives, and pinpointing challenges that their mentees encountered. Conversely, only seven mentors felt adequately supported with relating their mentoring to professional teaching standards, nine felt helped in adapting their mentoring techniques to the classroom's social dynamics, and ten responded that the NEST project was beneficial for analysing their mentees' professional development needs.

Since only six mentors had had mentoring experience prior to the programme, only those mentors completed questions that could provide insight into changes in their practices over the course of the NEST project. Based on their average frequency ratings, these mentors' mentoring practices remained largely consistent from the inception of the programme to the final survey. In all cases, only small and inconsistent fluctuations were observed which resulted from individual response variations in either direction. Detailed descriptive statistics regarding the reported results can be found in Appendix A1 – Austria.

3.1.4 Novice Teacher Interview Participants, Procedure, and Methods

Our seven interview participants (six women, one man) taught in schools of the type 'Mittelschule' or 'Polytechnische Schule' during their mentorship. All participants were educators in Vienna. Except for one teacher, all were novice teachers with less than five years of experience in the field. Participation in the interviews was voluntary. To attain a diversity of perspectives in the sample, the pool of potential interviewees included mentees who, according to the NEST mentors, had expressed positive overall mentoring experiences as well as mentees who had previously expressed more negative views to their mentors.

Out of the seven participants, three possessed non-Austrian university degrees which were not directly accredited within the Austrian system. Another two were still in the midst of their studies, yet they functioned in their school in positions similar to regular teachers during the mentoring period. Only two out of the seven held the standard formal qualifications when they received their mentoring.

Each interview lasted between 45 to 60 minutes and was divided into two parts. The first part explored participants' experiences with the NEST mentoring, motivations for participating, and the aspects they found most and least effective (Brinkerhoff, 2002). The second segment sought insights into how these new teachers navigated their schools' perceived 'disadvantagedness', the role of NEST mentoring, and areas needing better support.

The interviews followed a semi-structured format. All interviews were conducted as virtual online conferences by a member of the evaluation team with prior experience in conducting qualitative interviews. While starting with a predefined set of questions, the interviewer adjusted and introduced new queries based on their rapport with the interviewee and the flow of the interview. Audio recordings

of the interviews were subsequently transcribed by a student assistant. While the interviews were conducted and initially transcribed in the German language, example quotes were translated for this report. As the analysis was performed with the MAXQDA 2020 qualitative coding software, the included quotes are accompanied by positional indices from the original German transcripts.

To analyse the data, we employed thematic analysis with initial categories rooted predominantly in the structure of the interview questions. Using Braun and Clarke's (2006) thematic analysis guidelines as a foundation, the first phase focused on preliminary code generation from salient features of the data. These initial codes informed potential themes in the next phase. Throughout the iterative review processes, these themes were refined, ensuring they clearly followed the patterns within the interviewees' responses. Discrepancies or ambiguities uncovered during this phase were resolved through discussions between an evaluator and a graduate assistant who supported the coding process. After finalising and naming the themes, representative quotes were selected to illustrate them

The analysis of interview results focused on the following key themes: mentees' motivations for joining the programme; their perceptions of the mentoring structure; the aspects they appreciated most; tangible outcomes; and areas with potential for improvement. Additionally, we also incorporated a shorter analysis of the nuances of mentoring within disadvantaged school contexts and alternative support mechanisms suggested for novice teachers.

3.1.5 Interview Results

3.1.5.1 Motivations for Participating in the Mentoring Programme

The interviews showed that motivations among the interviewees for taking part in the mentoring programme were varied and diverse.

Discipline. One participant⁶ was motivated by a specific and tangible issue, seeking guidance to manage loud and unruly students effectively. This participant articulated a clear expectation of the mentoring process, namely receiving targeted advice for addressing the specific challenges in their classroom.

*I asked her to visit me in the two classes in which I had the greatest difficulties with the children. And my greatest difficulty is still the [lack of] discipline of the children.
(Interview 4, pos. 26)*

A Second Pair of Eyes. However, most motivations were more general, primarily revolving around the overarching theme of professional development. The participants reporting this motivation exhibited an interest in enhancing their teaching abilities by having another person in the classroom who would notice and make them aware of unrecognised and overlooked issues. They sought to gain insights to address

⁶ To maintain anonymity, all interviews were randomly numbered. Since the gender imbalance would have made one person identifiable, all interviewees are referred to using gender-neutral pronouns (they/them). Specific biographical references were also removed.

problems they were not perceiving themselves. For instance, one interviewee mirrored the prevalent motivation among the participants when they stated:

It was most important to me that someone simply watches and sees what I'm doing and looks at it from the outside. It wasn't like I had any acute difficulties or like I was having a hard time, but it just felt a bit strange that no one had ever looked at what I was actually doing [in the classroom] from the outside. And after all, I work with 20 young people, which means that I sometimes have an influence on almost 100 young people on one day. I just thought it would be good if someone had a look at it from the outside because things can creep in very quickly, even after just one year, things that you might not even notice. (Interview 1, pos. 12)

Much like this participant, other interviewees expressed a wish to have another individual provide insight not only into their teaching methods and overall classroom conduct, but also into more nuanced processes that might not be immediately apparent.

Need for (Better) Feedback. This desire was intertwined with the aspiration for comprehensive and constructive feedback. For instance, one interviewee conveyed that their motivations for joining the mentoring programme were influenced by their previous unsatisfactory mentoring experiences with their university advisors. They had found their advisors' feedback to have been brief, overly evaluative, and ultimately unconstructive.

I had been observed in the classroom before, but there was always a lack of output. It seems like I had some bad luck in my university programme. The feedback was always something like 'everything's okay, but maybe you could have added a number to the exercise sheet'. Wow, yes. That didn't help me much. (Interview 3, pos. 25)

Understanding a Foreign Education System. One participant, who had a non-Austrian degree and taught as a lateral entrant, emphasised the desire for receiving mentoring as a means to comprehend better the intricacies of the Austrian school system and gain clarity on the expectations placed on novice teachers.

Teach For Austria Brand Image. Notably, some mentees also revealed a favourable impression of Teach For Austria and the organisation's fellows at their schools, which may have motivated them to take part in the programme. Though not a motivation for participating by itself, the positive image of Teach For Austria was a contributing factor to the decision as the opportunity to participate in a programme offered by this organisation was viewed as a valuable and enriching experience. Interviewee 1 was especially vocal about their positive impression:

[Teach For Austria fellows] are simply much better trained than all the other teachers I know and also than all the other mentors [...]. Obviously, their training is more intensive and better than that in teacher training in Austria; at least that is my impression. And that's why it wasn't particularly surprising to me that [the mentoring programme] is good when it comes from Teach For Austria because so far, from what I've heard, I've only heard good things about it. (Interview 1, pos. 32)

3.1.5.2 Structure and Approach of the Mentoring Sessions

Adherence to the Format. Based on the feedback from the interviewees, the mentors adhered to the pre-established format consisting of two to three lesson observation sessions followed by collaborative reflections. At the outset of the mentoring programme, mentors enquired about the mentees' goals and expectations. In the reflection sessions, mentors moderated in a manner that encouraged mentees to share their own perceptions of their lessons freely.

Provision of Direct Advice. While the mentor training emphasised fostering a communicative environment that would be mostly led by the mentees and be characterised by openness and non-directiveness of the mentors, it was noted that some mentors opted to provide mentees with direct advice on improving various aspects of their teaching. For such advice, they often used the NEST material as a guideline. This direct approach deviated from the initial focus on enabling self-discovery and independent realisation. However, this divergence in approach was met with positive reception by the mentees. The provision of direct, actionable advice seemed to resonate well; mentees often highlighted how they could adapt these strategies to their own teaching (see Section 3.1.5.4). As an example of a more directive style of mentoring, one interviewee highlighted how their mentor initially encouraged them to introspect and assess their own lessons but then made them aware of certain aspects she (the mentor) had noticed. The mentor then supplied a list of potential strategies for enhancement, which the mentee further enriched with their own suggestions.

She always attentively asked me whether [the lessons] seemed okay to me, whether I had noticed this or that, and [she was] very attentive without pressing me in any way. And then I actually concluded that some things were not quite right yet. For example, that some things could perhaps be better, and this feedback helped me a lot to develop strategies. She simply gave me a list of how I could act, and I also wrote some things down. (Interview 6, pos. 18–19).

Refraining from Providing Direct Advice. However, interviews also showed that other mentors made sure that they did not impose any form of direct advice on their mentees:

Basically, these feedback conversations were usually structured so that I was supposed to evaluate the lesson for myself and then say what my problems were; at which points I didn't feel comfortable or where I had the feeling that I had lost individual students again, and then consider what could be done to improve the situation. My mentor had usually also noticed these points, or maybe she did it very well and sensitively, so that she didn't present it to me, but that it really came from my own reflection. (Interview 5, pos. 14)

Ongoing Communication. Besides the reflection sessions, some mentors maintained communication with their mentees by telephone, email, or WhatsApp. This offered additional opportunities for receiving feedback on concrete challenges in the classroom.

3.1.5.3 Perceived Positive Aspects of the Mentoring Programme

Mentees within the mentoring programme identified multiple advantageous components, emphasising both the interpersonal characteristics of the mentors and their proficiency in delivering constructive criticism in a supportive and appreciative manner.

Mentor Selection and Fit. Mentees appreciated that mentors were selected in a way that would match their personalities, interests, and school environments. Some perceived and positively commented on similarities with their mentors, whether in terms of the type of school, subjects, or comparable biographical backgrounds. Such parallels signalled relatability and an understanding between mentor and mentee.

[I think] that we just got along well. We were the same age. She had similar experiences with her students. (Interview 1, pos. 30)

Actually, she is [the same nationality as me]. So I don't know if they did that on purpose [interviewee laughs], but that was super good because we spoke a little [in my first language, and] a little German, that was great. (Interview 4, pos. 20)

External Mentors. Another recurring positive comment was that the mentors were not employed at the mentees' own schools. This external stance was predominantly preferred as it introduced a new and fresh perspective that mentees did not believe they would have received from colleagues at their schools. For example, one interviewee very much liked the fact that their mentor worked in another school in a different city:

This way you can really have a fresh, uninfluenced insight into the whole thing. If it had been someone from the school, you might have had completely different insights. [However], it is always better to be an external person, not a friend or not in a supervising position to the mentored teacher, so that you really come with your own opinions, with your own strategies. And generally, from another city, so that you really have a lot of new aspects. I think if [the mentor] had been from Germany, it might have been even more interesting because they have a completely different school system. (Interview 6, pos. 27)

The external position also alleviated concerns related to the potential influence on the perceptions by principals and colleagues. The neutrality of an external mentor created a comforting atmosphere, allowing mentees to be more open and at ease. For example, one mentee commented:

I think it's always better to talk to someone who is a bit on the outside, because the influences can be really strong [...]. It was actually important for me to talk to someone who was not influenced, who could simply remain neutral in all situations [...]. At school I also get help, but sometimes I don't know if I can or should talk about certain things. With my mentor, I can talk about everything; if I know I'm stuck, she just tries to help me, just me and with no other thoughts or anything. And it was just

totally comfortable; I didn't have to think about anything else, just my professional career [...]. (Interview 2, pos. 20–22)

In contrast, Interviewee 2 felt more judged by people who worked at their school:

To a certain extent I could always get help, it wasn't that I got left behind, but maybe I was a bit afraid of being judged or something. (Interview 2, pos. 24)

Availability of Mentors. The ability to approach mentors with spontaneous questions or problems was highlighted by mentees as an important positive aspect of mentoring. The value was especially notable when mentors were accessible beyond the scheduled observation and feedback sessions.

And we met again and again in between [the mentoring sessions], and it was great [...]. I often asked her via WhatsApp, 'what would you do in such a situation'. She was really very helpful. (Interview 4, pos. 20)

Feedback Quality and Intensity. Especially in comparison to prior mentoring experiences either with university advisors or school principals, mentees remarked positively on the intensity of the feedback and the constructive nature of how the feedback was delivered.

After a couple of years, it is usually not so easy for teachers to let someone into their own classrooms and observe them, and to allow them to criticise them. Not every teacher can do that, not everyone is capable of criticism when they get feedback. I notice that with myself, too, but [my mentor] was so nice and considerate, and it was possible to discuss everything openly without being offended in any way. (Interview 6, pos. 25)

Communication Styles. A connected theme among the mentees was the commendation of their mentors' communication styles, especially during discussions and reflections on classroom observations. While many interviewees could not pinpoint the precise attributes that made the communication so effective, they unanimously appreciated how the mentors delivered feedback. Even criticism, which could potentially have been challenging to accept, was consistently perceived as constructive and genuinely well-intentioned by all mentees.

3.1.5.4 Perceived Positive Outcomes of the Mentoring Programme

Mentees reported a diverse array of positive outcomes, highlighting enhancements in cognitive understanding of classroom processes, skill acquisition, and different aspects of emotional well-being.

Acquisition of Concrete, Adaptable Skills. Mentees who felt they had acquired concrete skills or techniques, such as those related to classroom management, organisational tasks, or specific routine tasks like student grading, emphasised how they adapted their mentors' advice and how mentors had helped them improve their own teaching.

So, for example, this year I still have this problem with [lack of] discipline because in this school discipline is really not a big thing. But now I manage to work much better with [my mentor's] advice and to manage the whole thing. The second time she came, that was also a big problem [in my lesson] because it was also in the afternoon. In the afternoon, [the students] are much more tired, but there she noticed that I had used her advice, although the class was restless. (Interview 4, pos. 25)

Increased Awareness of Classroom Processes. However, cognitive outcomes were often more nuanced. Mentees commented on how mentoring had helped them become aware of specific aspects of their teaching or classroom behaviour. These insights were often subtle but perceived as impactful. For example, one mentee described how recognising their patterns of movement within the classroom transformed their self-awareness and the dynamics of their interactions with their students:

After the first observation or during it, my mentor made a movement protocol, and then we really didn't have to talk about it anymore because it was clear. I had been avoiding those tables of students with whom I have the weakest relationship. And I was totally amazed. [Consequently] I made sure that I changed the seating arrangement and paid attention to it consciously. [...] Just becoming aware changed something in the relationship with these six children. I felt, I had been caught out, and it surprised me how these things were so clearly connected. (Interview 3, pos. 32)

Finding the Right Terms. Similarly, Interviewee 1 remarked that mentoring had helped them find the right terms for describing what happened in the classroom. Thus, the mentoring sessions helped to bridge the gap between theoretical pedagogical knowledge and practical experiences.

She provided terms for the things I was already doing. Of course, she always let me tell her how I felt about the lesson, and then she simply gave names to a lot of things I was already doing; for example, to calm the students or something like that. This [giving of names] helped a lot. (Interview 1, pos. 18).

Increased Self-Confidence. Emotionally, the programme facilitated the cultivation of self-confidence through positive feedback, proving invaluable for many teachers who initially harboured insecurities about their teaching or their role as teachers.

[I took away] a lot of encouragement. Actually, she gave me more praise than criticism. [...] Because of course you feel insecure, especially in the first year. But then when someone else is there and gives feedback, that's perfect. (Interview 4, pos. 52–54)

Openness to Mistakes and New Approaches. The precise, positive acknowledgement of the mentees' strengths greatly enhanced their self-assurance regarding classroom activities and often encouraged them to become more experimental and innovative in their approaches, acquiring a more growth-oriented attitude towards mistakes.

I learned that you can always improve things. Personally, when I started out, I always had the feeling that if I did something that didn't go well, that now I've made a mistake and it's going to be so hard to fix it. She showed me that you have to work with the mistake. If I think something didn't go so well, I can always just restart, so to speak, address it, and maybe it's not as bad as I thought at first. (Interview 6, pos. 36)

NEST Mentoring as Exemplary. Other effects were neither solely cognitive nor emotional, such as offering constructive examples of how teacher mentoring, particularly lesson observations and feedback, should be conducted. Another tangible outcome was the provision of resources for sustained development, including the NEST material and additional websites the mentors recommended to their mentees.

3.1.5.5 Potential for Improvement of the Mentoring Programme

Although the majority of mentees either did not specify criticisms or mentioned only the administrative efforts required to secure the mentoring, a few did articulate concrete feedback regarding opportunities for enhancing the programme.

Vision Statement. One mentee expressed that the initial assignment of 'defining a vision' felt overly broad and seemed lacking in purpose:

I have a good friend and she did [the NEST mentoring] too, and we reflected a bit on it ourselves at the weekend; what did it bring us and then it was a bit ... [interviewee shrugs] for both of us. It might make sense to define a vision like that. [However], it is difficult to define the vision, and we didn't pursue the one I defined, which was totally okay because it was like, yes, okay, I have to find something [Comment: Interviewee refers to defining the vision]. So, for me it wasn't that important and [my mentor] saw that, too, and we ignored it a bit. But maybe it's important for others. (Interview 3, pos. 48)

While this feedback was unique and not echoed by others, it suggests that the initial task of defining a vision might benefit from added specificity, ensuring that it establishes a framework for subsequent mentoring sessions.

Clearer Structure. Addressing the above aspect could also tackle another piece of constructive feedback from a different mentee. This individual found the mentoring sessions to be less structured compared to the feedback they gained from observations by their principal. They recommended establishing a clearer focus for each session, ensuring that they stand out distinctly from one another, effectively guiding the mentee's learning journey in a clear, chapter-like progression:

Perhaps it would also be worthwhile to change the foci of observations a little. For example, [some could focus] more on body language or dealing with the students and disruptive factors or things like that. So that the focus is just a bit different, that you have the feeling that you are learning chapter by chapter. (Interview 5, pos. 32)

Distinct Foci: Parents and Discipline. Interviewee 5 highlighted two specific areas pertinent to the particular challenges of their school. First, they expressed the need for a mentoring session that focuses on effective communication with students' parents. Second, they sought guidance on crafting a model for fostering discipline within their classroom, for example by developing an appropriate sequence of consequences for different types of rule violations.

Scheduling Problems. Interviewees 5 and 7 encountered challenges in scheduling sessions with their mentors. Consequently, they settled for lesson observation appointments that were neither particularly essential nor beneficial.

[My mentor and I] are stuck in a fixed timetable, and we therefore had to exclude some lessons that might have been interesting because she doesn't have time at the moment. And then there are things like the fact that she sat in on one of my PE lessons just because she needed another lesson and that was the only lesson for which we could find a date, [even though] I am not even a PE teacher. I'm allowed to play ball games with the children. So she could comment on my relationship with the children, observe, she could see how clearly I would say something. But there wasn't much subject-related teaching involved. (Interview 5, pos. 26)

Lack of School Support. Interviewee 7 faced challenges reconciling their standard school duties with the mentoring programme, which was perceived as a purely private endeavour at their school. They pointed out a broader issue at their institution: owing to an acute teacher shortage, many educators found it challenging to secure administrative approval for professional development opportunities. As a solution, the interviewee expressed a wish for improved cooperation between the organisers of the mentoring programme and their school's administration.

Extension of the Mentoring Programme. Among the seven interviewees, Interviewee 7 stood out as the most critical. They felt that the mentoring sessions were too compartmentalised and selective, preventing them from gaining insights that could be applied to a broader range of teacher scenarios beyond those discussed in the sessions. In their view, the mentoring they received presented little more than a collection of strategies which they found insufficient to address acute challenges in transitioning into teaching as a lateral entrant to the profession. Nevertheless, they did not regard the mentoring as futile. Instead, they believed that the scope, intensity, and duration of the mentoring needed to be extended:

No day is like the other, no lesson is like the one before, there is always something different, you can't think statically and apply some concept [to every lesson] because [you believe] it always works, you can't do that. You have to look at which problem exists with which student, what new challenges there are; and yes, I found it very difficult at the beginning to find the right way, and I still find it difficult. The whole day can go quite well, and then there is maybe one hour that can ruin the whole day because it is full of stress. So, I think it would also have been helpful to extend the programme, as I said, to two years. That would have been great for me because [the mentoring] was just too random. It was always only one hour. And, well, you can also imagine what kind of support you get from three pages of A4 with possible methods and problem strategies. In retrospect, I don't think that's enough. I read through it

and looked at it and saw what was relevant for me, what I could apply to practice, what I've already experienced. Yes, but I think you cannot break [the challenges of teaching] down into pages of A4. (Interview 7, pos. 12)

While other interviewees did not frame it as a direct criticism, most mentees explicitly wished for more than the small number of mentoring sessions they had undergone.

Availability of Internal Mentoring. Interviewee 7 stood out in connecting their wish for more mentoring with the idea of having a mentor from their own school. This set them apart from the majority, who (as pointed out above) appreciated having external mentors for various reasons. Interviewee 7's perspective was largely influenced by the organisational challenges they had faced during their mentoring experience.

Mentor Mismatch. While many mentees valued their mentor pairings and often identified similarities with their mentors, a few expressed a desire for a more aligned match in terms of teaching specifics. Two interviewees mentioned that they would have preferred a mentor with experience that was more aligned with their subjects or their type of school. Their concerns stemmed from perceived gaps in guidance related to specific subject content or age group nuances.

So I think what would really be good [to integrate into mentoring] is [subject-related] didactic things, because the mentors we have often come from other departments, so to speak, and didactic aspects are probably not in their department. (Interview 1, pos. 61)

[My mentor] taught at a Mittelschule, so she has to deal with younger children. Most of her advice was already good. There were only a few pieces of advice I can't really use in my class with these young people; they are now in puberty, they are no longer children. So, you have to think, maybe something more specific should be offered for the polytechnic school because this is a special kind of school. These are children who actually ... So most of the children come from disadvantaged environments regarding their family and so on, and they are not very good at school. I mean, for them, school is not the most important thing, whereas maybe in Mittelschule it is. Firstly, because they are small, younger; and secondly, because some are actually interested in learning. But these kids [in polytechnic schools] just think, 'I have to finish this year so that I can get into an apprenticeship,' and that's it for school. That's why you should outline some recommendations just for this type of school (Interview 4, pos. 30)

3.1.5.6 The Disadvantaged School Context

When probed about their perceptions of their schools being categorised as 'disadvantaged', mentees provided a plethora of views, highlighting the multifaceted nature of the term. Disadvantage was often perceived as a stigma pertaining to both teachers and students at specific schools or school types. Some mentees highlighted tangible resource constraints, like shortages of materials, inadequate classroom settings, or a lack of teaching staff. Others shed light on more student-related challenges, such as vandalism, tensions between student groups, disciplinary issues, and other challenges related to insufficient knowledge of the German language in large parts of the student population or confrontational

cultural or religious identifications. Often, mentees would link these challenges to parental neglect or the impact of poverty and other social inequalities.

Given the nuanced and unique challenges specific to each school, mentees generally did not anticipate that mentoring could address issues directly connected to 'disadvantaged' school contexts, other than supporting students with language difficulties. Apart from that, they expected mentoring to tackle specific challenges that they saw as indirectly connected to the social disadvantages within their schools, such as managing discipline, enabling differentiated learning, or understanding the specific needs of students.

For example, Interviewee 6 proposed integrating mentoring with a broad selection of highly specialised workshops that could target the very specific problems of novice teachers at disadvantaged schools:

Maybe you could also integrate that into [the mentoring programme] in a way that you offer some kind of workshop. Once [the novice teachers] know what the main problem is in this exact school year and in this specific class or in this teaching group. I think that would be advantageous for everybody. [...] There is a wide range of very different issues that need to be addressed because the children have very different needs and psychological problems. It doesn't necessarily have to be conflicts in which they hit each other or go after each other. It could also be bullying, it could also be other forms of exclusion. (Interview 6, pos. 56)

3.1.5.7 Ideas for Additional Forms of Support

While our interviews centred primarily on the nuances of mentoring experiences, they also shed light on potential avenues for bolstering support during teachers' nascent years. These insights could be instrumental in shaping the contours of future initiatives, although some might extend beyond the purview of the NEST project.

Broadening the Scope Beyond One-on-One Mentoring. As pointed out above, some interviewees suggested supplementing the traditional mentor-mentee dynamic, which largely pivots around observation and feedback. Interviewees raised the idea of including specialised workshops and resources, pinpointing specific areas where they felt a need for growth.

Clarification of School Law and Duties. A clear concern among some mentees was a lack of understanding about their rights and obligations as teachers. This was particularly pronounced for those unfamiliar with the Austrian school system; these teachers expressed a need for a more comprehensive introduction to the system, especially concerning its legal facets.

Support Surrounding Lateral Entry. Mentees without a formal teaching qualification, or those with qualifications from outside Austria, often felt a lack of administrative guidance. They expressed a wish for clearer, more accessible information pathways and supportive personnel to navigate the often complex bureaucratic processes they encountered.

Fostering Professional Networks. Another recurring suggestion was the idea of enhancing one-on-one mentoring with collective networking opportunities. The aim was to establish professional networks where novice teachers could learn collaboratively, seeking and offering support and advice.

3.1.6 Discussion

While originating from a specific convenience sample within only one of the seven participating education systems, the interviews have yielded a number of insights that could potentially be applicable to other education systems and to mentoring programmes tailored to disadvantaged school contexts.

One key observation pertains to the mentees' wishes and the aspects they perceived as especially beneficial in their mentoring. While the NEST mentoring approach emphasises the use of self-reflection and self-regulated learning by the mentees themselves, we observed an inclination towards directive guidance, both regarding the mentees' own wishes and the perceived practices of the mentors. However, based on both the questionnaire results regarding the mentees' satisfaction with the use of different mentoring practices and the comments by the majority of the interviewed mentees, most mentors seemed to have struck an appropriate balance between autonomous, reflective discovery and the provision of expert guidance.

Any criticism expressed by the interviewees was primarily about wanting feedback to be more concrete and support to be more structured. This could indicate that some mentors might have leaned too heavily towards the trend highlighted in the mentors' questionnaire responses, overemphasising facilitative practices rather than directive, guiding ones. However, since the interviews are not representative and cannot be matched to individual mentors' questionnaire responses, this interpretation remains speculative.

One of the overarching objectives of the NEST mentor training was to foster 'adaptivity' to individual novice teachers' needs (van Veldhuizen et al., 2023). The Austrian data seems to validate this objective. Even though previous research suggests novice teachers sometimes prefer evaluative guidance in their mentoring (Polikoff et al., 2015), there is also evidence that overly evaluative, narrow forms of mentoring can be perceived as judgemental and can hinder the professional development process (Hobson, 2016; Hobson & Malderez, 2013). Responses both in the questionnaires and the interviews showed that while mentees often wanted to be confronted with mistakes, receive advice, and be faced with constructive criticism, they also wanted to avoid being assessed and judged in their teaching.

Establishing a form of 'adaptivity' that not only considers teachers' expressed wishes but also what they may profit from and value in their professional development is therefore a highly complex task (Kindlinger et al., in press). Even though some mentees' preferences may lean towards more transmissive formats of mentoring in which they receive direct advice and apply it, there is evidence that even these mentees ultimately profit from more constructivist formats (Burger, 2023). Notably, the interview results also highlight that while some mentees desired specific feedback and wished to acquire tangible strategies for teaching, many perceived and emphasised the less tangible benefits of the mentoring they had received, ranging from heightened confidence and classroom awareness to a more open and experimental mindset. Overall, the findings suggest that Austrian mentors did offer 'adaptive' mentoring by combining forms of

direct advice with consistent and often successful efforts to foster broader professional development processes.

The interviews suggest that those forms of adaptivity that were meant to be established through mentor selection and mentor-mentee pairing (van Veldhuizen et al., 2023) were mostly effective for the participants. However, as highlighted in Interview 4, different disadvantaged schools, despite facing similar issues, might need varied strategies due to differences in age groups and other aspects of student composition.

A noteworthy insight from the interviews was the value mentees attached to having mentors from outside their school, which also eased worries about judgements and evaluations. Even though some past research advocates in-school mentoring due to its accessibility (Polikoff et al., 2015), almost all mentees favoured the fresh viewpoint brought by an external mentor and would not have opted for an in-school counterpart. It seems that availability was sometimes facilitated by alternative communication channels like WhatsApp. Communication through these alternative channels might also explain the often large number of informal 'conversations' reported in the questionnaire.

In the category of 'disadvantage', Austrian mentees' perceptions, as seen in both the questionnaire and interview data, largely aligned with the dimensions of the 'Index of Social Disadvantage'. During the interviews, mentees articulated individual challenges and support needs tied to disadvantage, including handling linguistically diverse groups or addressing the impact of limited parental involvement. However, they generally viewed these issues not as direct outcomes of their schools' unique situations, but rather as challenges stemming from inadequate training in managing large groups of students and from insufficient guidance from seasoned teachers who could provide both constructive feedback and emotional support. While the Austrian understanding of disadvantage predominantly concentrates on factors like migration, language proficiency, poverty, and parental education, our data reveals notable variances among teachers regarding their focus on these different categories and the concrete effects they have on their perceived teaching challenges. This variability in the perception of 'disadvantage', evident in both quantitative and qualitative findings, is consistent with trends observed in other systems within the NEST programme (Anderson-Park et al., 2023).

Lastly, we identified several areas that could bolster support for novice teachers in similar contexts. The prevailing recommendation was to increase the number of mentoring sessions, suggesting an expansion of the NEST programme. Other feedback may help refine the structure and organisation of mentoring. This includes introducing or emphasising specific focal points for individual sessions, providing a more lucid vision statement rationale, and implementing solutions to streamline scheduling and tackle other organisational challenges. Suggestions like creating professional networks or providing information on legal queries offer potential integration points within the existing NEST mentoring framework, offering valuable insights for upcoming strategies.

3.2 NEST Evaluation Results for Belgium – Flemish Community

Key Takeaways – Mentors

- **Intervention group mentors** have **high enthusiasm** for mentoring which even **increases** over time.
- Intervention group mentors focus their mentoring to a **greater degree** on specific challenges after the mentor training programme.
- Intervention group mentors use **more facilitative** and fewer directive practices than control group mentors.
- Intervention group mentors' **mentoring competence increases** after NEST mentor training.
- **NEST mentor training programme helps to improve** intervention group mentors' teaching practice.

Key Takeaways – Novice Teachers

- **Novice teachers** have **positive attitudes** towards being mentored.
- Majority of novice teachers perceive a **good fit between their needs and the mentoring practices** used by their mentors.
- Novice teachers' feelings of exhaustion and resilience stay stable over time.
- Novice teachers in Flemish Community **want to stay** in the teaching profession.
- Novice teachers find their **mentors quite competent**.
- Teaching competences of novice teachers stay stable over time.

The NEST evaluation report for Flemish Community is structured in line the NEST theory of change into sections discussing context, preconditions, processes, and outcomes. It starts by examining the role of mentoring in general in the context of the education system in Flemish Community and analyses whether mentoring can be a promising strategy for this education system given the current preconditions for the NEST project. The report goes on to analyse processes and examines how well NEST mentoring is implemented compared to regular mentoring at schools in Flemish Community. Finally, the report observes the outcomes of the NEST project in terms of the effects of the NEST mentor training programme on the mentors as well as the effects of NEST mentoring on novice teachers. The report closes with a brief discussion of findings.

In order to understand the results better, it is important to explain the structure of the sample for Flemish Community and to give a short description of the sample.

Structure: The overall sample for Flemish Community consisted of NEST mentors who took part in the NEST mentor training programme (mentor intervention group) and mentors who did not take part in the NEST training programme (mentor control group). The sample also consisted of an intervention group of novice teachers who were supported by a NEST mentor, and a control group of novice teachers who were either supported by a mentor who did not undergo the NEST mentor training programme or who were not supported by any mentor at all. In panel designs in which the same individuals have to complete more than one survey, dropout of participants over time (panel mortality) is a well-known problem. In this respect, the NEST project is no exception. Participants from the Flemish Community—mentors as well as novice teachers—dropped out of the programme for various reasons (e.g. changing to a different school,

maternity leave, long-term illness). Some participants did not drop out of the programme, but simply did not complete the surveys. The dropout reported here only refers to survey dropout rates. Since this report examines developments over time, we compare data from the first survey to the corresponding data from the other surveys. Therefore, the sample for the descriptive statistics and analyses in this report included only those mentors and novice teachers who filled out all required questionnaires.

The sample for the Flemish Community included 20 mentors; of those, 8 were NEST-trained mentors in the intervention group, and 12 were regular mentors who did not receive special training (control group mentors). Intervention group mentors filled out surveys at three points in time: at the beginning of the school year 2021/2022 in October 2021, before the NEST mentor training programme started (T1); at the end of the school year 2021/2022 in June 2022, when the theoretical and practical training had mostly finished (T2); and lastly, at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3). Mentors in the control group were surveyed only twice: at the beginning of the school year 2021/2022 in October 2021 (T1), and at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3).

The sample also consisted of 50 novice teachers from two cohorts. The first cohort (36 novice teachers) was surveyed in 2021/2022, and the second cohort (14 novice teachers) was surveyed in 2022/2023. The intervention group consisted of 30 novice teachers. Of those, 24 were in the first cohort and 6 were in the second cohort. The control group consisted of 20 novice teachers. Of those, 12 were in the first and 8 in the second cohort. Of the novice teachers in the control group, 90% reported that they were supported by a mentor. It is important to note that whenever data about mentors are presented from the perspective of novice teachers, the control group sample included only those novice teachers who reported that they were being supported by a mentor. In the sections on context and preconditions, the control group is handled as one group because baseline data are presented which were collected before the mentoring had started. In the sections on processes and outcomes, the intervention group is compared only to the control group with support from a mentor as the control group without mentor support only comprised two people.

Sample Description: The majority of novice teachers in both groups were female; however, the gender distribution was more balanced in the intervention group (IG: 57% female; CG: 80% female). The same was true for the mentor control groups. Here, 67% of mentors were female. In the mentor intervention group, however, the gender distribution was balanced, with exactly half of the mentors being female. The average age of novice teachers had a wide range. The youngest person was 22 years old, and the oldest person was 56 years old. In the intervention group, the average age was 32.2 years, with a median age of 28.5 years, compared to an average age of 31.7 years in the control group. The median was the same as in the intervention group (28.5 years). Intervention group mentors were on average 49.9 years old, with a median age of 49 years, and control group mentors were on average 47.3 years old, with a median age of 47.5 years. Novice teachers in the intervention group had an average teaching experience of 1.5 years, which was higher than that of novice teachers in the control group, who had an average teaching experience of 0.95 years. Teaching was not the first-choice career for 60% of novice teachers in the intervention group and 65% of novice teachers in the control group. All eight mentors in the intervention group reported that they had mentored novice teachers within the past five years compared to 83% in the mentor control group. The average teaching experience of mentors was higher in the mentor intervention group (M_{IG_m} : 21.9 years; M_{CG_m} : 20.5 years). However, the mentoring experience of both groups was very similar (M_{IG_m} : 3.1 years; M_{CG_m} : 3.4 years). Mentors in both groups already had

experience in working at disadvantaged schools (M_{IG_m} : 22.7 years; M_{CG_m} : 14 years). Detailed descriptive statistics for all reported results can be found in Appendix A2 – Belgium – Flemish Community.

3.2.1 Mentoring in the Broader Context of the Education System in the Flemish Community

This section considers the role of mentoring in general in the context of the education system in the Flemish Community. For this purpose, we examine data about the general acceptance of mentoring in the Flemish Community from the perspective of the participating novice teachers and the mentors. Furthermore, we examine the expectations both groups had about what attributes or characteristics a good mentor should have. Data used in this section were taken from the baseline survey conducted before the NEST mentor training programme started.

3.2.1.1 Novice Teachers and Mentors Think that Mentoring Is Generally Well Accepted in the Flemish Community

In the baseline survey, novice teachers and mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about the level of acceptance of mentoring in the education system in the Flemish Community in general. This scale was included in the survey to examine novice teachers' and mentors' perceptions of the general acceptance of mentoring by society as part of the professional development of teachers. On average, novice teachers in the intervention and control groups thought that mentoring was generally well accepted in the Flemish Community, with means in the intervention group ranging from 2.73–3.33, and from 2.85–3.25 in the control group. Novice teachers in both groups agreed most strongly that in their school district, mentoring novice teachers was seen as a crucial part of starting the teaching career (IG: 93% agreed or strongly agreed; CG: 90% agreed or strongly agreed).

Mentors in the intervention group thought that mentoring was generally well accepted in the Flemish Community, with means in the intervention group ranging from 2.63–3.38, while means for control group mentors were a little lower, ranging from 2.17–2.92. The highest level of agreement for both groups was with the statement 'In my school district, mentoring novice teachers is seen as a crucial part of the start of the teaching career of novice teachers', with 87% of intervention group mentors and 83% of control group mentors agreeing or strongly agreeing with the statement. Mentors and novice teachers had a very similar opinion about the general acceptance of mentoring in the Flemish Community, and the statement with which both groups agreed most was the same for both groups.

3.2.1.2 Novice Teachers and Mentors Have Mostly Similar Opinions about What Makes a Good Mentor

In the baseline survey, novice teachers and mentors were asked which attributes they found most important for being a good mentor. They could choose from seven different attributes and pick the three attributes they considered most important. This question was included because we wanted to examine which kind of expectations novice teachers and mentors had in general about what makes a good mentor. For the analysis, we calculated for each attribute whether it was chosen by a person as one of the three most important attributes. Thus, a percentage of 63 means that 63% of the respective group chose this attribute as one of the three most important attributes. Figure 5 shows that trustfulness was chosen most

often as one of the most important attributes by all groups. Only a minority in both groups found curiousness and courage important attributes for a good mentor. Overall, novice teachers and mentors had very similar opinions about which are the most important attributes to make a good mentor.

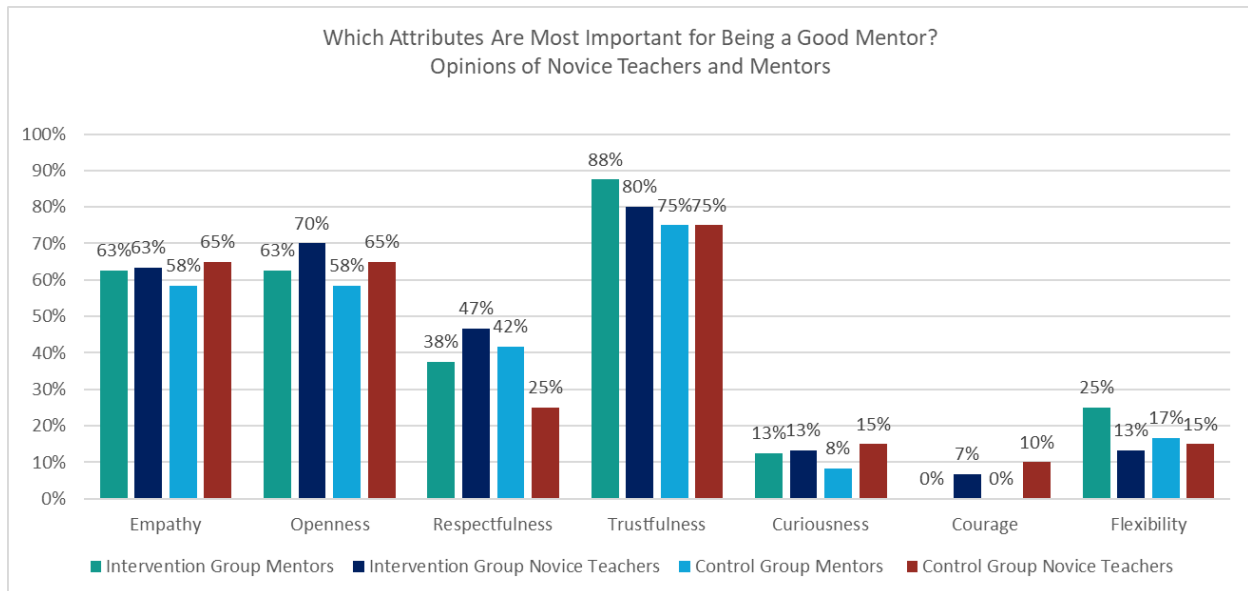


Figure 5: Important Attributes for Being a Good Mentor (Flemish Community)

3.2.2 Preconditions for the NEST Project – Is Mentoring a Promising Strategy for the Education System in the Flemish Community?

This section analyses the preconditions for the NEST project. We examine the prerequisites of the novice teachers and mentors working at disadvantaged schools to determine whether the conditions for a mentor training programme were favourable or not. In the following subsections, we report on data about novice teachers’ attitudes towards mentoring, mentors’ enthusiasm for mentoring, how well novice teachers and mentors feel prepared for dealing with challenges at disadvantaged schools, the availability of induction programmes for novice teachers, and the perceived school environment. Data used in the first three subsections were taken from the baseline survey conducted before the NEST mentor training programme started; data for the last section were taken from the second survey for novice teachers conducted at the end of the school year.

3.2.2.1 Positive Attitudes and High Enthusiasm for Mentoring

In the baseline survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with six statements about their attitudes towards being mentored. This scale was included in the survey to examine whether novice teachers had a general willingness to be mentored and whether they saw the benefits of being mentored. The analysis shows that on average, novice teachers in the intervention and control groups had positive attitudes towards being mentored, with means ranging from 2.97–3.47 in the intervention group and from 3.10–3.55 in the control group. The highest level of agreement in both groups was with the statement ‘I think being mentored can have

an important impact on my professional development.’ Only one person in either group disagreed with this statement, while 97% of novice teachers in the intervention group and 95% in the control group agreed or strongly agreed with this statement.

In the baseline as well as the final survey, mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with five statements about their enthusiasm for mentoring novice teachers. This scale was included in the survey to examine the extent to which mentors were motivated to support novice teachers with mentoring and whether this enthusiasm could be increased by the mentor training programme. Our analyses of the data show that mentors were already enthusiastic about mentoring at the beginning of the first school year before the training for NEST mentors started, with lower means for the mentors in the intervention group (M_{m_IG} : 3.38) than for mentors in the control group (M_{m_CG} : 3.52). Comparing average mentoring enthusiasm before the training to average enthusiasm at the end of the school year 2022/2023 shows that enthusiasm for mentoring stayed the same over time for control group mentors, while it distinctly increased for intervention group mentors (M_{m_IG} : 3.68; M_{m_CG} : 3.53). In the last survey, all mentors agreed or strongly agreed with all statements about mentoring enthusiasm, except with the statement ‘Mentoring is the most fulfilling part of my job.’ Here, 13% of mentors in the intervention group and 17% in the control group disagreed with this statement in the last survey.

3.2.2.2 Little Preparation for School Challenges by Initial Teacher Training

In the baseline survey, novice teachers were also asked to assess how well their initial teacher training had prepared them for six specific challenges they might face working at disadvantaged schools on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis of the data shows that on average, novice teachers in the intervention and control groups felt only to some extent prepared for challenging situations at school, with means ranging from 1.76–2.31 in the intervention group and from 1.56–2.33 in the control group. The intervention group felt least prepared for involving parents in the learning process of their children. Only 10% felt quite a bit prepared for this challenge, and no one felt that their initial teacher training had prepared them a lot for this challenge. In the control group, novice teachers felt least prepared for teaching students with language barriers. The majority felt prepared to some extent (56%); however, 44% did not feel at all prepared for teaching students with language barriers. Of all the challenges, both groups of novice teachers felt best prepared for managing a diverse classroom effectively. For this challenge, 34% of the intervention group and 44% of the control group felt quite a bit or a lot prepared by their initial teacher training.

3.2.2.3 Extensive Induction Is Implemented for the Majority of Novice Teachers at Schools in the Flemish Community

In the baseline survey, novice teachers were asked whether they were currently taking part or had taken part in any induction activities at the school at which they were currently teaching. By induction activities we referred to activities designed to support new teachers' introduction into the teaching profession and to support experienced teachers who are new to a school. These activities are either organised in formal, structured programmes or informally arranged as separate activities. This question was included in the survey to examine how well induction processes for new teachers are already implemented in the school system. For the novice teachers who reported that they had taken part in formal induction activities, we

included questions on the type of activity. They could report their participation in a total of ten different induction activities: general or administrative introduction; courses or seminars attended in person; online courses or seminars; networking or collaboration with other new teachers; team-teaching with experienced teachers; supervision of portfolios, diaries, or journals; reduced teaching load; regular visits from the school principal and/or experienced teachers; supervision of teaching by the school principal and/or experienced teachers; and online activities, such as virtual communities.

Our data analysis shows that the majority of novice teachers in the intervention group (77%) and the control group (75%) had taken part in induction activities. Looking separately at formal and informal induction activities, the percentages of novice teachers who had taken part in any induction activities become smaller. In the intervention group, 67% had taken part in formal and 63% had taken part in informal induction activities. In the control group, 70% had taken part in formal and 60% had taken part in informal induction activities. Of the 23 novice teachers in the intervention group who reported that they had taken part in induction activities, a maximum of 20 also gave information on the type of activity. In the control group, a maximum of 14 (of 15) reported on the type of activity. The majority of novice teachers in the intervention group (75%–95%) had taken part in all of the ten different induction activities. The activity reported least often was online activities, e.g. virtual communities. The most common induction activities included: courses or seminars attended in person, general or administrative introduction, supervision of teaching and regular visits from the school principal and/or experienced teachers, and networking or collaboration with other new teachers (all 90% or higher). In the control group, at least half of novice teachers had also taken part in all of the ten activities (50%–86%). Common induction activities reported by the control group were: supervision of teaching by the school principal and/or experienced teachers, and networking or collaboration with other new teachers (both 86%). Overall, induction was available for at least three quarters of novice teachers and seemed to include many different activities.

3.2.2.4 Challenging Factors Only Slightly Hinder the School's Capacity to Provide Quality Instruction in the Flemish Community

To learn more about the school environment or the conditions under which novice teachers have to work at disadvantaged schools, novice teachers were asked in the second survey what factors hindered quality instruction at their school. Novice teachers had to assess on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) in how far 14 different challenges (such as staff shortages or lack of learning materials) hindered their school's capacity to provide quality instruction. The analysis shows that on average, the majority of novice teachers in both groups saw the school's capacity to provide quality instruction as hindered only to some extent by the 14 challenges. For the challenges of shortage of support personnel and shortage of teachers with competence in teaching students in a multicultural or multilingual setting, novice teachers in the control group saw their school's capacity to provide quality instruction as being hindered more than novice teachers in the intervention group. The median in the control group was 3, while it was 2 in the intervention group. However, both groups thought that the challenge providing the greatest level of hindrance to providing quality instruction was a shortage of support personnel. Here, 46% of novice teachers in the intervention group thought that the quality of instruction was hindered quite a bit or a lot, compared to 63% of novice teachers in the control group. However, means overall were still quite low for both groups of novice teachers ($M_{IG} = 1.69\text{--}2.39$; $M_{CG} = 1.45\text{--}2.63$).

3.2.3 How Well Is NEST Mentoring Implemented Compared to Regular Mentoring at Schools in the Flemish Community?

This section analyses the implementation of NEST mentoring in comparison with regular mentoring at schools in the Flemish Community. We will examine the quantity of formal and informal mentoring conversations and the quality of mentoring in terms of the focus of mentoring as well as the match between the mentoring practices offered by mentors and the perceived need for those practices from the perspective of novice teachers. The section also gives insights into how well intervention group mentors were able to transfer insights and lessons learned the NEST mentor training programme into their mentoring practice. For this purpose, we examine the changes in the mentoring focus and mentoring practices of the mentors. The scale about mentoring focus is the counterpart to the scale on preparedness which was discussed in Section 3.2.2.2. Data for novice teachers were taken from the second survey; for the mentors, data from all mentor surveys were analysed. It is important to note that this section only included data of those novice teachers in the control group who reported that they were being supported by a mentor at the time of taking the survey. This sample comprised 18 novice teachers (90%), while in the intervention group all novice teachers had a NEST mentor.

3.2.3.1 Novice Teachers Take a Critical View of Their Mentor's Time Allocation and Organisation of Mentoring Conversations

In the second survey, novice teachers were asked how many formal and informal mentoring conversations they had with their mentor. We defined a formal mentoring conversation as a longer meeting between mentor and mentee to plan and/or to discuss and/or to reflect on, for instance a lesson plan, actual teaching, or student behaviour. We defined an informal mentoring conversation as a conversation between mentor and mentee that was a short meeting to exchange information or materials or to receive advice or feedback on ideas. This question was included in the survey to have a quantitative measure for the meetings between mentors and their mentees.

The analysis shows that on average, novice teachers in the intervention group had 4.21 formal mentoring conversations (*Mdn* = 4). The range of formal mentoring conversations was between zero and 15 in the intervention group. The intervention group also reported an average of 10.04 informal mentoring conversations (*Mdn* = 5.5), with the frequency of meetings ranging between zero and 60. Since the NEST mentoring planned for three formal mentoring conversations, we expect these outliers to be the result of typing mistakes or of a misunderstanding or misreading of the question. On average, novice teachers in the control group had 4.26 formal mentoring conversations (*Mdn* = 3; Range: 2–14). They also reported having had on average 17.71 informal mentoring conversations (*Mdn* = 7.5; Range: 0–55). The data collected suggest that novice teachers in the control group had more mentoring conversations than novice teachers in the intervention group. However, the data have to be interpreted cautiously since only eight of the 18 novice teachers in the control group who had a mentor answered the question. This means that the data might not represent the control group sample accurately.

Novice teachers also had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with three statements about the time allocation and organisation of mentoring conversations.

The analysis shows that on average, novice teachers in the intervention group perceived the time allocation and organisation of their mentoring conversations quite positively, with means ranging from 3.00–3.44. This is even more true for the control group, where means ranged from 3.39–3.44. Of the three statements, novice teachers in the intervention group agreed most with the statement that they knew well in advance when their mentor would be coming for a classroom visit (85% agreed or strongly agreed). In the control group, novice teachers agreed most that their mentor took sufficient time for the mentoring conversations; 95% agreed or strongly agreed with this statement.

3.2.3.2 Intervention Group Mentors Focus Their Mentoring to a Greater Degree on Specific Challenges After the Mentor Training Programme

Mentors were asked in all three surveys about the focus of their mentoring activities. We wanted to examine to what extent they focused on six challenges novice teachers might face while teaching and whether the extent of focus changed after the mentor training. For this purpose, mentors assessed in how far they focused their mentoring on six different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). This question directly complements the question for novice teachers. Figure 6 shows that intervention group mentors increased their focus on all of the different challenges in their mentoring after the NEST mentor training programme. This was especially true for the focus on teaching students with learning difficulties and teaching students with language barriers. After the school year 2021/2022, the focus decreased again for all of the challenges, except supporting novice teachers with managing a diverse classroom effectively. The mentoring focus on engaging hard-to-reach learners stayed stable after the training. The decreases in mentoring focus mainly for two specific challenges at the end of the school year 2022/2023 could indicate that intervention group mentors had learned in the NEST training to adapt better to their novice teachers’ needs and to focus their mentoring on those areas where they perceived the highest demand.

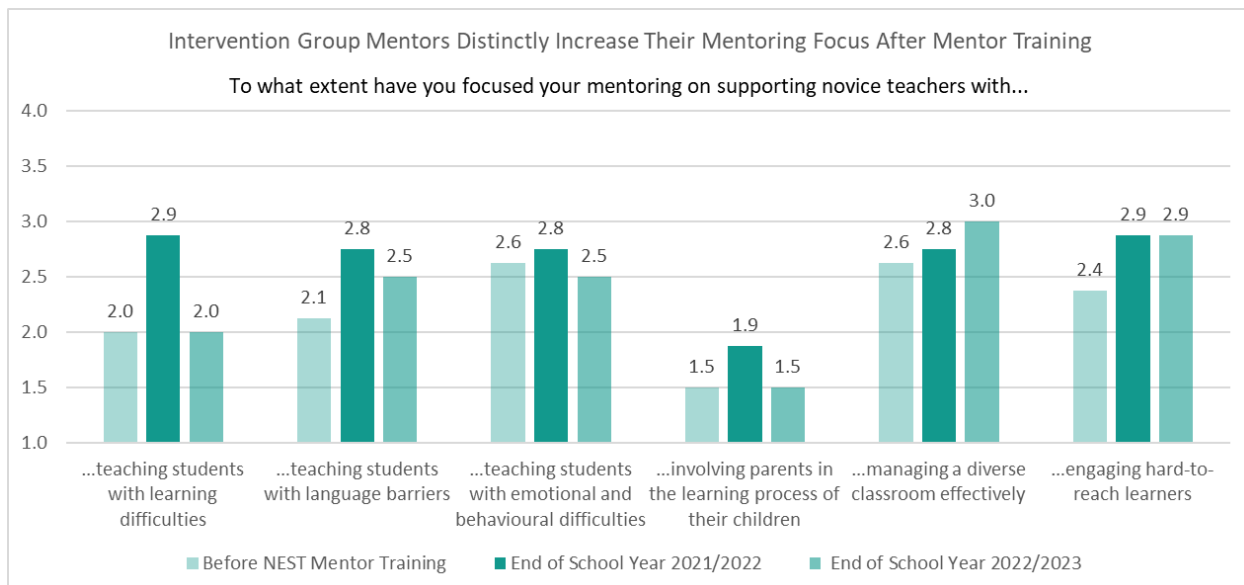


Figure 6: Intervention Group Mentors’ Development of Mentoring Focus (Flemish Community)

3.2.3.3 Novice Teachers and Mentors Perceive the Same Areas of Focus in the Mentoring Practices

In the second survey, novice teachers were asked about the focus of the mentoring they received, so this issue can be examined from the perspectives of both the mentors and the mentees. To assess the extent to which the mentoring the novice teachers received focused on supporting them with dealing with certain challenges at school, they had to rate six statements regarding the different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis shows that novice teachers in the intervention group only perceived a moderate level of focus ('to some extent') of their mentoring on the different challenges, with means ranging from 1.59–2.41. Means for the control group with mentor support were higher overall (1.94–2.83). The highest perceived difference in focus was for managing a diverse classroom effectively. Here, 4% of novice teachers in the intervention group thought that their mentoring focused on this challenge a lot, compared to 17% in the control group. This was also the challenge for which novice teachers in the control group perceived the highest focus of their mentoring. Novice teachers in the intervention group perceived the strongest focus of their mentoring to have been on engaging hard-to-reach learners (7% chose the answer option 'a lot' compared to 6% in the control group).

We also compared the data of the novice teacher intervention group to the mentor intervention group data. The novice teacher sample comprised two consecutive cohorts. The first cohort was the cohort of novice teachers that was supported by mentors directly after the mentor training programme. The second cohort of novice teachers was supported by mentors in the mentors' second school year of the NEST project. We wanted to examine whether the development in the extent of focus of the mentors would be mirrored in the perceptions by the two novice teacher cohorts. However, it is important to note that the second cohort of intervention group novice teachers only comprised six people, which means that the data need to be interpreted cautiously. As the mentors' development of their mentoring focus was very specific to individual challenges—i.e. there was no evident trend in the development of their mentoring focus—the novice teachers in the two cohorts should accordingly also have perceived more or less mentoring focus depending on the different challenges.

Figure 7 shows that the perceptions by novice teachers mirror the development of focus perceived by the mentors only when the mentors' perceived focus decreased: where mentors perceived a lower level of focus in the second year, novice teachers in the second cohort also perceived less focus in that area than novice teachers in the first cohort had. Where mentors thought their focus on a specific challenge had stayed mainly the same or had increased, novice teachers in the second cohort still perceived a lower focus than novice teachers in the first cohort. In other words, novice teachers in the second cohort perceived a lower degree of focus of their mentoring overall than those in the first cohort. There is also an evident disconnect between the mentors' and the novice teachers' overall perception of the mentors' focus in that mentors assessed their level of focus distinctly higher than was perceived by novice teachers in either cohort. That said, where novice teachers and mentors did perceive the highest level of focus of mentoring activities, this was for the same challenges.

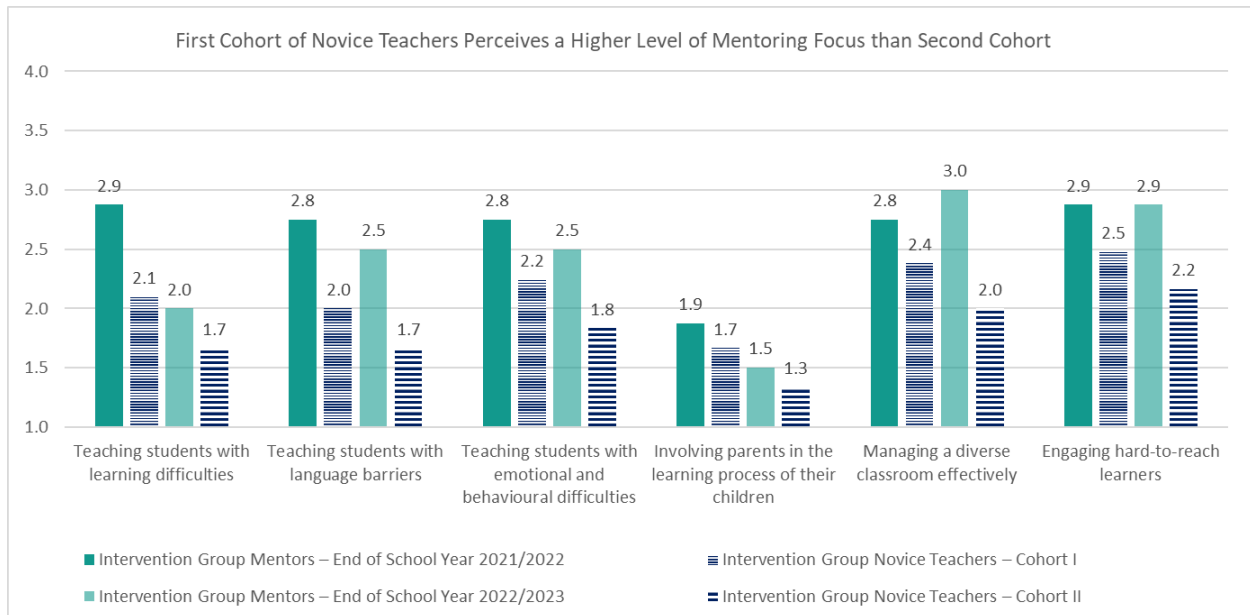


Figure 7: Intervention Group Novice Teachers' and Mentors' Perceptions of Mentoring Focus (Flemish Community)

3.2.3.4 Intervention Group Mentors Use More Facilitative and Fewer Directive Practices than Control Group Mentors

Mentors were asked about their mentoring practices in all surveys. For this purpose, mentors rated how often they used 18 different mentoring practices on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*). We differentiated between more directive and more facilitative mentoring practices. More directive practices generally put the mentor in a more active role and include giving advice or using concrete examples from the mentor’s own practice. The facilitative practices put the novice teacher in the more active role and include asking open questions, using active listening skills, or letting novice teachers find solutions on their own. We wanted to examine which practices mentors had used before the mentor training programme and whether these practices had changed over time. It is important to note that intervention group mentors were surveyed three times, but control group mentors were only surveyed twice. More information about the data collection process can be found in the description of the structure of the sample.

Figure 8 shows that intervention group mentors continuously increased their use of facilitative practices over time, while their use of directive practices stayed stable. Control group mentors decreased their use of facilitative practices over time, while their use of directive practices more or less stayed the same. Mentors in the intervention group used more facilitative and fewer directive mentoring practices after the NEST mentor training programme than mentors in the control group.

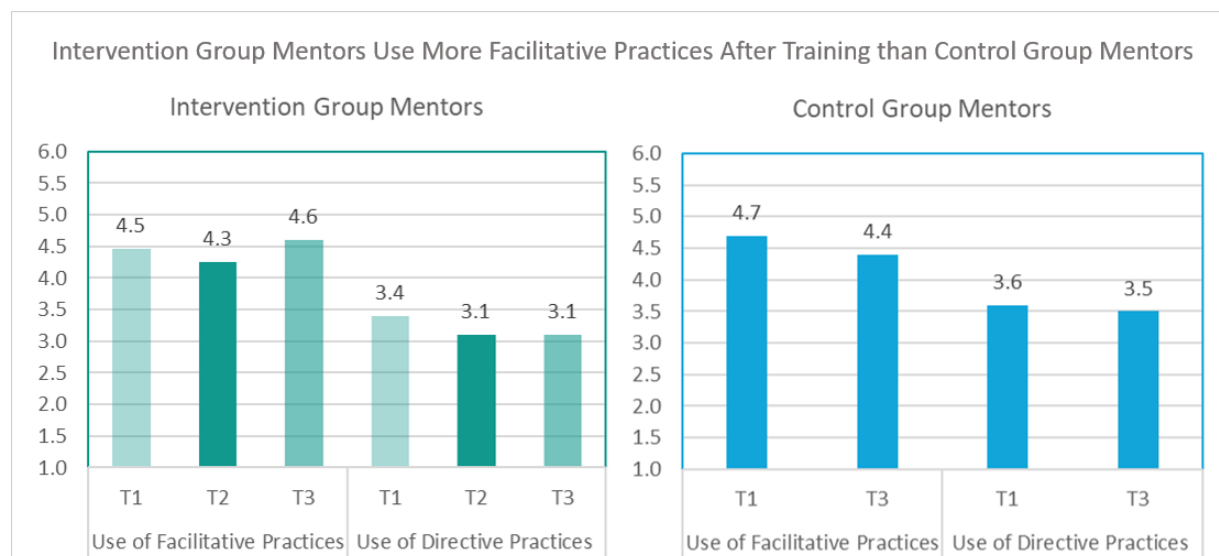


Figure 8: Development of Mentoring Practices Over Time by Mentor Group (Flemish Community)

3.2.3.5 NEST Mentor Training Programme Helps Intervention Group Mentors to Use Their Mentoring Practices in a More Adaptive Way

In the last survey, intervention group mentors had to rate on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme had improved their competences to switch between different practices and to adapt their practices in a flexible way. If they thought that their competence level was already so high that they did not need to improve further, they could indicate this by ticking a box. Our analysis shows that intervention group mentors thought that the NEST mentor training programme helped them on average quite a bit to improve using different mentoring approaches for novice teachers with different personalities, changing their mentoring approach according to the social situation in the classroom, and adapting their mentoring approach according to the novice teacher's level of professional development ($M_{m_IG} = 2.50-3.50$). Overall, intervention group mentors thought that the NEST mentor training programme helped them to improve most in using different mentoring approaches for novice teachers with different personalities (50% answered 'a lot').

3.2.3.6 Majority of Novice Teachers Perceive a Good Fit Between Their Needs and the Mentoring Practices Used by Their Mentors

At the same time, we asked novice teachers to rate how well the frequency with which their mentor used these mentoring practices during their mentoring conversations fit with their perceived needs for such practices on a 3-point scale ranging from 1 (*not often enough*) to 2 (*exactly as often as I needed*) to 3 (*too often*).

The analysis of novice teacher data shows that for all of the practices, the majority of novice teachers thought that mentors had used the practices exactly as often as the novice teachers needed. The percentages of novice teachers who thought that the practice had been used as often as they needed were higher in the control group overall. In both groups, percentages of novice teachers who stated that

mentors had used mentoring practices not often enough were higher than percentages of novice teachers who stated that mentoring practices had been used too often. Practices with the best fit in the intervention group, i.e. the highest percentage of novice teachers answering ‘exactly as often as I needed’, were the mentor using active listening skills, the mentor starting the conversation with an open question, and the mentor asking clarifying questions (all rated by 100% of respondents with ‘exactly as often as I needed’). The practices novice teachers would have liked their mentors to use more frequently were the mentor giving examples of best practice, the mentor supporting them in trying out different teaching methods (both rated by 22% of respondents with ‘not often enough’), and the mentor having ideas about how they should teach the subject matter (rated by 33% of respondents with ‘not often enough’). The best perceived fit in the control group was for the mentor letting them try out different teaching methods (rated by 100% of respondents with ‘exactly as often as I needed’). Overall, 94% of the novice teachers in the control group experienced a perfect fit between their need and the frequency of the use of the respective practice for eight of the 18 practices.

To analyse further the fit between the frequency of use of a mentoring practice and the perceived need from the perspective of novice teachers, we created a dichotomous variable. We categorised the answers ‘not often enough’ and ‘too often’ as bad fit, and the answer option ‘exactly as often as I needed’ as good fit, i.e. for each mentoring practice, novice teachers could have the value 0 for bad fit and the value 1 for good fit. Then we summed up the practices to receive a measure for an overall fit between mentoring practice and perceived need. This measure has a range from 0 (*no fit at all*) to 20 (*perfect fit*). The average fit between the frequency of mentoring practices and the perceived need for those practices was 17.3 for the intervention group and 18.06 for the control group.

3.2.4 Positive Effects of the NEST Mentor Training Programme and NEST Mentoring

This section analyses the results of the NEST mentor training programme and NEST mentoring in comparison with regular mentoring at schools in the Flemish Community. We describe whether the NEST interventions had any effects on various outcome variables such as emotional exhaustion, satisfaction with the workplace, and the teaching competences of novice teachers and the mentoring competences of mentors. Technically, having two control groups—novice teachers with mentors and novice teachers without mentors—would require us to conduct two sets of comparisons for outcome variables which relate to novice teachers, such as emotional exhaustion, job satisfaction or teaching competence. However, with only two novice teachers, the group without mentor support was too small to be used as a reference group. Therefore, we compare the intervention group only to the control group with mentor support. In the Flemish Community, 90% of the novice teachers in the control group had a mentor to support them (see Section 3.2.3). Since we are mainly examining developments in this section, data for novice teachers and mentors were taken from all measurement points to have comparative measures over time.

3.2.4.1 Novice Teachers’ Feelings of Exhaustion and Resilience Stay Stable Over Time

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about their emotional exhaustion. This scale was included in the survey because exhaustion can be a predictor for leaving the job. The data show that novice teachers in the intervention group and in the control group with mentor

support on average felt not very exhausted at the beginning and at the end of the school year. However, the emotional exhaustion of novice teachers in the intervention group slightly decreased over time, while the exhaustion of novice teachers in the control group slightly increased over time. At the end of the school year, novice teachers in the intervention group felt distinctly less exhausted than novice teachers in the control group. Means for individual statements at the end of the school year ranged from 1.83–2.54 in the intervention group and 1.83–2.83 in the control group with mentor support. At both measurement points, the highest level of agreement in both groups was with the statement ‘Overall, I feel overstrained by my workload’, with 17% of respondents in the intervention group and 10% in the control group strongly agreeing with this statement. At both measuring points, the intervention group agreed least with the statement ‘When I am working, I don’t realise how weary I am’; only 10% of respondents agreed or strongly agreed with this statement at the end of the school year. In contrast, the control group agreed least with the statement ‘At the end of a day’s work, I sometimes feel really depressed’ at both measuring points; only 28% of respondents agreed, and none strongly agreed at the end of the school year.

In the second survey, novice teachers were also asked how resilient they felt to stress and negative setbacks at work. They had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about resilience. This scale was included in the survey as a counterpart to emotional exhaustion and can be a predictor for staying in the job. Novice teachers in the intervention and control groups on average felt quite resilient, with means ranging from 2.72–2.97 in the intervention group and 2.61–2.94 in the control group. The highest level of agreement in both groups was with the statement ‘I do not let stress at work get me down.’ Here, 79% of novice teachers in the intervention group and 72% of the control group agreed or strongly agreed with this statement. Overall, the data on resilience mirror the data on exhaustion. Novice teachers in the intervention group felt more resilient than novice teachers in the control group.

3.2.4.2 Novice Teachers in the Flemish Community Think that Their School Is a Good Workplace

The second survey also included questions on job satisfaction. Novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with ten statements about job satisfaction. One of the subscales revolved around satisfaction with the school as a workplace (three statements). The scale on job satisfaction was included in the survey as another predictor for staying in the job. The analysis of the data shows that novice teachers in the intervention group and the control group were on average quite satisfied with their workplace, with means for individual statements ranging from 3.03–3.28 in the intervention group and 3.00–3.29 in the control group. A notable difference between the groups was found regarding the statement ‘I would recommend this school as a good place to work’; 17% of novice teachers in the intervention group and only 6% of novice teachers in the control group disagreed with this statement. However, only 3% of novice teachers in the intervention group and 6% in the control group with mentor support strongly agreed with the idea of changing to a different school if it were possible.

3.2.4.3 Novice Teachers in the Flemish Community Want to Stay in the Teaching Profession

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with two statements about their plans to make career changes. This scale was included in the survey to examine the tendency towards leaving the teaching profession. Our analysis shows that novice teachers on average had a low tendency to leave the teaching profession at the end of the school year or in the long term. In the second survey, no novice teachers in either group were planning to leave the teaching profession after the school year. However, 32% of novice teachers in the intervention group and 50% in the control group agreed or strongly agreed with the idea of a career change in the long term. This result was corroborated only to some extent by the average number of years novice teachers reported to be willing to stay in the teaching profession. The median (which is less affected by outliers than the mean) for the intervention the group was 17.5 years, and 20 years for the control group with mentor support, which shows a dedication overall to stay in the teaching profession for a long time.

3.2.4.4 Intervention Group Mentors' Mentoring Competence Increases After the NEST Mentor Training

Mentors were asked to assess their own mentoring competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding twelve different skills. Our analysis shows that mentors assessed their mentoring competence prior to the mentor training programme as average, with a mean of 4.26. However, at the end of the school year 2021/2022, i.e. after the NEST mentor training, they assessed their mentoring competence distinctly higher ($M_{m_IG} = 4.77$), and at the end of the school year 2022/2023, higher still, with a mean of 4.86. Compared to the mentor control group, they started with a distinctly lower self-assessment of their overall mentoring competence. However, while their self-assessed competence continuously increased over time, the self-assessed mentoring competence of the control group did not change over time, as depicted in Figure 9.

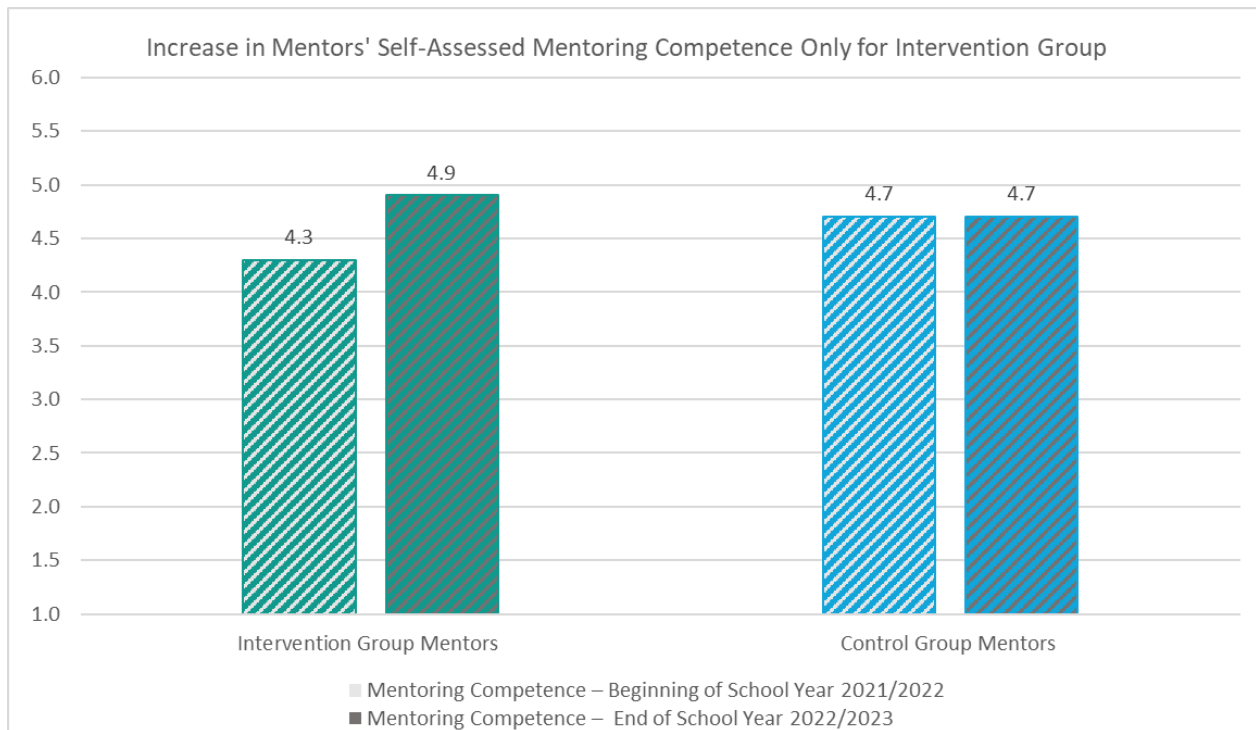


Figure 9: Development of Mentors' Mentoring Competence Over Time by Mentor Group (Flemish Community)

Since the mentor training programme focused especially on supporting mentors with building a trustful relationship, initiating reflection by novice teachers, adapting to novice teachers' specific needs, and building resilience in novice teachers, we specifically examined the statements regarding mentoring competences which revolved around these topics. Mentors in the intervention group assessed themselves higher regarding the four statements at the end of the school year 2022/2023 than mentors in the control group.

Mentors' self-assessed competence increased over time for the four statements, as depicted in Figure 10. This is especially evident when comparing the mean from before the training to the mean at the end of the school year 2022/2023. Mentors assessed themselves highest regarding supportive relationship-building and prompting reflection.

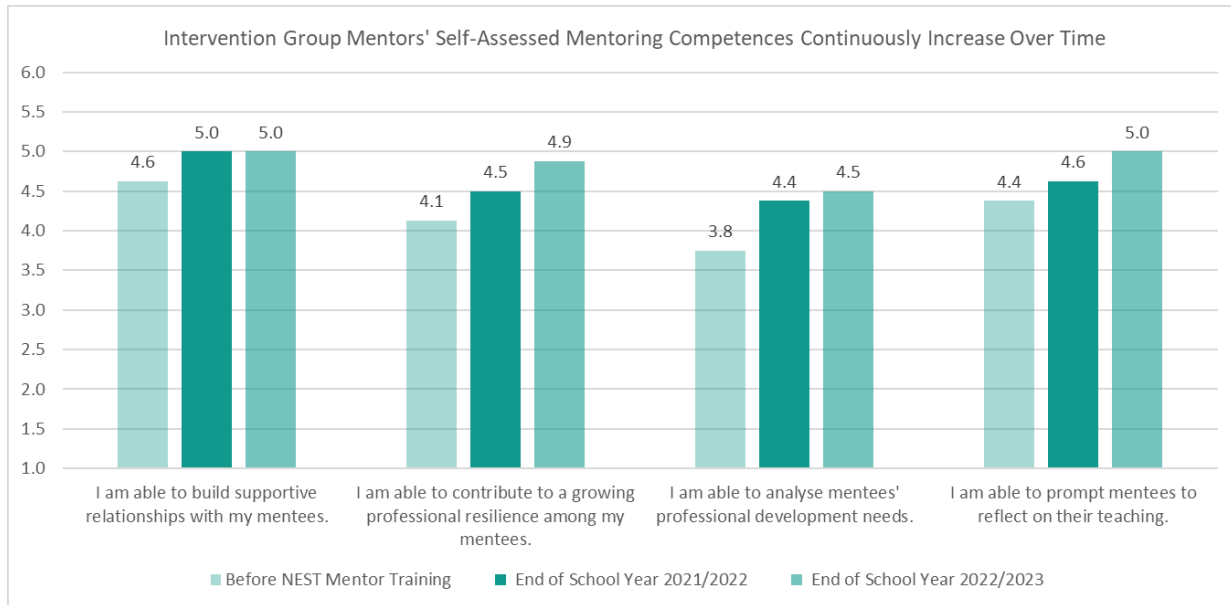


Figure 10: Intervention Group Mentors' Development of Specific Mentoring Competences (Flemish Community)

3.2.4.5 Novice Teachers Find Their Mentors Quite Competent

In the second survey, novice teachers had to assess their mentor's mentoring competence by agreeing on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with twelve statements about their mentor's mentoring competence. This scale was included in the survey to examine mentoring competence not only from the perspective of mentors but also to capture the perceptions by novice teachers as the recipients of mentoring. In the control group, this question was only posed to novice teachers who had reported on an earlier question that they had a mentor to support them.

The majority of novice teachers in both groups strongly agreed with the statements about their mentors' competence, with means ranging from 3.00–3.56 in the intervention group and 3.11–3.56 in the control group. Looking at the mean of the scale, novice teachers in the intervention group assessed their mentors as high ($M_{IG} = 3.29$) as novice teachers in the control group assessed their control group mentors ($M_{CG_ment} = 3.3$). Novice teachers in the intervention group agreed most with the statement 'My mentor addresses my feelings in a professional way', with 56% strongly agreeing. Agreement in the control group was highest with the statement 'My mentor gives me constructive feedback', with 56% of novice teachers strongly agreeing with the statement. Regarding the four statements which were analysed above for the mentors, the percentage of novice teachers who strongly agreed with the individual statements was similar, except regarding the mentor helping novice teachers develop professional resilience. Here, 19% of novice teachers in the intervention group strongly agreed, compared to 28% in the control group.

3.2.4.6 NEST Mentor Training Programme Helps to Improve Intervention Group Mentors' Teaching Practice

Intervention Group mentors were also asked to answer on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme helped them to improve their own teaching practice. The majority of mentors (71%) reported that the training helped them quite a bit to improve their own teaching practice, and 14% of the mentors thought that the NEST training programme helped them a lot to improve their own teaching practice ($M_{m_IG} = 3$).

3.2.4.7 Teaching Competences of Novice Teachers Stay Stable Over Time

In the first and the second survey, novice teachers had to assess their own teaching competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding different skills relevant for teaching in general, for interacting with students, and for supporting parents. The data allowed for building one subscale on competences to interact with students (eleven statements) and one subscale on interaction with parents (four statements). The scales were included because we wanted to examine whether novice teachers with an intervention group mentor increased their teaching competence to a higher degree than novice teachers without a specially trained mentor.

The analysis shows that at the beginning of the school year, novice teachers in both groups thought they had average teaching competences regarding student interactions (T1: $M_{IG} = 4.4$; $M_{CG_ment} = 4.44$). On average, novice teachers in both groups still had the same opinion regarding their competences for student interactions at the end of the school year (T2: $M_{IG} = 4.4$; $M_{CG_ment} = 4.33$). Novice teachers in the control group assessed themselves a bit lower. Examining the individual statements revolving around student interactions, novice teachers in all groups assessed themselves highest at the end of the school year regarding showing an open attitude so that it is easy for students to approach them with problems (T2: $M_{IG} = 5.1$; $M_{CG_ment} = 5.0$). Overall, 10% of the novice teachers in the intervention group and 12% of the novice teachers in the control group thought they had high abilities.

Results for the competence of supporting parents were different than results for competences regarding student interactions. Intervention group novice teachers' self-assessments of their competence regarding parent support decreased slightly between the beginning and the end of the school year, while it stayed stable over time for the control group novice teachers. On average, novice teachers in the intervention group and control group thought they had only basic abilities regarding competences for parent support at the end of the school year (T2: $M_{IG} = 3$; $M_{CG_ment} = 3.44$), although novice teachers in the control group rated their own abilities distinctly higher. Overall, no novice teachers in the intervention group thought they had high abilities, compared to 6% in the control group.

Examining the individual statements revolving around parent support, novice teachers in the intervention group and the control group assessed themselves highest at the end of the school year regarding the competence of showing parents how to positively influence the education of their children (T2: $M_{IG} = 3.22$; $M_{CG_ment} = 3.47$) and dealing with conflict in parent teacher interactions in a professional way (T2: $M_{IG} = 3.22$; $M_{CG_ment} = 3.76$).

3.2.5 Discussion of Evaluation Results

The evaluation of the NEST programme indicates that novice teachers working at disadvantaged schools in the Flemish Community do benefit from being supported by a well-trained mentor. In order to enable an effective scaling-up of the NEST training and the subsequent mentoring, we have to consider the implications of the results at the micro-, meso-, and macrolevel. It is important to note that the sample size in the Flemish Community was very small, which means that we could only compare the intervention and control groups at a descriptive level. In addition, the very small size of sample means that results should be interpreted cautiously.

The analysis of the results implies that the NEST mentor training and NEST mentoring had many positive effects at the microlevel in the Flemish Community. According to the mentors themselves, the mentoring they provided after the NEST training was more focused on the specific challenges of novice teachers who are teaching at disadvantaged schools. The mentors believed they kept up the focus for some of the challenges, but for other challenges it dropped in the year after they completed the training. This finding could suggest that mentors were better able to adapt their focus to the needs of the novice teachers at that point. The novice teachers in the Flemish Community agreed with the areas of focus of their mentors but perceived a lower level of focus than their mentors for all challenges. In addition to the improvement in mentoring focus, the intervention group mentors also increased the use of facilitative mentoring practices, whereas there was a decrease in the use of mentoring practices (both directive and facilitative) among the control group mentors. Likewise, mentors in the intervention group indicated that the training had helped them to adapt their mentoring practices to the needs of the novice teachers. Novice teachers in both groups experienced a good fit between their needs and the use of the different mentoring practices by the mentor who supported them, but the novice teachers in the control group thought the fit was better than the novice teachers in the intervention group. The intervention group mentors in the Flemish Community self-assessed their mentoring competence higher after the completion of the training, whereas mentoring competences stayed the same for the control group. After the training, self-assessed mentoring competences for the intervention group were slightly higher than for the control group, but novice teachers in the intervention and control groups rated the mentoring competences equally high. Mentors who completed the training also perceived a positive effect of the training on their own teaching competences. Finally, teaching competences stayed the same for both the intervention and the control group. These results show that the NEST mentor training had positive effects on the mentors and on how the novice teachers perceived the mentoring they received, but did not create much effect at the level of the novice teachers. This is not surprising since the mentoring provided by the NEST mentors is further away from the initial intervention (i.e. the NEST mentor training).

At the mesolevel, schools are the main institutions involved with the NEST project. Schools are the workplace of novice teachers and therefore play an essential role in the experiences of novice teachers. Although novice teachers in the Flemish Community were satisfied with their job and viewed their school as a good workplace in general, schools could also play a part in supporting the novice teachers better with the challenges they face during their first years of teaching. It is positive that the novice teachers in the Flemish Community felt that challenges related to the school building, instruction materials, or staff shortages at the school only slightly hindered the school in providing good quality instruction. However, the novice teachers in the Flemish Community indicated that schools would benefit from appointing more personnel to support the novice teachers and improve the quality of instruction. About three quarters of the novice teachers in the Flemish Community had participated in an induction programme at the start of

their career, and they received quite an extensive induction with a lot of different activities. If schools in the Flemish Community could enable every novice teacher to take part in an induction programme, all novice teachers could feel better prepared for the challenges they might face during their first years of teaching at a disadvantaged school in the Flemish Community.

The implications of the results of the evaluation of the NEST project at the macrolevel are vast. For an effective continuation and scaling-up of the NEST project, consideration should be given to how the NEST training and subsequent mentoring could be embedded into the already existing structures of the education system in the Flemish Community. The novice teachers who participated in the NEST project did not feel very well prepared for the challenges they faced at their schools by the initial teacher training programme they had completed. This means that novice teachers at disadvantaged schools in the Flemish Community might really benefit from the support of a mentor to help them prepare for and deal with the challenges they face in their first years of teaching at a disadvantaged school. The existing mentoring structure in the Flemish Community seems to be quite good, with 90% of the novice teachers in the control group having a mentor during the first years of their teaching career. In the Flemish Community, most novice teachers have access to mentoring, which raises the question if a mentor training programme specifically focused on disadvantaged schools can help to improve the mentoring experience of novice teachers working at disadvantaged schools in the Flemish Community.

Further, our analysis suggests that the climate for the implementation of good quality mentoring in the Flemish Community is good. Both the mentors and the novice teachers agreed that mentoring was generally well accepted and valued in the Flemish Community. In addition, novice teachers had very positive attitudes towards being mentored, and the mentors showed high enthusiasm for mentoring novice teachers. In the Flemish Community, support seems to be already available for many novice teachers at disadvantaged schools in the form of induction programmes and mentoring. However, not all novice teachers who work at disadvantaged schools in the Flemish Community actually receive this support, which suggests there is still room to improve the induction and mentoring structure in the Flemish Community. The NEST training affected the mentors positively in the Flemish Community in that it improved the adaptivity of their mentoring, increased their mentoring focus on specific challenges, and improved their overall mentoring competences and even their own teaching. However, the mentoring provided by these mentors did not alter the levels of exhaustion or resilience or the teaching competences of the novice teachers. It is possible that the NEST mentoring in the Flemish Community did not have such a pronounced impact on novice teachers because in some schools in the Flemish Community it was not possible to implement the observation and feedback cycles which are the core of the mentoring provided in the NEST project. The analysis of the results in the Flemish Community therefore suggests that the NEST training and mentoring programme might have to be adapted more strongly to the realities of the education system in the Flemish Community in order to create positive effects not only for the mentors but also for the novice teachers teaching at disadvantaged schools in the Flemish Community.

3.3 NEST Evaluation Results for Belgium – Wallonia-Brussels Federation

Key Takeaways – Mentors

- **Mentors** have **high enthusiasm** for mentoring.
- Intervention group mentors **focus** their mentoring **to a greater degree** on specific challenges after the mentor training programme.
- Intervention group mentors **use more facilitative and fewer directive practices** than control group mentors.
- Intervention group mentors' **mentoring competence increases** after NEST mentor training.
- NEST mentor training programme helps to **improve** intervention group mentors' teaching practice.

Key Takeaways – Novice Teachers

- **Novice teachers** have **positive attitudes** toward being mentored.
- Majority of novice teachers perceive a **good fit between their needs and the mentoring practices** used by their mentors.
- Novice teachers' feelings of exhaustion and resilience stay stable over time.
- Novice teachers in the Wallonia-Brussels Federation **want to stay** in the teaching profession.
- Novice teachers find intervention group **mentors more competent**.
- Teaching competences of novice teachers stay stable over time.

The NEST evaluation report for the Wallonia-Brussels Federation is structured in line with the NEST theory of change into sections discussing context, preconditions, processes, and outcomes. It starts by examining the role of mentoring in general in the context of the education system in the Wallonia-Brussels Federation and analyses whether mentoring can be a promising strategy for this education system given the current preconditions for the NEST project. The report goes on to analyse processes and examines how well NEST mentoring is implemented compared to regular mentoring at schools in the Wallonia-Brussels Federation. Finally, the report observes the outcomes of the NEST project in terms of the effects of the NEST mentor training programme on the mentors as well as the effects of NEST mentoring on novice teachers. The report closes with a brief discussion of findings.

In order to understand the results better, it is important to explain the structure of the sample for the Wallonia-Brussels Federation and to give a short description of the sample.

Structure: The overall sample for the Wallonia-Brussels Federation consisted of NEST mentors who took part in the NEST mentor training programme (mentor intervention group) and mentors who did not take part in the NEST training programme (mentor control group). The sample also consisted of an intervention group of novice teachers who were supported by a NEST mentor, and a control group of novice teachers who were either supported by a mentor who did not undergo the NEST mentor training programme or who were not supported by any mentor at all. In panel designs in which the same individuals have to complete more than one survey, dropout of participants over time (panel mortality) is a well-known problem. In this respect, the NEST project is no exception. Participants from the Wallonia-Brussels Federation—mentors as well as novice teachers—dropped out of the programme for various reasons (e.g. changing to a different school, maternity leave, long-term illness). Some participants did not drop out of

the programme but simply did not complete the surveys. The dropout reported here only refers to survey dropout rates. Since we examine developments over time, we compare data from the first survey to the corresponding data from the other surveys. Therefore, the sample for the descriptive statistics and analyses in this report included only those mentors and novice teachers who filled out all required questionnaires.

The sample for the Wallonia-Brussels Federation included 51 mentors; of those, 15 were NEST-trained mentors in the intervention group, and 36 were regular mentors who did not receive special training (control group mentors). Intervention group mentors filled out surveys at three points in time: at the beginning of the school year 2021/2022 in October 2021, before the NEST mentor training programme started (T1); at the end of the school year 2021/2022 in June 2022, when the theoretical and practical training had mostly finished (T2); and lastly, at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3). Mentors in the control group were only surveyed twice: at the beginning of the school year 2021/22 in October 2021 (T1), and at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3).

The sample also consisted of 145 novice teachers from two cohorts. The first cohort (116 novice teachers) was surveyed in 2021/2022, and the second cohort (29 novice teachers) was surveyed in 2022/2023. The intervention group consisted of 43 novice teachers. Of those, 37 were in the first cohort and 6 were in the second cohort. The control group consisted of 102 novice teachers. Of those, 79 were in the first and 23 in the second cohort. Of the novice teachers in the control group, 61% reported that they were supported by a mentor. It is important to note that whenever data about mentors are presented from the perspective of novice teachers, the control group sample included only those novice teachers who reported that they were being supported by a mentor. In the sections on context and preconditions, the control group is handled as one group because baseline data are presented which were collected before the mentoring had started. In the sections on processes and outcomes, the intervention group is compared to the control group with support from a mentor and to the control group without mentor support. We would expect more noticeable differences between the intervention group and the control group without mentor support. We make the respective reference groups very explicit in the text.

Sample Description: The majority of novice teachers in both groups were female (IG: 72%; CG: 67%). The same was true for the mentor groups; 73% of mentors in the intervention group and 81% of mentors in the control group were female. The average age of novice teachers had a wide range. The youngest person was 21 years old, and the oldest person was 55 years old. In the intervention group, the average age was 32 years, with a median age of 27 years, compared to an average age of 29.6 years with a median age of 27 years in the control group. Intervention group mentors were on average 46.3 years old, with a median age of 47 years, and control group mentors were on average 48.6 years old, with a median age of 48 years. Novice teachers in the intervention group had an average teaching experience of 1.8 years, which was very similar to that of novice teachers in the control group, who had an average teaching experience of 1.4 years. Teaching was not the first-choice career for 64% of novice teachers in the intervention group and 56% of novice teachers in the control group. In the mentor intervention group, 67% reported that they had mentored novice teachers within the past five years compared to 78% in the mentor control group. The average teaching experience of mentors was higher in the mentor control group (IG_m: 18.1 years, CG_m: 23.3 years). However, the intervention group mentors had on average more mentoring experience than the control group mentors (IG_m: 4.7 years, CG_m: 2.9 years). Mentors in both groups already had

experience in working at disadvantaged schools (IG_m : 10.3 years, CG_m : 9.3 years). Detailed descriptive statistics regarding all reported results can be found in Appendix A3 – Belgium – Wallonia-Brussels Federation. More information on the variables used in the regression analyses can be found in the codebook for the Wallonia-Brussels Federation on page 396.

3.3.1 Mentoring in the Broader Context of the Education System in the Wallonia-Brussels Federation

This section considers the role of mentoring in general in the context of the education system in the Wallonia-Brussels Federation. For this purpose, we examine data about the general level of acceptance of mentoring in the Wallonia-Brussels Federation from the perspective of the participating novice teachers and the mentors. Furthermore, we examine the expectations both groups had about what attributes or characteristics a good mentor should have. Data used in this section were taken from the baseline survey conducted before the NEST mentor training programme started.

3.3.1.1 Novice Teachers and Mentors Think that Mentoring Is Generally Well Accepted in the Wallonia-Brussels Federation

In the baseline survey, novice teachers and mentors had to agree on 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about the level of acceptance of mentoring in the education system in the Wallonia-Brussels Federation in general. This scale was included in the survey to examine novice teachers' and mentors' perceptions of the general level of acceptance of mentoring by society as part of the professional development of teachers. On average, novice teachers in the intervention and control groups thought that mentoring was generally moderately well accepted in the Wallonia-Brussels Federation, with means in the intervention group ranging from 2.37–3.03, and from 2.48–2.87 in the control group. There was no significant difference between the intervention group and the control group with regard to the perception of the general acceptance of mentoring in the Wallonia-Brussels Federation. Novice teachers in both groups agreed most that in their environment, people highly respect mentors who support novice teachers (IG : 73% agreed or strongly agreed; CG : 72% agreed or strongly agreed).

Mentors thought that mentoring was generally moderately well accepted in the Wallonia-Brussels Federation, with means in the intervention group ranging from 2.00–2.80, and from 1.83–3.11 in the control group. The highest level of agreement for both groups was with the statement 'In my school district, mentoring novice teachers is seen as a crucial part of the start of the teaching career of novice teachers', with 73% of intervention group mentors and 86% of control group mentors agreeing or strongly agreeing with the statement.

3.3.1.2 Novice Teachers and Mentors Have Mostly Similar Opinions about What Makes a Good Mentor

In the baseline survey, novice teachers and mentors were asked which attributes they found most important for being a good mentor. They could choose from seven different attributes and pick the three attributes they considered most important. This question was included because we wanted to examine which kind of expectations novice teachers and mentors had in general about what makes a good mentor.

For the analysis, we calculated for each attribute whether it was chosen by a person as one of the three most important attributes. Thus, a percentage of 80 means that 80% of the respective group chose this attribute as one of the three most important attributes. Figure 11 shows that empathy and trustfulness were chosen most often as one of the most important attributes by all groups. However, mentors found flexibility more important, while novice teachers found openness more important compared to mentors. Only a minority in both groups found curiousness and courage important attributes for a good mentor.

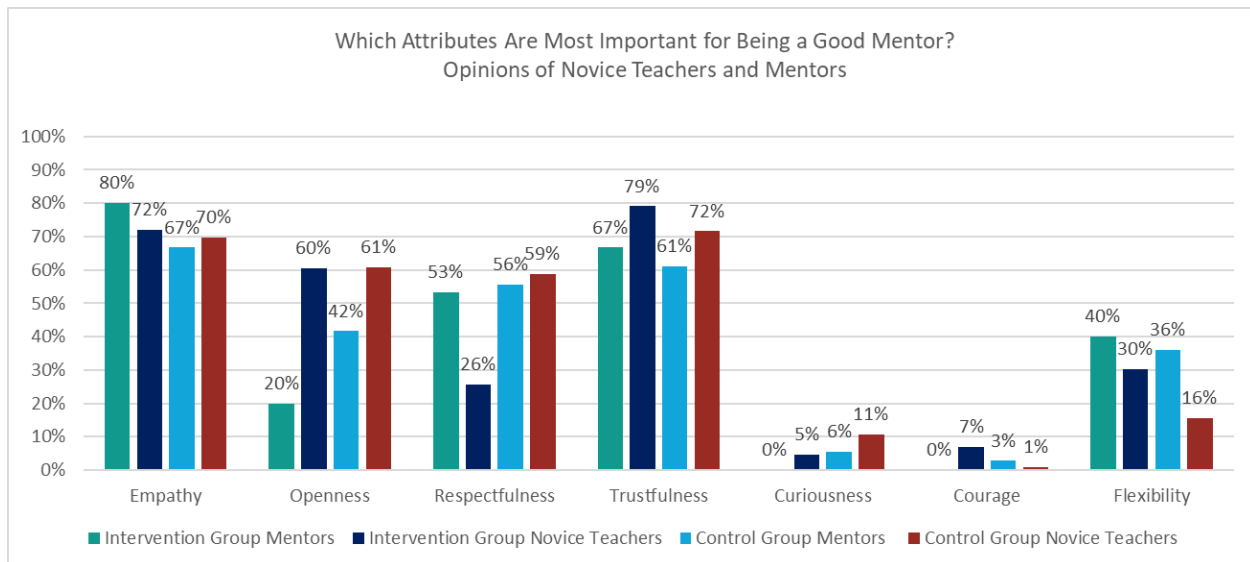


Figure 11: Important Attributes for Being a Good Mentor (Wallonia-Brussels Federation)

3.3.2 Preconditions for the NEST Project – Is Mentoring a Promising Strategy for the Education System in the Wallonia-Brussels Federation?

This section analyses the preconditions for the NEST project. We examine the prerequisites of novice teachers and mentors working at disadvantaged schools to determine whether the conditions for a mentor training programme were favourable or not. In the following subsections, we report on data about novice teachers’ attitudes towards mentoring, mentors’ enthusiasm for mentoring, how well novice teachers and mentors feel prepared for dealing with challenges at disadvantaged schools, the availability of induction programmes for novice teachers, and the perceived school environment. Data used in the first three subsections were taken from the baseline survey conducted before the NEST mentor training programme started; data for the last section were taken from the second survey for novice teachers conducted at the end of the school year.

3.3.2.1 Positive Attitudes and High Enthusiasm for Mentoring

In the baseline survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with six statements about their attitudes towards being mentored. This scale was included in the survey to examine whether novice teachers had a general willingness to be mentored and whether they saw the benefits of being mentored. The analysis shows that on average, novice teachers in the intervention and control groups had positive attitudes towards being mentored,

with means ranging from 3.05–3.46 in the intervention group and from 3.05–3.50 in the control group. A *t* test comparing the means of the scale between the two groups shows no significant difference in attitudes towards mentoring between both groups of novice teachers. The highest level of agreement in the intervention group was with the statement ‘I think being mentored can have an important impact on my professional development.’ Only one person in the intervention group strongly disagreed with this statement; 98% agreed or strongly agreed. In the control group, all novice teachers agreed or strongly agreed with this statement.

In the baseline as well as the final survey, mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with five statements about their enthusiasm for mentoring novice teachers. This scale was included in the survey to examine the extent to which mentors were motivated to support novice teachers with mentoring and whether this enthusiasm could be increased by the mentor training programme. Our analyses of the data show that mentors were already enthusiastic about mentoring at the beginning of the school year 2021/2022 before the training for NEST mentors started, with slightly higher means for the mentors in the intervention group (M_{m_IG} : 2.90–3.60) than for mentors in the control group (M_{m_CG} : 2.61–3.50). Comparing average levels of enthusiasm for mentoring before the training to average enthusiasm at the end of the school year 2022/2023 shows that enthusiasm for mentoring stayed the same over time for both groups of mentors. The majority of mentors agreed or strongly agreed with all statements about mentoring enthusiasm, except with the statement ‘Mentoring is the most fulfilling part of my job.’ Here, 40% of mentors in the intervention group and 44% in the control group disagreed with this statement in the last survey; however, in both groups, all mentors agreed or strongly agreed with the statement ‘I enjoy sharing my teaching expertise with novice teachers.’

3.3.2.2 Little Preparation for School Challenges by Initial Teacher Training

In the baseline survey, novice teachers were also asked to assess how well their initial teacher training had prepared them for six specific challenges they might face working at disadvantaged schools on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis of the data shows that on average, novice teachers in the intervention and control groups felt only to some extent prepared for challenging situations at school, with means ranging from 1.57–2.17 in the intervention group and from 1.65–2.20 in the control group. A *t* test comparing the means of the scale between the two groups shows no difference between the groups regarding their feeling of preparedness for challenging situations. The intervention group as well as the control group felt least prepared for teaching students with language barriers. In both groups, 54% of novice teachers felt not at all prepared for this challenge by their initial teacher training. Of all the challenges, both groups of novice teachers felt best prepared for managing a diverse classroom effectively. For this challenge, 40% of the intervention group and 35% of the control group felt quite a bit or a lot prepared by their initial teacher training.

3.3.2.3 Extensive Induction Is Implemented for About Half of Novice Teachers at Schools in the Wallonia-Brussels Federation

In the baseline survey, novice teachers were asked whether they were currently taking part or had taken part in any induction activities at the school at which they were currently teaching. By induction activities we referred to activities designed to support new teachers' introduction into the teaching profession and to support experienced teachers who are new to a school. These activities are either organised in formal,

structured programmes or informally arranged as separate activities. This question was included in the survey to examine how well induction processes for new teachers are already implemented in the school system. For the novice teachers who reported that they had taken part in formal induction activities, we included questions on the type of activity. They could report their participation in a total of ten different induction activities: general or administrative introduction; courses or seminars attended in person; online courses or seminars; networking or collaboration with other new teachers; team-teaching with experienced teachers; supervision of portfolios, diaries, or journals; reduced teaching load; regular visits from the school principal and/or experienced teachers; supervision of teaching by the school principal and/or experienced teachers; and online activities, such as virtual communities.

Our data analysis shows that a little more than half of novice teachers in the intervention group (56%) and control group (52%) had taken part in induction activities. Looking separately at formal and informal induction activities, the percentages of novice teachers who had taken part become smaller. In the intervention group, 42% had taken part in formal and 37% had taken part in informal induction activities. In the control group, 36% had taken part in formal and 47% had taken part in informal induction activities. Of the 24 novice teachers in the intervention group who reported that they had taken part in induction activities, a maximum of 18 also gave information on the type of activity. In the control group, a maximum of 37 (of 53) reported on the type of activity. The majority of novice teachers in the intervention group (72%–94%) had taken part in all of the ten different induction activities. The activity that was reported least often was team-teaching with experienced teachers. The most common induction activities included: general or administrative introduction, supervision of teaching and regular visits by the school principal and/or experienced teachers, and networking or collaboration with other new teachers (all 94%). In the control group, the majority of novice teachers had also taken part in all of the ten activities (participation rates between 59%–100%). All novice teachers reported having taken part in a general or administrative introduction. Other very common induction activities reported by the control group were: regular visits from the school principal and/or experienced teachers, and networking or collaboration with other new teachers (all over 90%). So even though only about half of the novice teachers in both groups reported having had an induction programme at school, those people who were offered an induction programme seemed to have taken part in a broad range of activities.

3.3.2.4 Challenging Factors Only Slightly Hinder the School's Capacity to Provide Quality Instruction in the Wallonia-Brussels Federation

To learn more about the school environment or the conditions under which novice teachers have to work at disadvantaged schools, novice teachers were asked in the second survey what factors hindered quality instruction at their school. Novice teachers had to assess on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) in how far 14 different challenges (such as staff shortages or lack of learning materials) hindered their school's capacity to provide quality instruction. The analysis shows that on average, the majority of novice teachers in both groups saw the school's capacity to provide quality instruction as not hindered at all or only to some extent by the 14 challenges. However, novice teachers in the intervention group found that their school was hindered significantly more by five of the 14 challenges than novice teachers in the control group. These challenges were insufficient internet access, shortage of instructional space such as classrooms, shortage of support personnel, shortage of teachers with competence in teaching students in a multicultural or multilingual setting, and insufficient time for instructional leadership. The largest differences between the intervention and the control group were found for the

challenge mentioned last ($t(133) = -2.07^*$, $p = 0.02$). Both groups thought that the most hindering challenge was a shortage of teachers with competence in teaching students with special needs. However, means overall were still quite low for both groups of novice teachers ($M_{IG} = 1.88 - 2.38$; $M_{CG} = 1.69 - 2.26$).

3.3.3 How Well Is NEST Mentoring Implemented Compared to Regular Mentoring at Schools in the Wallonia-Brussels Federation?

This section analyses the implementation of NEST mentoring in comparison with regular mentoring at schools in the Wallonia-Brussels Federation. We will examine the quantity of formal and informal mentoring conversations and the quality of mentoring in terms of the focus of mentoring and the match between the mentoring practices offered by mentors and the perceived need for those practices from the perspective of novice teachers. The section also gives insights into how well intervention group mentors were able to transfer knowledge and lessons learned from the NEST mentor training programme into their mentoring practice. For this purpose, we examine the changes in the mentoring focus and mentoring practices of the mentors. The scale about mentoring focus is the counterpart to the scale on preparedness, which was discussed in Section 3.3.2.2. Data for novice teachers were taken from the second survey; for the mentors, data from all mentor surveys were analysed. It is important to note that this section only included data of those novice teachers in the control group who reported that they were being supported by a mentor at the time of taking the survey. This sample comprised 62 people (61%), while all novice teachers in the intervention group had a NEST mentor.

3.3.3.1 Novice Teachers Take a Critical View of Their Mentor's Time Allocation and Organisation of Mentoring Conversations

In the second survey, novice teachers were asked how many formal and informal mentoring conversations they had with their mentor. We defined a formal mentoring conversation as a longer meeting between mentor and mentee to plan and/or to discuss and/or to reflect on, for instance, a lesson plan, actual teaching, or student behaviour. We defined an informal mentoring conversation as a conversation between mentor and mentee that was a short meeting to exchange information or materials or to receive advice or feedback on ideas. This question was included in the survey to have a quantitative measure for the meetings between mentors and their mentees.

The analysis shows that on average, novice teachers in the intervention group had 3.44 formal mentoring conversations ($Mdn = 3$). The range of formal mentoring conversations was between zero and ten in the intervention group. They also reported an average of 8.03 informal mentoring conversations ($Mdn = 3$), with the frequency of meetings ranging between zero and 60. Since the NEST mentoring planned for three formal mentoring conversations, we expect the outliers to be the result of typing mistakes or of a misunderstanding or misreading of the question. On average, novice teachers in the control group had 4.36 formal mentoring conversations ($Mdn = 5$; Range: 0–8). They also reported having had 12.38 informal mentoring conversations on average ($Mdn = 10$; Range: 2–60). The data collected suggest that novice teachers in the control group had more mentoring conversations than novice teachers in the intervention group. However, data have to be interpreted cautiously since of the 62 novice teachers in the control group who had a mentor, only 13 answered the question. This means that the data might not represent the control group sample very accurately.

Novice teachers also had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with three statements about the time allocation and organisation of mentoring conversations.

The analysis shows that on average, novice teachers in the Wallonia-Brussels Federation perceived the time allocation and organisation of their mentoring conversations not very positively, with means ranging from 2.10–2.88 the intervention group and from 1.98–3.00 in the control group. There was no significant difference between the groups regarding their perception of the time allocation and organisation of their mentoring. Of the three statements, novice teachers in both groups agreed most that their mentor took sufficient time for their mentoring conversations; 18% strongly agreed with this statement in the intervention group compared to 34% in the control group.

3.3.3.2 Intervention Group Mentors Focus Their Mentoring to a Greater Degree on Specific Challenges After the Mentor Training Programme

Mentors were asked in all three surveys about the focus of their mentoring activities. We wanted to examine to what extent they focused on six challenges novice teachers might face while teaching and whether the extent of focus changed after the mentor training. For this purpose, mentors assessed in how far they focused their mentoring on six different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). This question directly complements the question for novice teachers. Figure 12 shows that intervention group mentors increased their focus on most of the different challenges in their mentoring after the NEST mentor training programme. This was especially true for the focus on managing a diverse classroom and engaging hard-to-reach learners. After the school year 2022/2023, the focus decreased again for most of the challenges. However, intervention group mentors further increased their mentoring focus on supporting novice teachers with teaching students with emotional and behavioural difficulties. The decreases in the mentoring focus compared to before the training could indicate that intervention group mentors had learned to adapt better to their novice teachers' needs and to focus their mentoring on the areas where they perceived the highest demand.

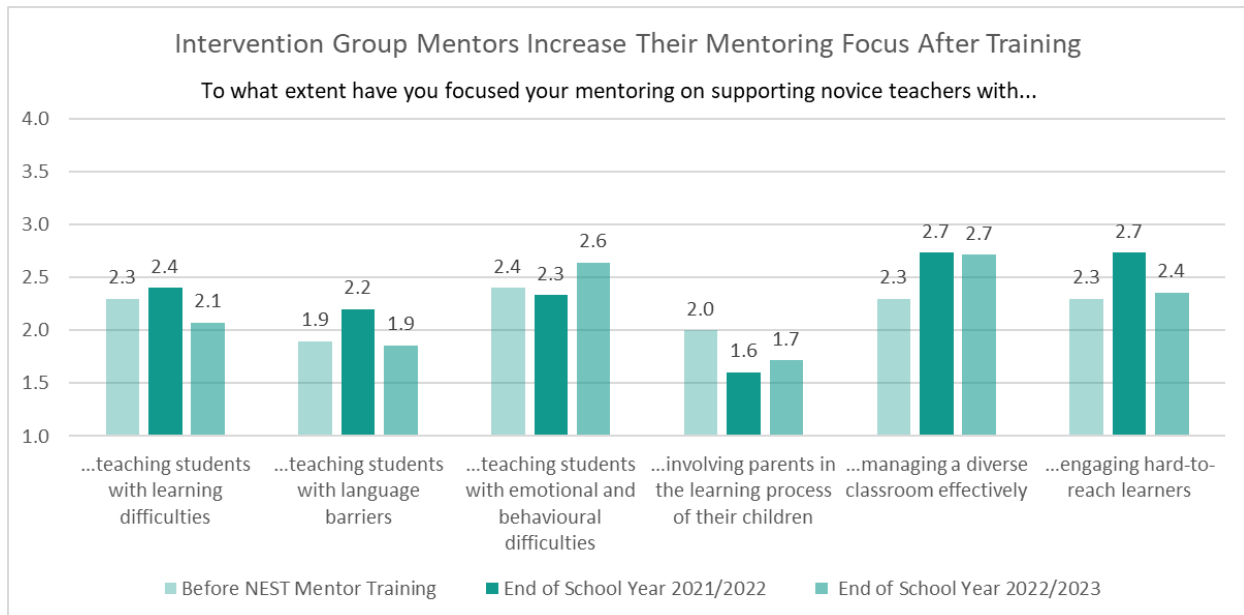


Figure 12: Intervention Group Mentors’ Development of Mentoring Focus (Wallonia-Brussels Federation)

3.3.3.3 Novice Teachers and Mentors Perceive the Same Areas of Focus in Mentoring

In the second survey, novice teachers were asked about the focus of the mentoring they received, so this issue can be examined from the perspectives of both the mentors and the mentees. To assess the extent to which the mentoring the novice teachers received focused on supporting them with dealing with certain challenges at school, they had to rate six statements regarding the different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis shows that novice teachers in the intervention group perceived mostly a low level of focus on the different challenges in their mentoring, with means ranging from 1.55–2.35. Means for the control group with mentor support were similarly low (1.52–2.51). However, *t* tests show that novice teachers in the control group perceived a significantly stronger focus in their mentoring than the novice teachers in the intervention group on two of the six challenges (engaging hard-to-reach learners, and involving parents in the learning process of their children). The highest perceived difference in focus was for engaging hard-to-reach learners ($t(97) = 2.24^{**}, p = 0.01$). Here, 8% of novice teachers in the intervention group thought that their mentoring had focused on this challenge a lot, compared to 20% in the control group. This was also the challenge for which novice teachers in the control group perceived the highest focus of their mentoring. Novice teachers in the intervention group perceived the strongest focus of their mentoring on teaching students with learning difficulties (18% chose the answer option ‘a lot’).

We also compared the data of the novice teacher intervention group to the mentor intervention group. The novice teacher sample comprised two consecutive cohorts. The first cohort was the cohort of novice teachers that was supported by mentors directly after the mentor training programme. The second cohort of novice teachers was supported by mentors in the mentors’ second school year of the NEST project. We wanted to examine, whether the development in the extent of mentors’ focus would be mirrored in the

perceptions of the two novice teacher cohorts. However, it is important to note that the second cohort of intervention group novice teachers only comprised six people, so data need to be interpreted cautiously. As the mentors’ development of mentoring focus was very specific to the individual challenges, i.e. there was no evident trend in the development of their mentoring focus, the novice teachers in the two cohorts should accordingly also have perceived more or less mentoring focus for the different challenges. Figure 13 shows that the perceptions by novice teachers mirror the perceived development of the mentors with regard to the levels of focus, i.e. if mentors perceived a lower focus in the second year, then novice teachers in the second cohort also perceived less focus than novice teachers in the first cohort. If mentors thought their focus had stayed mainly the same regarding a specific challenge, then novice teachers in both cohorts also had similar perceptions of the extent of mentoring focus. However, it also seems that mentors felt that they had focused their mentoring more strongly on the challenges than transpired to novice teachers in either cohort.

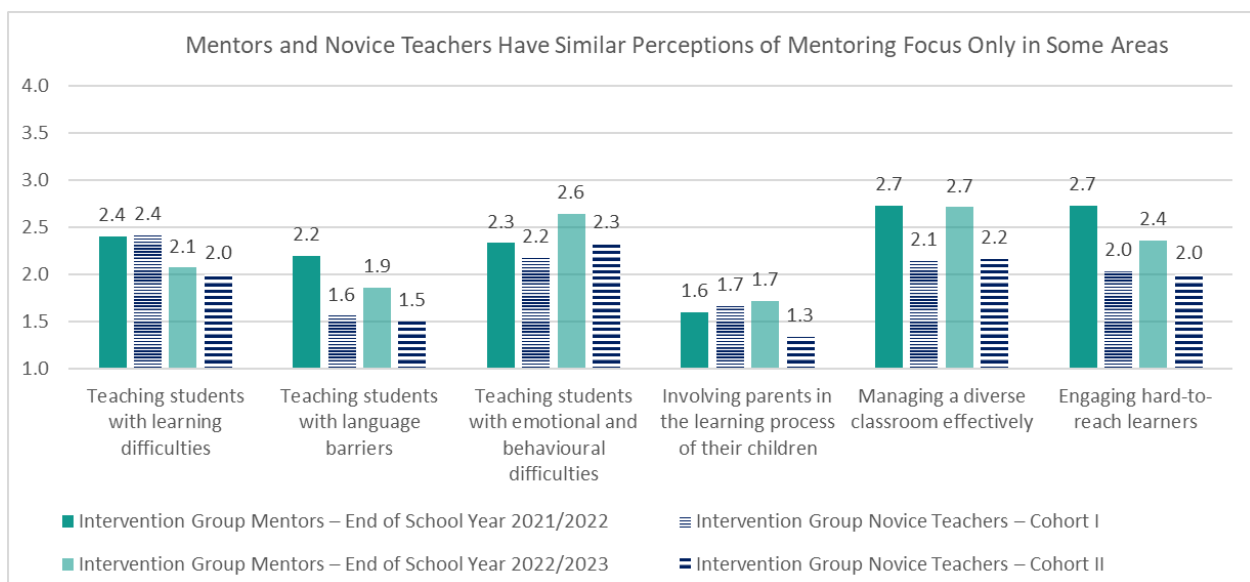


Figure 13: Intervention Group Novice Teachers' and Mentors' Perceptions of Mentoring Focus (Wallonia-Brussels Federation)

3.3.3.4 Intervention Group Mentors Use More Facilitative and Fewer Directive Practices than Control Group Mentors

Mentors were asked about their mentoring practices in all surveys. For this purpose, mentors rated how often they used 18 different mentoring practices on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*). We differentiated between more directive and more facilitative mentoring practices. More directive practices generally put the mentor in a more active role and include giving advice or using concrete examples from the mentor’s own practice. The facilitative practices put the novice teacher in the more active role and include asking open questions, using active listening skills, or letting novice teachers find solutions on their own. We wanted to examine which practices mentors had used before the mentor training programme and whether these practices had changed over time. It is important to note that intervention group mentors were surveyed three times but control group mentors were only

surveyed twice. More information about the data collection process can be found in the description of the structure of the sample.

Figure 14 shows that for both groups of mentors, the frequency of use decreased for all mentoring practices over time. Also, mentors were using more facilitative practices than directive practices at all measurement points. However, control group mentors used fewer facilitative and more directive mentoring practices than the intervention group mentors at all measurement points.

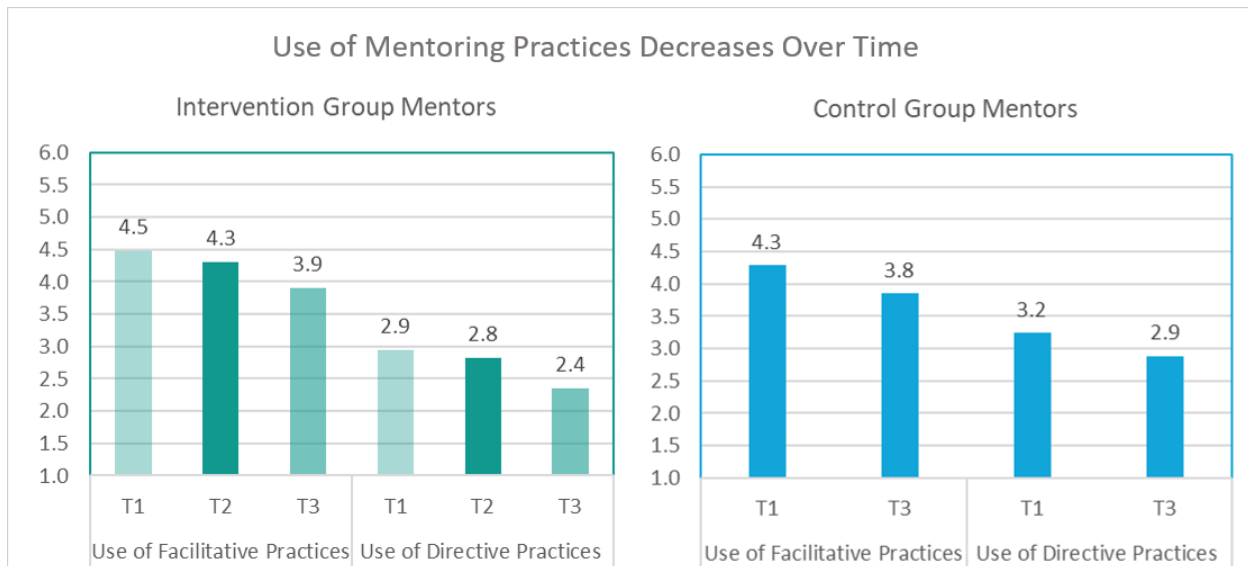


Figure 14: Development of Mentoring Practices Over Time by Mentor Group (Wallonia-Brussels Federation)

3.3.3.5 NEST Mentor Training Programme Helps Intervention Group Mentors to Use Their Mentoring Practices in a More Adaptive Way

In the last survey, intervention group mentors had to rate on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme had improved their competences to switch between different practices and to adapt their practices in a flexible way. If they thought that their competence level was already so high that they did not need to improve further, they could indicate this by ticking a box. Our analysis shows that intervention group mentors thought that the NEST mentor training programme helped them on average to some extent to improve using different mentoring approaches for novice teachers with different personalities, changing their mentoring approach according to the social situation in the classroom, and adapting their mentoring approach according to the novice teacher's level of professional development ($M_{m_IG} = 2.36-3.07$). Overall, intervention group mentors thought the NEST mentoring programme helped them to improve most in using different mentoring approaches for novice teachers with different personalities (33% answered 'a lot').

3.3.3.6 Majority of Novice Teachers Perceived a Good Fit Between Their Needs and the Mentoring Practices Used by Their Mentors

At the same time, we asked novice teachers to rate how well the frequency with which their mentor used these mentoring practices during their mentoring conversations fit with their perceived needs for such practices on a 3-point scale ranging from 1 (*not often enough*) to 2 (*exactly as often as I needed*) to 3 (*too often*).

The analysis of novice teacher data shows that for all of the practices, the majority of novice teachers thought that mentors had used the practices exactly as often as they needed. In both groups, percentages of novice teachers who stated that mentors had used the mentoring practices not often enough were higher than percentages of novice teachers who stated that mentoring practices had been used too often. Practices with the best fit in the intervention group, i.e. the highest percentage of novice teachers answering 'exactly as often as I needed', were the mentor using active listening skills, the mentor using examples of best practice from their own experience (both 83%), and the mentor letting novice teachers discover the principles behind a good lesson for themselves (82%). The best perceived fit in the control group was for the mentor starting the conversation with an open question and using active listening skills (81%).

To analyse further the fit between the frequency of use of a mentoring practice and the perceived need from the perspective of novice teachers, we created a dichotomous variable. We categorised the answers 'not often enough' and 'too often' as bad fit, and the answer option 'exactly as often as I needed' as good fit, i.e. for each mentoring practice, novice teachers could have the value 0 for bad fit and the value 1 for good fit. Then we summed up the practices to receive a measure for an overall fit between mentoring practice and perceived need. This measure has a range from 0 (*no fit at all*) to 20 (*perfect fit*). The average fit between the frequency of mentoring practices and the perceived need for those practices was 13.02 for the intervention group and 12.32 for the control group with mentor support. There was no significant difference between the groups regarding their perceived fit of mentoring practices.

3.3.4 Positive Effects of the NEST Mentor Training Programme and NEST Mentoring

This section analyses the results of the NEST mentor training programme and NEST mentoring in comparison with regular mentoring at schools in the Wallonia-Brussels Federation. We describe whether the NEST interventions had any effects on various outcome variables such as emotional exhaustion, satisfaction with the workplace, and the teaching competences of novice teachers and the mentoring competences of mentors. However, since the sample of mentors was small, we can only perform regression analyses with the novice teacher data, i.e. we can estimate effects on the mentors from the perspective of the novice teachers. Since we had two control groups, one comprising novice teachers with a mentor and one comprising novice teachers without a mentor, we must conduct two sets of comparisons for outcome variables which relate to novice teachers. First, we compare the intervention group to the control group with mentor support. In the Wallonia-Brussels Federation, 60% of the novice teachers in the control group had a mentor to support them (see Section 3.3.3). Second, we compare the intervention group to the control group without mentor support. We expect more distinct differences between the latter groups. Since we are mainly examining developments in this section, data for novice teachers and mentors were taken from all measurement points to have comparative measures over time.

3.3.4.1 Novice Teachers' Feelings of Exhaustion and Resilience Stay Stable Over Time

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about their emotional exhaustion. This scale was included in the survey because exhaustion can be a predictor for leaving the job. The data show that novice teachers in the intervention and control groups on average felt moderately exhausted at the beginning as well as at the end of the school year. However, the distribution of answers for the individual statements shows that the groups were roughly split into two halves. One half of novice teachers felt quite exhausted, while the other half did not feel exhausted. There was no significant difference between the groups with regard to exhaustion and no significant change in novice teachers' levels of exhaustion over time. Means at the end of the school year ranged from 2.32–2.59 in the intervention group and 2.31–2.56 in the control group with mentor support ($M_{CG_no_ment} = 2.03 - 2.65$). At the end of the school year, the highest level of agreement in all groups was with the statement 'I often feel exhausted while I am working.' However, levels of agreement with this statement in the control group with mentor support were as high as they were with the statement 'Overall, I feel overstrained by my workload.' At both measurement points, all groups agreed least with the statement 'At the end of a day's work, I sometimes feel really depressed.'

In the second survey, novice teachers were also asked how resilient they felt to stress and negative setbacks at work. They had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about resilience. This scale was included in the survey as a counterpart to emotional exhaustion and can be a predictor for staying in the job. Novice teachers in the intervention and control groups on average felt only moderately resilient, with means ranging from 2.32–2.71 in the intervention group and 2.39–2.54 in the control group with mentor support ($M_{CG_no_ment} = 2.46 - 2.72$). There was no significant difference between the intervention group and either control group in this respect. The highest level of agreement in all groups was with the statement 'I think I can cope well with work pressure.' Here, 59% of novice teachers in the intervention group and 56% of the control group with mentors agreed or strongly agreed with this statement (59% in the control group without mentors). Overall, the data on resilience mirror the data on exhaustion. Here, the sample was also basically split into two halves. One half of the novice teachers in any group felt resilient, while the other half did not feel particularly resilient.

3.3.4.2 Novice Teachers in the Wallonia-Brussels Federation Think that Their School Is a Good Workplace

The second survey also included questions on job satisfaction. Novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with ten statements about job satisfaction. One of the subscales revolved around satisfaction with the school as a workplace (three statements). The scale on job satisfaction was included in the survey as yet another predictor for staying in the job. The analysis of the data shows that novice teachers in the intervention group and the control groups were on average quite satisfied with their workplace, with means for individual statements ranging from 3.20–3.40 in the intervention group and 3.10–3.47 in the control group with support from a mentor ($M_{CG_no_ment} = 3.21 - 3.55$). There was no significant difference between the intervention group and the control group without mentor support regarding satisfaction with the school as a good workplace. The highest level of agreement in all groups was with the statement 'I enjoy working at this school'; 92% of

novice teachers in the intervention group and 90% of novice teachers in the control group with mentors agreed or strongly agreed with this statement (97% in the control group without mentors). The lowest level of agreement overall, was with the statement 'I would like to change to another school if that were possible.' Only 3% of novice teachers in the intervention group and in the control group with mentor support strongly agreed with the idea of changing school if it were possible (5% in the control group without mentors).

3.3.4.3 Novice Teachers in the Wallonia-Brussels Federation Want to Stay in the Teaching Profession

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with two statements about their plans to make career changes. This scale was included in the survey to examine the tendency towards leaving the teaching profession. Our analysis shows that novice teachers on average had a low tendency to leave the teaching profession at the end of the school year or in the long term. In the second survey, only 5% of novice teachers in the intervention group agreed that they were planning to leave the teaching profession after the school year. No one in this group strongly agreed with the statement. In the control groups, 3% of novice teachers strongly agreed with this statement (CG_{ment}: 5% agreed; CG_{no_ment}: 11% agreed). There was no significant difference between the intervention group and the control group without mentor support in this respect. However, novice teachers in the intervention group agreed significantly more strongly that they were thinking about leaving the teaching profession at the end of the year in the second survey compared to when they were asked at the beginning of the school year ($t(38) = 2.48^{**}$, $p = 0.01$). The same was true about the idea of leaving the teaching profession in the long term, i.e. a career change ($t(37) = 1.82^*$, $p = 0.04$). Overall, 8% of novice teachers in the intervention group and the control group without mentor support agreed strongly with the idea of a career change in the long term, compared to 15% in the control group with mentor support. These results are complemented by the average number of years novice teachers reported to be willing to stay in the teaching profession. The median (which is less affected by outliers than the mean) for the intervention group and the control group without mentor support was 15 years, and for the control group with mentor support it was 17.5 years, which overall shows a dedication to stay in the teaching profession.

3.3.4.4 Intervention Group Mentors' Mentoring Competence Increases After the NEST Mentor Training

Mentors were asked to assess their own mentoring competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding twelve different skills. Our analysis shows that mentors assessed their mentoring competence prior to the mentor training programme as average, with a mean of 4.15. However, at the end of the school year 2021/2022, i.e. after the NEST mentor training, they assessed their mentoring competence slightly higher ($M_{m_IG} = 4.24$), and at the end of the school year 2022/2023, higher still, with a mean of 4.28. Compared to the mentor control group, they started with a very similar self-assessment of their overall mentoring competence. However, the self-assessed mentoring competence of the control group increased slightly less over time, as depicted in Figure 15.

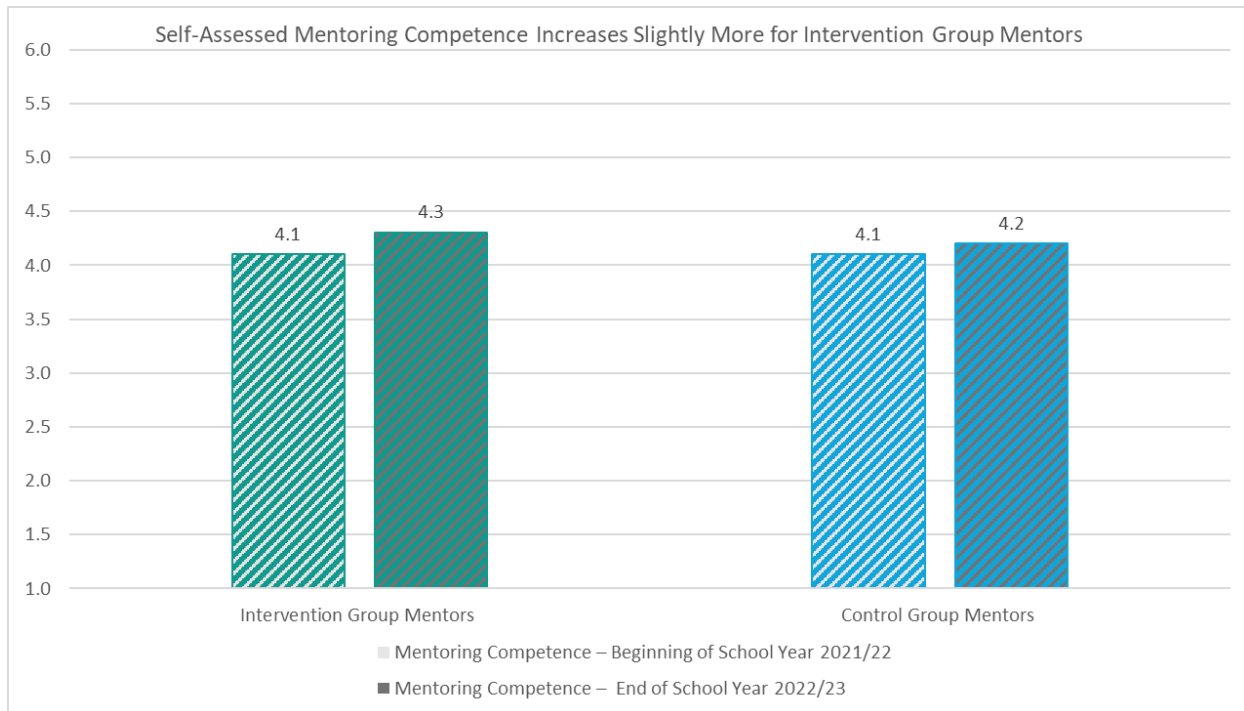


Figure 15: Development of Mentors' Mentoring Competence Over Time by Mentor Group (Wallonia-Brussels Federation)

Since the mentor training programme focused especially on supporting mentors with building a trustful relationship, initiating reflection by novice teachers, adapting to novice teachers' specific needs, and building resilience in novice teachers, we specifically examined the statements regarding mentoring competences which revolved around these topics. Mentors in the intervention group assessed themselves higher regarding the four statements at the end of the school year 2022/2023 than mentors in the control group.

Mentors' self-assessed competence increased over time for most of the four statements, as depicted in Figure 16. This is especially evident when comparing the mean from before the training to the mean at the end of the school year 2022/2023. Mentors assessed themselves highest regarding supportive relationship-building and prompting reflection.

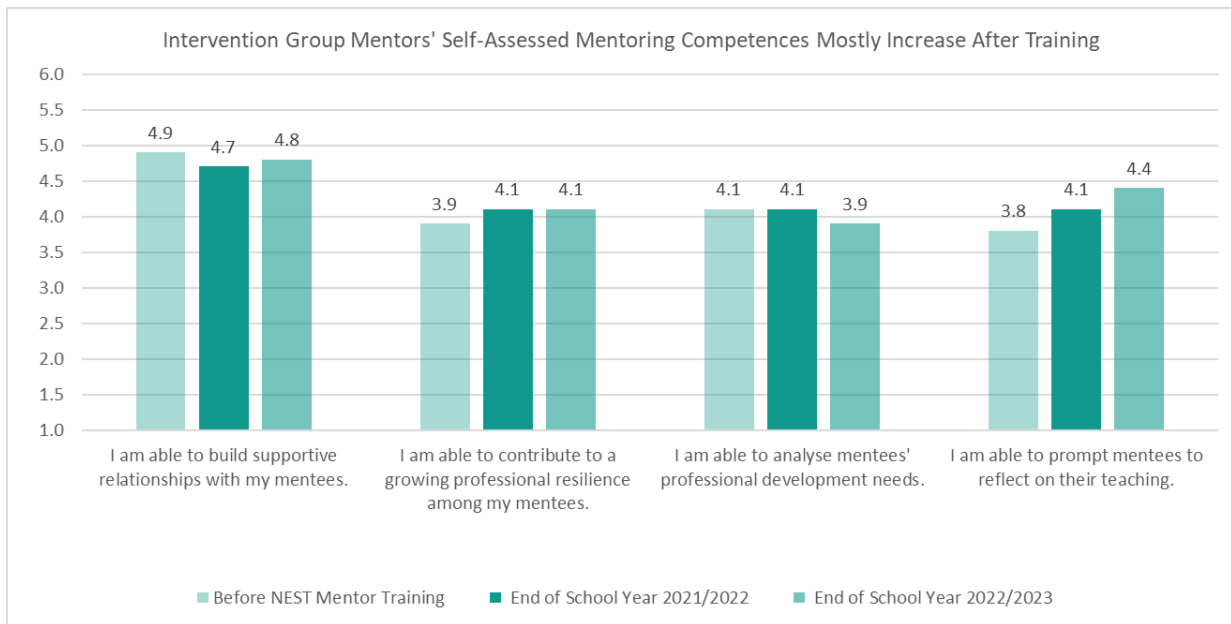


Figure 16: Intervention Group Mentors' Development of Mentoring Competence (Wallonia-Brussels Federation)

3.3.4.5 Novice Teachers Find Intervention Group Mentors More Competent than Control Group Mentors When They Perceive Good Time Allocation and Organisation of Their Mentoring Conversations

In the second survey, novice teachers had to assess their mentor's mentoring competence by agreeing on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with twelve statements about their mentor's mentoring competence. This scale was included in the survey to examine mentoring competence not only from the perspective of mentors but also to capture the perceptions by novice teachers as the recipients of mentoring. In the control group, this question was only posed to novice teachers who had reported on an earlier question that they had a mentor to support them.

The majority of novice teachers in both groups agreed with the statements about their mentors' competence, with means ranging from 2.30–3.28 in the intervention group and 1.98–3.07 in the control group. Looking at the mean of the scale, novice teachers in the intervention group assessed their mentors slightly lower ($M_{IG} = 2.74$) than novice teachers in the control group assessed their control group mentors ($M_{CG_ment} = 2.92$). However, this difference is not significant. In both groups, the level of agreement was highest with the statement 'My mentor gives me constructive feedback', with 41% of novice teachers in the intervention group and 44% of novice teachers in the control group strongly agreeing with the statement. Regarding the four statements which were analysed above for the mentors, the percentage of novice teachers who strongly agreed with the individual statements was always higher in the control group. This was especially true regarding the mentor analysing the novice teachers' professional development needs. Here, 7% of novice teachers in the intervention group strongly agreed, compared to 18% in the control group.

For further analysis of mentoring competence, we calculated an ordinary least squares (OLS) regression with mentoring competence as the dependent variable, i.e. we wanted to examine what other variables affect mentoring competence. As already mentioned above, this analysis can only be based on the novice teacher data, so we can only examine what factors affect mentoring competence from the perspective of novice teachers. As independent or predictor variables, we used the time allocation and organisation of mentoring conversations and a dummy variable taking the value 1 for novice teachers in the intervention group and the value 0 for novice teachers in the control group. This variable was created to test the effect of having been part of the intervention opposed to having been part of the control group during the school year. Gender and age were used as control variables. We would have liked to include more predictors, such as the extent of mentoring focus and the perceived fit of mentoring practices. However, these were too highly correlated with other predictors. We also included an interaction effect between the intervention dummy variable and the time allocation and organisation of mentoring conversations in the model. Correlations between the independent variables were all smaller than 0.24. Results for the OLS regression show that the model was significant ($F(5, 95) = 28.17^{**}$, $\text{Prob}>F = 0.00$) and explained 58% of the variance of mentoring competence. The model yielded a significant effect for the allocation of time and organisation of mentoring (0.5^{**}), all else being equal, while the dummy variable (intervention) had a significant negative effect, all else being equal (-0.81^{**}). Finally, the interaction had a significant positive effect, all else being equal (0.25^*). This result is quite interesting. It means that the time allocation and organisation of mentoring have a positive effect on the novice teachers' perceived mentoring competence of their mentors. Furthermore, this effect is stronger for the novice teachers in the intervention group (as we have to add the coefficient of the interaction effect). In other words, novice teachers in both groups assessed their mentor's mentoring competence higher when they perceived a better time allocation and organisation of their mentoring conversations. However, this effect is even stronger for novice teachers in the intervention group, all else being equal. Novice teachers in the intervention group assessed their mentors' mentoring competence higher only when they thought the time allocation and organisation of mentoring conversations was very good (3.5 or higher); otherwise, they assessed the mentoring competence lower than the novice teachers in the control group, all else being equal.

3.3.4.6 NEST Mentor Training Programme Helps to Improve Intervention Group Mentors' Teaching Practice

Intervention group mentors were also asked to answer on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme helped them to improve their own teaching practice. The majority of mentors (93%) reported that the training helped them at least to some extent to improve their own teaching practice; 43% of the mentors thought that the NEST training programme helped them a lot to improve their own teaching practice ($M_{m_IG} = 3.14$).

3.3.4.7 Teaching Competences of Novice Teachers Stay Stable Over Time

In the first and the second survey, novice teachers had to assess their own teaching competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding different skills relevant for teaching in general, for interacting with students, and for supporting parents. The data allowed for building one subscale on competences to interact with students (eleven statements) and one subscale on interaction with parents (four statements). The scales were included because we wanted to examine whether novice teachers with an intervention group mentor increased their teaching competence to a

higher degree than novice teachers without a specially trained mentor. Furthermore, we were interested in what other factors influenced the teaching competence of novice teachers.

The analysis shows that there was no significant difference between the intervention group and the control groups regarding their self-assessed teaching competence either at the beginning or the end of the school year. There was also no significant change in novice teachers' self-assessments between the beginning and the end of the school year.

On average, novice teachers in all groups thought they had average abilities regarding competences for student interactions at the end of the school year (T2: $M_{IG} = 4.39$; $M_{CG_ment} = 4.44$; $M_{CG_no_ment} = 4.23$). In the intervention group, 15% of novice teachers thought they had high or very high abilities (CG_ment : 20%; CG_no_ment : 24%).

Examining the individual statements revolving around student interactions, novice teachers in all groups assessed themselves highest at end of the school year for showing an open attitude so that it is easy for students to approach them with problems (T2: $M_{IG} = 5.02$; $M_{CG_ment} = 5.1$; $M_{CG_no_ment} = 4.95$).

Results for the competence of supporting parents were very similar to the results for competences of student interactions. Again, there was no significant difference between the intervention group and the control groups regarding their self-assessed teaching competence either at the beginning or the end of the school year. There was also no significant change in novice teachers' self-assessments of their competence regarding parent support between the beginning and the end of the school year.

On average, novice teachers in the intervention group and the control group without mentor support thought they had only basic abilities regarding competences for parent support at the end of the school year (T2: $M_{IG} = 2.93$; $M_{CGI_no_ment} = 2.83$), while novice teachers in the control groups rated their own abilities average ($M_{CG_ment} = 3.15$). Overall, 5% of novice teachers in the intervention group thought they had high abilities (CG_ment : 0%; CG_no_ment : 0%).

Examining the individual statements revolving around parent support, novice teachers in the intervention group and the control groups assessed themselves highest at the end of the school year regarding the competence of showing parents how to positively influence the education of their children (T2: $M_{IG} = 3.12$; $M_{CG_ment} = 3.3$; $M_{CG_no_ment} = 3.03$) and advising parents how to influence the learning environment of their children (T2: $M_{IG} = 3.02$; $M_{CG_ment} = 3.35$; $M_{CG_no_ment} = 3.05$).

For further analysis of teaching competence, we calculated an OLS regression with teaching competence regarding student interactions at the end of the school year as the dependent variable since we wanted to examine what factors affect teaching competence. As independent or predictor variables, we used the preparedness for school challenges by initial teacher education, satisfaction with the school as a workplace, extent of mentoring focus, resilience, competence at the beginning of the school year, and a dummy variable taking the value 1 for novice teachers in the intervention group supported by an intervention group mentor and the value 0 for novice teachers in the control group with support from a control group mentor. We would have liked to include more variables, such as time allocation and organisation of mentoring or the number of formal and informal mentoring conversations. However,

these were too highly correlated with other predictor variables. Gender, age, and whether or not novice teachers had had induction were used as control variables. Correlations between predictors were all under 0.3. Results for the OLS regression show that the model was significant ($F(9, 85) = 6.07^{**}$, $\text{Prob}>F = 0.00$) and explained 33% of the variance of teaching competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded a significant effect only for the self-assessed teaching competence at the beginning of the school year. The intervention dummy variable also had no significant effect, i.e. whether novice teachers were in the intervention group or in the control group did not affect their self-assessed competence at the end of the school year. Unsurprisingly, the self-assessed competence at the beginning of the school year was a very strong significant predictor, i.e. the better novice teachers assessed themselves at the beginning of the school year, the better they assessed their competences at the end of the school year (*beta*: 0.57), all else being equal.

3.3.5 Discussion of Evaluation Results

In this discussion, we will consider the implications of the results from the evaluation of the NEST programme in the Wallonia-Brussels Federation at the micro-, meso-, and macrolevel. In so doing, we will reflect on whether or not the NEST training for the mentors and the NEST mentoring for novice teachers could be scaled up in the Wallonia-Brussels Federation. It is important to note, however, that the sample sizes in the Wallonia-Brussels Federation were quite small especially for the intervention groups, so results should be interpreted cautiously.

The results of the NEST training and mentoring in the Wallonia-Brussels Federation at the microlevel are mixed. According to the mentors themselves, the mentoring they provided after the NEST training was more focused on most of the specific challenges of novice teachers who are teaching at disadvantaged schools. Mentors and novice teachers did agree on which type of challenge their mentoring had focused on to a greater or lesser extent, but novice teachers perceived a lower level of focus for all challenges than their mentors. The intervention group mentors used more facilitative and fewer directive practices than the control group mentors right from the beginning; however, their use of both facilitative and directive mentoring practices decreased over time. That notwithstanding, mentors in the intervention group indicated that the training had helped them to some extent to adapt their mentoring practices to the needs of the novice teachers. This was confirmed by the novice teachers in the intervention group, who experienced a good fit between their needs and the use of the different mentoring practices by their mentor. The intervention group mentors self-assessed their mentoring competence higher after completion of the training than the mentors in the control group. This result was confirmed by the novice teachers' perspective. Novice teachers in the intervention group assessed the mentoring competence of their mentors higher than those in the control group only if they also assessed the time allocation and organisation of the mentoring as good. In all other cases, the control group rated the mentoring competence of their mentors higher. Further, mentors who completed the training also perceived a positive effect of the NEST training on their own teaching competences. Still, this effect seemed to be limited from the perspective of the novice teachers because the mentoring they received did not lead to an increase in the teaching competences of the novice teachers in the intervention group. These results indicate that although the mentors experienced a positive change in their mentoring after the NEST training according to the indicators used for our evaluation, this did not affect the novice teachers they mentored. It is possible that the mentoring provided by the NEST-trained mentors in the Wallonia-Brussels Federation was not intensive enough to see effects at the level of the novice teachers.

At the mesolevel, schools are the main institutions involved with the NEST project. Schools are the workplace of novice teachers and therefore play an essential role in the experiences of novice teachers. Although novice teachers in the Wallonia-Brussels Federation were satisfied with their job and viewed their school as a good workplace in general, schools could also play a part in supporting the novice teachers better with the challenges they face during their first years of teaching. It is positive that the novice teachers in the Wallonia-Brussels Federation felt that challenges related to the school building, instruction materials, or staff shortages at the school only slightly hindered the school in providing good quality instruction. However, schools would still benefit from appointing more specialised teaching personnel (e.g. teachers who focus specifically on children with special educational needs) who could support the novice teachers in the classroom. About half of the novice teachers in the Wallonia-Brussels Federation had participated in an induction programme at the start of their career, and their induction was quite extensive. Therefore, more disadvantaged schools in the Wallonia-Brussels Federation could set up such elaborate induction programmes to improve the support for their novice teachers. This should help novice teachers to feel better prepared for the challenges they might face during their first years of teaching at a disadvantaged school.

The implications of the results of the evaluation of the NEST project at the macrolevel are vast. For the further development and possible upscale of the NEST mentor training programme, consideration should be given to how the training and subsequent mentoring could be embedded into the already existing structures of the education system in the Wallonia-Brussels Federation. The novice teachers who participated in the NEST project did not feel very well prepared for the challenges they faced at their schools by the initial teacher training programme they had completed. This means that novice teachers who work at disadvantaged schools in the Wallonia-Brussels Federation might really benefit from the support of a mentor to help them prepare for and deal with the challenges they face in their first years of teaching at a disadvantaged school. In the Wallonia-Brussels Federation, the majority of the novice teachers in the control group (61%) had a mentor. This suggests that in this education system, there is already room for mentoring and the NEST programme should make a difference in improving the quality of the mentoring by training the mentors more specifically for mentoring at disadvantaged schools.

Further, our analysis suggests that the climate for the implementation of good quality mentoring in the Wallonia-Brussels Federation is good. Both the mentors and the novice teachers agreed that mentoring was generally accepted and valued in the Wallonia-Brussels Federation. Novice teachers also had very positive attitudes towards being mentored, and the mentors showed high levels of enthusiasm for mentoring novice teachers. In the Wallonia-Brussels Federation, there seems to be some support for novice teachers at disadvantaged schools already in the form of induction programmes and mentoring. However, not all novice teachers working at disadvantaged schools in the Wallonia-Brussels Federation receive this support, which suggests there is still room to improve the induction and mentoring structure in the Wallonia-Brussels Federation. It is possible that the NEST mentoring in the Wallonia-Brussels Federation did not yield so many effects at the level of the novice teachers because in many schools in the Wallonia-Brussels Federation, it was not possible to implement the observation and feedback cycles which are the core of the mentoring provided in the NEST project. The analysis of the results in the Wallonia-Brussels Federation suggests, therefore, that both the NEST mentor training and the subsequent mentoring might have to be adapted more strongly towards the realities of the education system in the Wallonia-Brussels Federation in order to create positive effects not only for the mentors, but also for the novice teachers teaching at disadvantaged schools.

3.4 NEST Evaluation Results for Bulgaria

Key Takeaways – Mentors

- **Experts have high enthusiasm** for mentoring which even **increases** over time.
- Experts **increase** their **mentoring focus** after the mentor training programme.
- Experts use a variety of different mentoring practices, and the **NEST mentor training programme helps experts** to adapt those practices to novice teachers' needs.
- Experts' **mentoring competence increases** after the NEST mentor training.

Key Takeaways – Novice Teachers

- **Novice teachers** in the intervention group have more **positive attitudes about mentoring** than those in the control group.
- Novice teachers **perceive a better fit** between their needs and the mentoring practices used by the experts.
- Novice teachers feel moderately exhausted but nevertheless quite resilient.
- Bulgarian novice teachers **want to stay** in the teaching profession.
- Novice teachers find NEST-trained **experts highly competent**.
- **Teaching competences** of novice teachers supported by NEST-trained experts **increase over time**.

The Bulgarian evaluation report for the NEST project is structured in line with the NEST theory of change into sections discussing context, preconditions, processes, and outcomes. It starts by examining the role of mentoring in general in the context of the Bulgarian education system and analyses whether mentoring can be a promising strategy for the Bulgarian education system given the current preconditions for the NEST project. The report goes on to analyse processes and examines how well NEST mentoring is implemented compared to regular mentoring at Bulgarian schools. Finally, the report observes the outcomes of the NEST project in terms of the effects of the NEST mentor training programme on the experts as well as the effects of NEST mentoring on novice teachers. The report closes with a discussion of findings.

In order to understand the results better, it is important to explain the structure of the Bulgarian sample and to give a short description of the sample.

Structure: The overall Bulgarian sample consisted of intervention group experts who took part in the NEST mentor training programme. They filled out surveys at three points in time: at the beginning of the school year 2021/2022 in October 2021, before the NEST mentor training programme started (T1); at the end of the school year 2021/2022 in June 2022, when the theoretical and practical training had mostly finished (T2); and lastly, at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3).

The sample also consisted of an intervention group of novice teachers who were supported by an intervention group expert, and a control group of novice teachers who were either supported by an expert who did not undergo the NEST mentor training programme or who were not supported by any expert at all. Novice teachers were surveyed twice during the school year. The first cohort was surveyed at the beginning and at the end of the school year 2021/2022. The second cohort of novice teachers was

surveyed at the beginning and at the end of the school year 2022/2023. In panel designs in which the same individuals have to complete more than one survey, dropout of participants over time (panel mortality) is a well-known problem. In this respect, the NEST project is no exception. Bulgarian participants—experts as well as novice teachers—dropped out of the programme for various reasons (e.g. changing to a different school, maternity leave, long-term illness). Some participants did not drop out of the programme but simply did not complete the surveys. The dropout reported in this report only refers to survey dropout rates. Since this report examines developments over time, we compare data from the first survey to the corresponding data from the second survey or, in case of the experts, to corresponding data from the third survey. Therefore, the sample for the descriptive statistics and analyses in this report included only those experts and novice teachers who filled out all required questionnaires.

This sample included 43 NEST-trained experts and 657 novice teachers from two cohorts. The first cohort consisted of 322 novice teachers, and the second cohort included 335 novice teachers. The intervention group consisted of 246 novice teachers. Of those, 117 were in the first cohort and 129 were in the second cohort. The control group consisted of 411 novice teachers. Of those, 205 were in the first and 206 in the second cohort. The majority of novice teachers in the control group reported that they were not supported by an expert (84%). It is important to note that whenever data about experts are presented from the perspective of novice teachers, the control group sample included only the novice teachers who reported that they were being supported by an expert. In the sections on context and preconditions, the control group is handled as one group because baseline data are presented which were collected before the mentoring had started. In the sections on processes and outcomes, the intervention group is compared to both the control group with support from an expert and the control group without expert support. We would expect more noticeable differences between the intervention group and the control group without expert support. We make the respective reference groups very explicit in the text.

Sample Description: The majority of novice teachers in both the intervention group and the control group were female (76% in both groups). In the group of experts, the percentage of females was even higher (81%). The average age of novice teachers had a wide range. The youngest person was 21 years old, and the oldest person was 58 years old. In the intervention group, the average age was 34.6 years, with a median age of 34 years, compared to an average age of 33.6 years with a median age of 32 years in the control group. Experts were on average 50.4 years old, with a median age of 52 years. Novice teachers in the intervention group had an average teaching experience of 1.7 years, while novice teachers in the control group had slightly more teaching experience, with an average of 2.4 years. Teaching was not the first-choice career for 59% of novice teachers in the intervention group and 55% of novice teachers in the control group. Of the Bulgarian experts, 86% had previous mentoring experience, i.e. they reported that they had mentored novice teachers within the past five years. Detailed descriptive statistics regarding all reported results can be found in Appendix A4 – Bulgaria. More information on the variables used in the regression analyses can be found in the codebook for Bulgaria on page 372.

3.4.1 Mentoring in the Broader Context of the Bulgarian Education System

This section considers the role of mentoring in general in the context of the Bulgarian education system. For this purpose, we examine data about the general acceptance of mentoring in Bulgaria from the perspective of the participating novice teachers and the experts. Furthermore, we examine the expectations both groups had about what attributes or characteristics a good mentor should have. Data

used in this section were taken from the baseline survey conducted before the NEST mentor training programme started.

3.4.1.1 Novice Teachers and Experts Agree that Mentoring Is Generally Accepted

In the baseline survey, novice teachers and experts had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about the level of acceptance of mentoring in the Bulgarian education system in general. This scale was included in the survey to examine novice teachers' and experts' perceptions of the general acceptance of mentoring by society as part of the professional development of teachers. On average, novice teachers in the intervention and control groups thought that mentoring was generally well accepted in Bulgaria. Still, *t* test results show that the novice teachers in the intervention group agreed significantly more strongly with the general acceptability of mentoring in Bulgaria than the control group ($t(650) = -2.25^{**}$, $p = 0.01$). The highest level of agreement in the intervention group was with the statement 'In my school, district mentoring for novice teachers is seen as a crucial part of starting the teaching career' ($M_{IG} = 3.22$). Almost 40% of novice teachers in the intervention group strongly agreed with this statement. In the control group, agreement was highest with the statement 'In my environment people highly respect mentors who support novice teachers' ($M_{CG} = 3.13$). Here, 34% strongly agreed with this statement. Data from the experts mirror the views of the novice teachers. Experts agreed with all statements about the general acceptance of mentoring as well. The highest level of agreement in this group was with the statement 'In my education system, mentoring is seen as one of the most important parts of professional development for teachers' ($M_{exp} = 3.44$), with 58% strongly agreeing with the statement.

3.4.1.2 Novice Teachers and Experts Have Mostly Similar Opinions About What Makes a Good Mentor

In the baseline survey, novice teachers and experts were asked which attributes they found most important for being a good mentor. They could choose from seven different attributes and pick the three attributes they considered most important. This question was included because we wanted to examine which kind of expectations novice teachers and experts had in general about what makes a good mentor or expert. For the analysis, we calculated for each attribute whether it was chosen by a person as one of the three most important attributes. Thus, a percentage of 38 means that 38% of the respective group chose this attribute as one of the three most important attributes. Figure 17 shows that respectfulness and trustfulness were chosen most often as one of the most important attributes by all groups. However, experts found trustfulness more important than novice teachers. Only a minority in both groups found curiousness or courage very important attributes for a good expert.

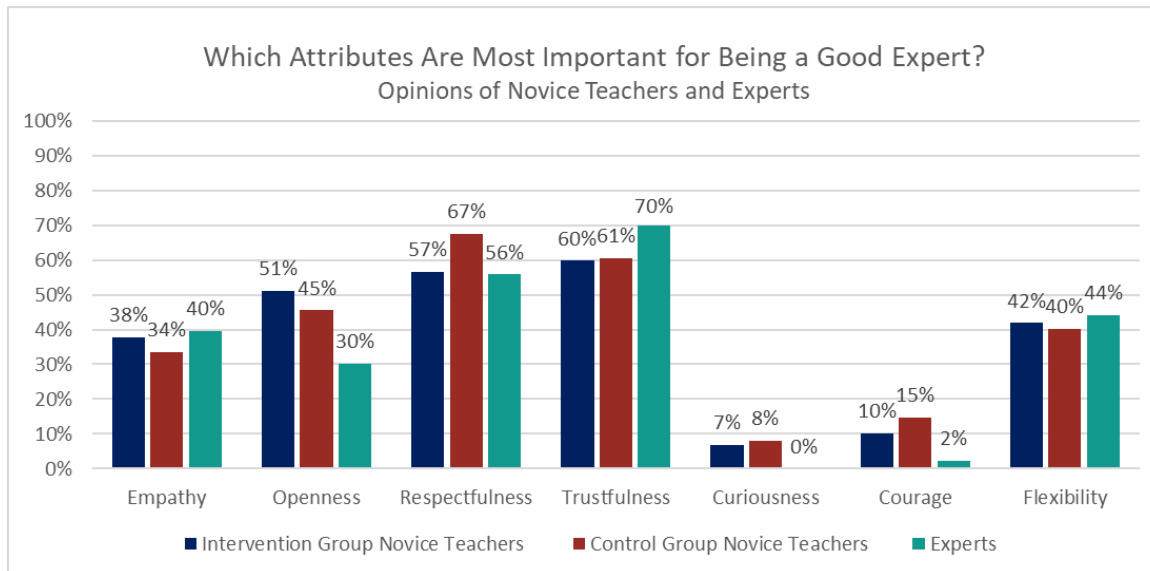


Figure 17: Important Attributes for Being a Good Expert (Bulgaria)

3.4.2 Preconditions for the NEST Project – Is Mentoring a Promising Strategy for the Bulgarian Education System?

This section analyses the preconditions for the NEST project. We examine the prerequisites of the novice teachers and experts working at disadvantaged schools to determine whether the conditions for a mentor training programme were favourable or not. In the following subsections, we report on data about novice teachers' attitudes towards mentoring, experts' enthusiasm for mentoring, how well novice teachers and experts felt prepared for dealing with challenges at disadvantaged schools, the availability of induction programmes for novice teachers, and the perceived school environment. Data used in the first three subsections were taken from the baseline survey conducted before the NEST mentor training programme started; data for the last subsection were taken from the second survey for novice teachers conducted at the end of the school year.

3.4.2.1 Positive Attitudes and High Enthusiasm for Mentoring

In the baseline survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with six statements about their attitudes towards being mentored. This scale was included in the survey to examine whether novice teachers had a general willingness to be mentored and whether they saw the benefits of being mentored. The analysis shows that on average, novice teachers in the intervention and control groups had positive attitudes towards being mentored. A *t* test comparing the means of the scale between the two groups shows that the novice teachers in the intervention group had significantly more positive attitudes towards mentoring than those in the control group ($t(653) = -7.13^{**}$, $p < 0.01$). The highest level of agreement in the intervention group was with the statement 'I think being mentored will support the development of more suitable alternatives for my classroom activities' ($M_{IG} = 3.44$). Almost half of the novice teachers in the intervention group strongly agreed with this statement (48%). If also considering the novice teachers who agreed (rather than 'strongly agreed') with the statement, almost all novice teachers in the intervention group agreed or

strongly agreed with this statement (97%). The same is true for the statement 'I think being mentored will help me to develop reflection skills for my own teaching.' The statement that was rated lowest was 'I expect my expert(s) to help me discover the causes for professional problems' ($M_{IG} = 3.29$). Here, 37% strongly agreed with the statement. This statement was also rated the lowest by the novice teachers in the control group ($M_{CG} = 2.99$). Only 22% of the novice teachers in the control group strongly agreed with this statement. Agreement in the control group was highest with the statement 'I think being mentored will help me to develop reflection skills for my own teaching' ($M_{CG} = 3.14$). Almost all novice teachers in the control group agreed or strongly agreed with this statement (88%).

In the baseline as well as the final survey, experts had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with five statements about their enthusiasm for mentoring novice teachers. This scale was included in the survey to examine the extent to which experts were motivated to support novice teachers with mentoring and whether this enthusiasm could be increased by the mentor training programme. Our analyses of the data show that experts were already very enthusiastic about mentoring before the training started. The majority of experts agreed or strongly agreed with all statements about mentoring enthusiasm (T1: $M_{exp} = 3.24\text{--}3.94$). In both surveys, they agreed most with the statements 'I enjoy sharing my teaching expertise with novice teachers' and 'I feel content when I see progress in my mentees' teaching.' A *t* test comparing average mentoring enthusiasm before the training with average enthusiasm at the end of the school year 2022/2023 yielded that experts had significantly higher enthusiasm for mentoring after the training ($t(36) = -3.33^{**}$, $p < 0.01$). All experts agreed or strongly agreed that they felt content when they saw progress in their mentees' teaching (95% strongly agreed), and that they enjoyed sharing their own teaching experience with novice teachers (90% strongly agreed).

3.4.2.2 Little Preparation for School Challenges by Initial Teacher Training

In the baseline survey, novice teachers were also asked to assess how well their initial teacher training had prepared them for six specific challenges they might face working at disadvantaged schools on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The data show that on average, novice teachers in the intervention and control groups felt only to some extent prepared for challenging situations at school. A *t* test comparing the means of the scale between the two groups showed that the novice teachers in the intervention group felt significantly less well prepared than the control group ($t(645) = 2.1^{*}$, $p = 0.02$). The intervention group as well as the control group felt least prepared for teaching students with language barriers ($M_{IG} = 1.96$; $M_{CG} = 2.03$) and involving parents in the learning process of their children ($M_{IG} = 2.08$; $M_{CG} = 2.19$). Exactly one third of the intervention group and 30% of the control group felt not at all prepared for teaching students with language barriers, and 27% of either group felt not at all prepared for involving parents in the learning process of their children. Of all the challenges, both groups of novice teachers felt best prepared for teaching students with learning difficulties ($M_{IG} = 2.30$; $M_{CG} = 2.42$). For this challenge, 38% of the intervention group and 47% of the control group felt quite a bit or a lot prepared by their initial teacher training.

In the baseline survey, experts were asked exactly the same question. This scale was included in the survey to examine how well mentors felt prepared already for certain challenges as an indicator of their need for a mentor training programme. The analysis shows that experts felt similarly unprepared for challenges as did teachers in the intervention group, i.e. they felt on average only to some extent prepared for

challenges. They felt least prepared for teaching students with language barriers ($M_{\text{exp}} = 1.95$) and teaching students with learning difficulties ($M_{\text{exp}} = 1.98$). Almost half of the experts (47%) felt not at all prepared for teaching students with language barriers, and 42% of the experts felt not at all prepared for teaching students with learning difficulties. Experts felt best prepared for engaging hard-to-reach learners ($M_{\text{exp}} = 2.31$), with 45% reporting feeling quite a bit or a lot prepared for this challenge.

3.4.2.3 Induction Is Still Not Very Common at Bulgarian Schools

In the baseline survey, novice teachers were asked whether they were currently taking part or had taken part in any induction activities at the school at which they were currently teaching. By induction activities we referred to activities designed to support new teachers' introduction into the teaching profession and to support experienced teachers who are new to a school. These activities can be organised either in formal, structured programmes or informally arranged as separate activities. This question was included in the survey to examine how well induction processes for new teachers are already implemented in the school system. For the novice teachers who reported that they had taken part in formal induction activities, we included questions on the type of activity. They could report their participation in a total of ten different induction activities: general or administrative introduction; courses or seminars attended in person; online courses or seminars; networking or collaboration with other new teachers; team-teaching with experienced teachers; supervision of portfolios, diaries, or journals; reduced teaching load; regular visits from the school principal and/or experienced teachers; supervision of teaching by the school principal and/or experienced teachers; and online activities, such as virtual communities.

The analysis of the data shows that the majority of novice teachers in the intervention group (76%) and control group (67%) had not taken part in any induction activities. Looking separately at formal and informal induction activities, the percentages of novice teachers who had not taken part in any induction activities are even larger. In the intervention group, 80% had not taken part in formal and 84% had not taken part in informal induction activities. In the control group, 75% had not taken part in formal and 74% had not taken part in informal induction activities. Of the 60 novice teachers in the intervention group who reported that they had taken part in induction activities, a maximum of 49 also gave information on the type of activity. In the control group, a maximum of 102 (of 134) reported on the type of activity. For both groups, the most common induction activities included: a general or administrative introduction at the school; regular visits from the school principal and/or experienced teachers; and supervision of teaching by the school principal and/or experienced teachers.

3.4.2.4 Challenging Factors Only Slightly Hinder the School's Capacity to Provide Quality Instruction in Bulgaria

To learn more about the school environment or the conditions under which novice teachers have to work at disadvantaged schools, novice teachers were asked in the second survey what factors hindered quality instruction at their school. Novice teachers had to assess on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) in how far 14 different challenges (such as staff shortages or lack of learning materials) hindered their school's capacity to provide quality instruction. The analysis shows that the majority of novice teachers in the intervention group and control group saw the school's capacity to provide quality instruction as not hindered at all or only to some extent. The medians for all 14 challenges had the value 1, i.e. for all challenges at least 50% of the novice teachers answered 'not at all' regarding the level of

hindrance posed by the specific challenge. No significant differences were found between the intervention and the control group. Overall, means were slightly higher for all challenges that revolved around staff shortages, such as shortage of teachers with competence in teaching students with special needs, shortage of teachers with competence in teaching students in a multicultural or multilingual setting, or shortage of support personnel. However, means were still quite low ($M_{IG} = 1.30\text{--}1.60$; $M_{CG} = 1.31\text{--}1.56$).

3.4.3 How Well Is NEST Mentoring Implemented Compared to Regular Mentoring at Bulgarian Schools?

This section analyses the implementation of NEST mentoring in comparison with regular mentoring at schools in Bulgaria. We will examine the quantity of formal and informal mentoring conversations and the quality of mentoring in terms of the focus of mentoring and the match between the mentoring practices offered by mentors as well as the perceived need for those practices from the perspective of novice teachers. The section also gives insights into how well the experts were able to transfer knowledge and lessons learned from the NEST mentor training programme into their mentoring practice. For this purpose, we examine the changes in the mentoring focus and mentoring practices of the experts. The scale about mentoring focus is the counterpart to the scale on preparedness, which was discussed in Section 3.4.2.2. Data for novice teachers were taken from the second survey. For the experts, data from all mentor surveys were analysed. It is important to note that this section presents only data of those novice teachers in the control group who reported that they were being supported by a mentor. This sample comprised only 66 novice teachers, a relatively small percentage of the control group (16%), while in the intervention group all novice teachers had a NEST mentor.

3.4.3.1 Control Group Novice Teachers Have More Mentoring Conversations, While the Organisation and Time Allocation of Mentoring Conversations Work Better for the Intervention Group

In the second survey, novice teachers were asked how many formal and informal mentoring conversations they had with their expert. We defined a formal mentoring conversation as a longer meeting between expert and mentee to plan and/or to discuss and/or to reflect on, for instance, a lesson plan, actual teaching, or student behaviour. We defined an informal mentoring conversation as a conversation between expert and mentee that was a short meeting to exchange information or materials or to receive advice or feedback on ideas. This question was included in the survey to have a quantitative measure for the meetings between experts and their mentees.

The data show that the majority of novice teachers in the intervention group (44%) had three formal mentoring conversations. Overall, 72% of the intervention group had between one and three formal mentoring conversations, and 20% had four or five formal mentoring conversations; the rest are outliers who reported having had between eight and 30 formal mentoring conversations. Since the NEST mentoring planned for three formal mentoring conversations, we expect these outliers to be the result of typing mistakes; there would hardly have been time within the school year to have 30 formal mentoring conversations with one expert.

Numbers for informal mentoring conversations were similar. The majority reported having had two or three informal mentoring conversations (35%). A few teachers reported between seven and 20 informal mentoring conversations, and 11% reported having had no informal mentoring conversations. The numbers for formal and informal mentoring conversations in the control group show even more variance. Novice teachers in the control group reported between zero and 30 formal and between zero and 100 informal mentoring conversations. Here again we expect higher numbers (outliers) to be the result of typing mistakes. Overall, 50% of the novice teachers in the control group had between one and five formal mentoring conversations and between one and ten informal mentoring conversations. The data suggest that novice teachers in the control group had more mentoring conversations than novice teachers in the intervention group. However, the data have to be interpreted cautiously since the number of novice teachers with a mentor in the control group was quite small, and of those, only roughly half (39 people) answered the question. This means that the data might not represent the control group sample very well.

Novice teachers also had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with three statements about the time allocation and organisation of their mentoring conversations.

A *t* test comparing the means of the scale between the two groups shows that novice teachers in the intervention group agreed significantly more strongly with the statements regarding the organisation and time allocation of mentoring conversations than the control group ($t(301) = -5.23^{**}$, $p < 0.01$). Of the three statements, both groups of novice teachers agreed most with the first two. The majority of novice teachers in the intervention group (66%) strongly agreed that the experts took sufficient time for the mentoring conversations. In the control group, the majority also strongly agreed with this statement, although to a lesser extent than in the intervention group, with only 46%. The majority of novice teachers in the intervention group also strongly agreed that the experts took sufficient time to observe their classroom teaching (61%), whereas in the control group, 46% of novice teachers agreed with the statement and only 34% strongly agreed with the statement. In the intervention group, 93% agreed or strongly agreed that they knew well in advance when the expert would visit them for a classroom observation, whereas in the control group, 70% agreed or strongly agreed with this statement.

3.4.3.2 Experts Increase Their Mentoring Focus After the Mentor Training Programme

Experts were asked in all three surveys about the focus of their mentoring activities. We wanted to examine to what extent they focused on six specific challenges novice teachers might face while teaching and whether the extent of focus changed after the mentor training. For this purpose, experts assessed in how far they focused their mentoring on the six different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). This question directly complements the question for novice teachers. Figure 18 shows that experts slightly increased their focus on most of the different challenges in their mentoring after the NEST mentor training programme. This is especially true for the focus on teaching students with learning difficulties. After the school year 2022/2023, the focus decreased again for most of the challenges. However, experts increased their mentoring focus on supporting novice teachers with teaching students with learning difficulties and managing a diverse classroom effectively. The decreases in the mentoring focus compared to levels measured before the training could indicate that experts learned in the training to adapt better to their novice teachers' needs and to focus their mentoring on the areas where they perceive the highest demand.

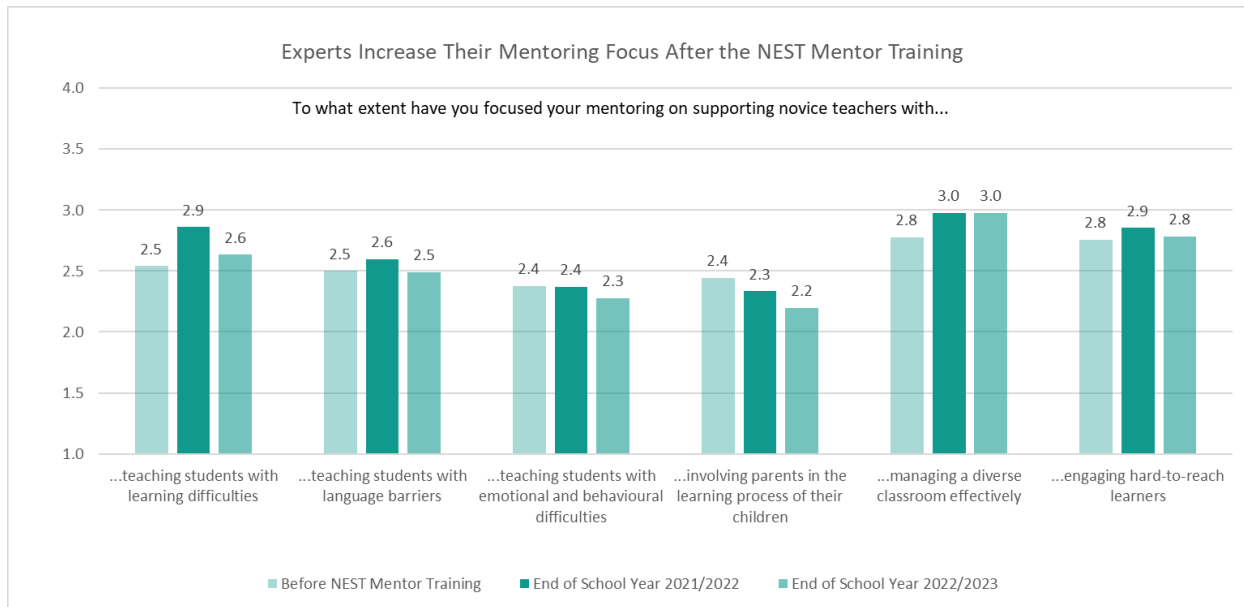


Figure 18: Experts' Development of Mentoring Focus (Bulgaria)

3.4.3.3 Novice Teachers' Perceptions of Experts' Mentoring Focus Is in Line with the Experts' Perceptions

In the second survey, novice teachers were asked about the focus of the mentoring they received, so this issue can be examined from the perspective of both the mentors and the mentees. To assess the extent to which the mentoring that the novice teachers received focused on supporting them with dealing with certain challenges at school, they had to rate six statements regarding the different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis shows that both groups of novice teachers perceived only a moderate level of focus on the different challenges in their mentoring. Means for the intervention group ranged from 2.38–2.86, and means in the control group with mentor support ranged from 2.44–2.64. Novice teachers in both groups perceived the highest focus of their mentoring on engaging hard-to-reach learners, with 70% of novice teachers in the intervention group and 60% of novice teachers in the control group feeling that their mentoring focused quite a bit or a lot on this challenge. This was the only one of the six different challenges where the intervention group perceived a significantly higher focus than the control group ($t(301) = -1.98^*$, $p = 0.02$). Novice teachers in the intervention group perceived the second highest focus on teaching students with learning difficulties. Here, 68% reported that their mentoring focused quite a bit or even a lot on this challenge. Novice teachers in the control group perceived the second highest focus of their mentoring on effectively managing a diverse classroom, with 59% perceiving quite a bit or a lot of focus on this challenge.

We also compared the data of the novice teacher intervention group to the expert data. The novice teacher sample comprised two consecutive cohorts. The first cohort was the cohort of novice teachers that was supported by experts directly after the mentor training programme. The second cohort of novice teachers was supported by experts in the experts' second school year of the NEST project. We wanted to examine whether the development in the extent of focus of the experts would be mirrored in the perceptions by the two novice teacher cohorts. As experts thought that they had focused their mentoring more strongly at the end of the school year 2021/2022, the first cohort should have perceived a higher

level of focus in their mentoring; and as the level of focus decreased after the mentor training programme according to the experts' perception, the second cohort of novice teachers should have perceived a lower level of focus in their mentoring. Figure 19 shows exactly this development; not only did the experts feel that their focus decreased, but the data from the novice teachers validate this perception. Novice teachers in the second cohort perceived a lower extent of focus than novice teachers in the first cohort.

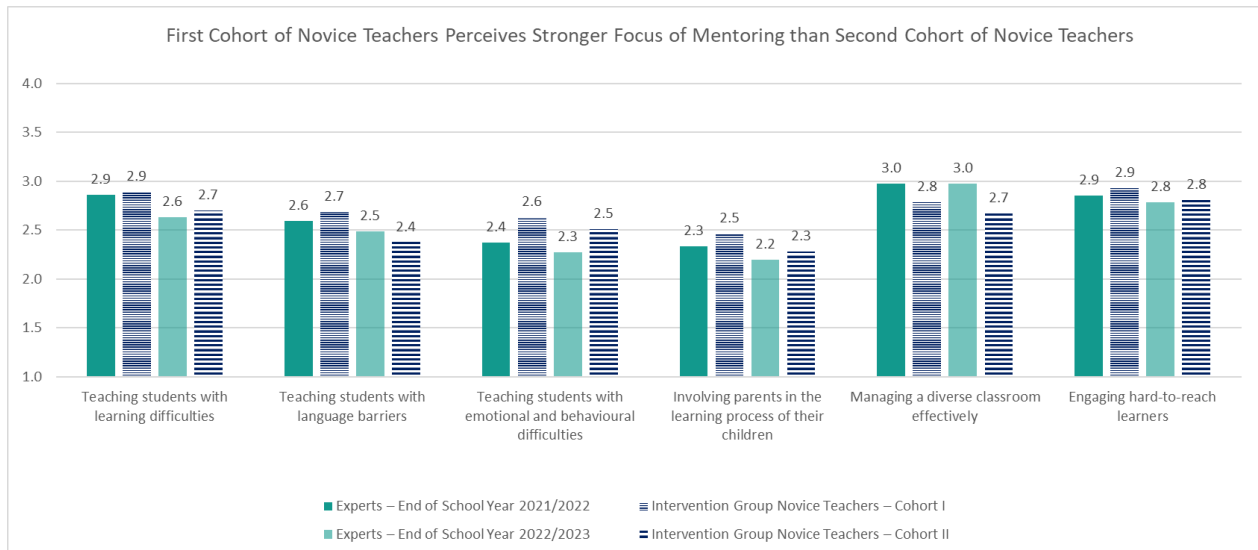


Figure 19: Novice Teachers' and Experts' Perceptions of Mentoring Focus (Bulgaria)

3.4.3.4 Experts Use a Variety of Different Mentoring Practices, and the NEST Mentor Training Programme Helps Experts to Adapt Those Practices

Experts were asked about their mentoring practices in the last two surveys. For this purpose, experts rated how often they used 18 different mentoring practices on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*). We differentiated between more directive and more facilitative mentoring practices. More directive practices generally put the mentor in a more active role and include giving advice or using concrete examples from the mentor's own practice. The facilitative practices put the novice teacher in the more active role and include asking open questions, using active listening skills, or letting novice teachers find solutions on their own. We wanted to examine which practices experts had used before the mentor training programme and whether these practices had changed over time.

The analysis shows that experts increased the frequency of almost all practices. On average, only three of the 18 practices were used less at the end of the school year 2022/2023 compared to the end of the school year 2021/2022. Of those, the decrease in frequency of use was highest for assessing the teaching skills of their novice teachers (T2: $M_{exp} = 4.46$; T3: $M_{exp} = 4.23$). Figure 20 shows that changes in frequency of use were largest directly after the training at the end of the school year 2021/2022 (T2). The frequency of use for the facilitative practices increased while the frequency of use for directive practices decreased. At the end of the school year 2022/2023 the use of facilitative practices continued to increase, while the frequency of use of directive practices also increased again. However, while the frequency of use of

directive practices was higher before the NEST mentor training, at the end of the school year 2022/2023 the frequency of use of facilitative practices was higher than that of directive practices.

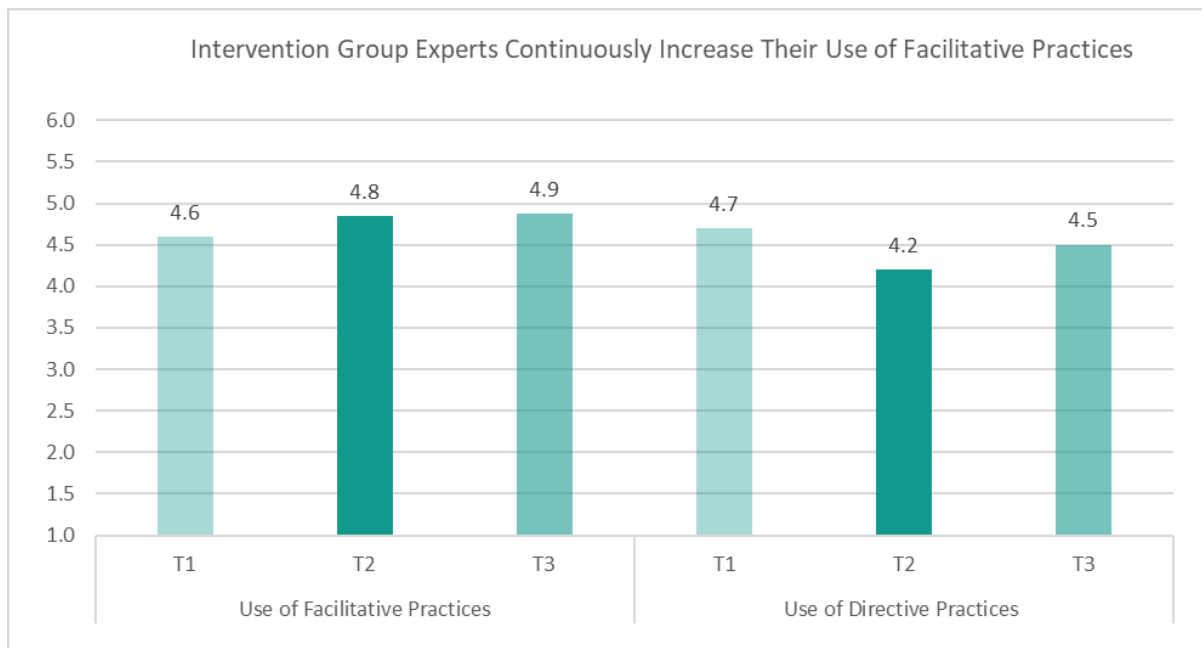


Figure 20: Experts' Frequency of Use of Mentoring Practices (Bulgaria)

3.4.3.5 NEST Mentor Training Programme Helped Experts to Use Their Mentoring Practices in a More Adaptive Way

In the last survey, experts had to rate on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme had improved the experts' competences to switch between different practices and to adapt their practices in a flexible way as this was one of the aims of the training. If they thought that their competence level was already so high that they did not need to improve further, they could indicate this by ticking a box. Our analysis shows that all experts thought that the NEST mentor training programme helped them at least to some extent to improve using different mentoring approaches for novice teachers with different personalities, changing their mentoring approach according to the social situation in the classroom, and adapting their mentoring approach according to the novice teacher's level of professional development. Overall, experts thought the NEST mentoring programme helped them to improve most in using different mentoring approaches for novice teachers with different personalities (53% answered 'a lot').

3.4.3.6 Novice Teachers in the Intervention Group Perceive a Better Fit Between Their Needs and the Mentoring Practices Used by Experts

At the same time, we asked novice teachers to rate how well the frequency with which their expert used these mentoring practices during their mentoring conversations fit with their perceived needs for such practices on a 3-point scale ranging from 1 (*not often enough*) to 2 (*exactly as often as I needed*) to 3 (*too*

often). The analysis of novice teacher data shows that for all of the practices, the majority of novice teachers thought that experts had used the practices exactly as often as the novice teachers needed. Interestingly enough, only a minority of novice teachers stated that experts had used mentoring practices not often enough, while more respondents stated that mentoring practices had been used too often. This was true for directive and non-directive practices. Practices with the best fit in the intervention group, i.e. the highest percentage of novice teachers answering ‘exactly as often as I needed’, were the expert starting the conversation with an open question (92%) and the expert letting novice teachers discover the principles behind a good lesson for themselves (87%). In the control group who were supported by an expert, the majority of novice teachers (79%) thought the best fit was for the practice of starting the conversation with an open question as well; however, the expert asking clarifying questions was the second-best fit for this control group (71%).

To analyse further the fit between the frequency of use of a mentoring practice and the perceived need from the perspective of novice teachers, we created a dichotomous variable. We categorised the answers ‘not often enough’ and ‘too often’ as bad fit, and the answer option ‘exactly as often as I needed’ as good fit, i.e. for each mentoring practice, novice teachers could have the value 0 for a bad fit and the value 1 for a good fit. Then we summed up the practices to receive a measure for an overall fit between mentoring practice and perceived need. This measure has a range from 0 (*no fit at all*) to 20 (*perfect fit*). The average fit between the frequency of mentoring practices and the perceived need for those practices is 15.83 for the intervention group and 13 for the control group with expert support. This difference is statistically significant, i.e. novice teachers in the intervention group perceived a better fit than novice teachers in the control group with expert support ($t(304) = -3.54^{**}$, $p < 0.01$). This is also true when we examine the non-directive practices ($t(303) = -2.82^{**}$, $p < 0.01$) and directive practices separately ($t(304) = -2.54^{**}$, $p = 0.01$).

3.4.4 Positive Effects of the NEST Mentor Training Programme and NEST Mentoring

This section analyses the results of the NEST mentor training programme and NEST mentoring in comparison with regular mentoring at schools in Bulgaria. We examine whether the NEST interventions had any effects on various outcome variables such as emotional exhaustion, satisfaction with the workplace, and the teaching competences of novice teachers and the mentoring competences of experts. However, since the sample of experts was small, we can perform regression analyses only with the novice teacher data, i.e. we can estimate effects on the mentors from the perspective of the novice teachers. Another challenge is that the number of novice teachers in the control group who had an expert to mentor them was very small (16%, see Section 3.4.3), while all novice teachers in the intervention group had an expert to support them. This makes it harder to find evidence for significant effects when controlling for the intervention in regression analysis. Since we had two control groups, one comprising novice teachers with a mentor (expert) and one comprising novice teachers without a mentor (expert), we must conduct two sets of comparisons for outcome variables which relate to novice teachers. First, we compare the novice teacher intervention group to the novice teachers in the control group who had experts to support them; and second, we compare the novice teacher intervention group to the control group novice teachers without support from an expert. We expect the differences between the latter two groups to be more pronounced. Since we are mainly examining developments in this section, data for novice teachers and experts were taken from all measurement points to have comparative measures over time.

3.4.4.1 Novice Teachers Feel Moderately Exhausted but Nevertheless Quite Resilient

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about their emotional exhaustion. This scale was included in the survey because exhaustion can be a predictor for leaving the job. The data show that novice teachers in the intervention and control groups on average felt moderately exhausted. Furthermore, looking at the scale, exhaustion was stable over time, so novice teachers felt similarly exhausted at the beginning and at the end of the school year. Means at the end of the school year ranged from 2.30–2.61 in the intervention group and 2.30–2.53 in the control group with expert support ($M_{CG_no_exp} = 2.36$ – 2.64). The highest level of agreement in the intervention group as well as in the control group without an expert at both measurement points was with the statements ‘I often feel exhausted while I am working’ (T2: $M_{IG} = 2.61$; $M_{CG_no_exp} = 2.63$) and ‘Overall, I feel overstrained by my workload’ (T2: $M_{IG} = 2.6$; $M_{CG_no_exp} = 2.64$). Both groups are basically split into two halves: one half disagreed with feeling exhausted, and the other half agreed. The control group who had an expert to support them felt slightly less exhausted, and exhaustion also decreased for some of the statements over time. The highest level of agreement in this group at the beginning of the school year was with the same statements as the other groups. At the end of the school year, the highest agreement for the control group with expert support was again with the statement ‘Overall, I feel overstrained by my workload’ (T2: $M_{CG_exp} = 2.53$) and with the statement ‘When I am working, I realise how weary I am.’ (T2: $M_{CG_exp} = 2.37$). In this control group, less than half of novice teachers agreed with feelings of exhaustion for most of the statements.

In the second survey, novice teachers were also asked how resilient they felt to stress and negative setbacks at work. They had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about resilience. This scale was included in the survey as a counterpart to emotional exhaustion and can be a predictor for staying in the job. The data mirror the results about emotional exhaustion. On average, novice teachers in the intervention and control groups felt moderately resilient, with means ranging from 2.44–2.77 in the intervention group and 2.42–2.88 in the control group with expert support ($M_{CG_no_exp} = 2.44$ – 2.80). The highest level of agreement in all groups was with the statement ‘I think that I can cope well with work pressure’; 72% of novice teachers in the intervention group and 77% of novice teachers in the control group with experts agreed or strongly agreed with this statement (74% in the control group without experts). The percentages of agreement with the statement ‘I can cope well with setbacks at work’ were slightly lower; 70% of novice teachers in the intervention group and 71% of the control group with expert agreed or strongly agreed with this statement (69% in the control group without experts). Even though about half of the novice teachers in all groups reported feelings of exhaustion, a higher percentage still felt resilient, i.e. while about a fifth of novice teachers felt exhausted, they also felt quite resilient.

3.4.4.2 Bulgarian Novice Teachers Think Their School Is a Good Workplace

The second survey also included questions on job satisfaction. Novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with ten statements about job satisfaction. One of the subscales revolved around satisfaction with the school as a workplace (three statements). The scale on job satisfaction was included in the survey as yet another predictor for staying in the job. The analysis of the data shows that on average, novice teachers in the intervention group and

the two control groups were quite satisfied with their workplace, with means for individual statements ranging from 2.89–3.31 in the intervention group and 2.86–3.48 in the control group with support from an expert ($M_{CG_no_exp} = 2.97\text{--}3.43$). However, the results of t tests show that novice teachers in the intervention group were significantly less satisfied with their workplace than the novice teachers in the control group with experts ($t(303) = 1.72^*$, $p = 0.04$) and without experts ($t(581) = 1.83^*$, $p = 0.03$). The highest level of agreement in all groups was with the statement ‘I enjoy working at this school’; 92% of novice teachers in the intervention group and 98% of novice teachers in the control group with experts agreed or strongly agreed with this statement (94% in the control group without experts). The lowest level of agreement overall was with the statement ‘I would like to change to another school if that were possible.’ Only 5% of novice teachers in the intervention group and 6% of novice teachers in the control group with experts strongly agreed with this statement (7% in the control group without experts).

3.4.4.3 Bulgarian Novice Teachers Want to Stay in the Teaching Profession

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with two statements about their plans to make career changes. This scale was included in the survey to examine the tendency towards leaving the teaching profession. Our analysis shows that on average, novice teachers had a low tendency to leave the teaching profession at the end of the school year or in the long term. In the second survey, only 3% of novice teachers in the intervention group and only 5% of novice teachers in the control group with experts agreed that they were planning to leave the teaching profession after the school year (4% in the control group without experts). However, the result of a t test shows that novice teachers in the control group with experts agreed significantly more strongly with intending to leave the profession at the end of the year in the second survey compared to when they were asked at the beginning of the school year in the first survey ($t(64) = 2.28^{**}$, $p = 0.01$). For the intervention group as well as the control group without expert support, there was no difference; their tendency to leave at the end of the school year was stable over the two measurement points. On average, more novice teachers in the intervention group (11%) and in the control group without expert support (12%) agreed with the idea of leaving the teaching profession in the long term, compared to only 3% in the control group with expert support. However, strong agreement was lower in the intervention group (2%). In both control groups, strong agreement was 3% for novice teachers with expert support and 4% for novice teachers without an expert to support them. The overall low tendency to leave the teaching profession is complemented by the average number of years novice teachers reported to be willing to stay in the teaching profession. This number was similar in both groups: 23.5 years in the intervention group and 24 years in the control group with experts (22.4 years in the control group without experts). However, since the years one is willing to stay in the profession are correlated with one’s age and since the intervention group was significantly older than the control group with experts (on average three years older), this shows an even stronger willingness of the intervention group to stay in the teaching profession compared to the control group.

3.4.4.4 Experts’ Mentoring Competence Increases After the NEST Mentor Training

Experts were asked to assess their own mentoring competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding twelve different skills. Our analysis shows that experts assessed their mentoring competence prior to the mentor training programme quite high, with a mean of 4.79. However, at the end of the school year 2021/2022, they assessed their mentoring competence even

higher ($M_{exp} = 5.02$), and at the end of the school year 2022/2023 higher still, with a mean of 5.27. In fact, t tests show that the self-assessed mentoring competence significantly increased over time (T1–T2: ($t(36) = -2.07^*$, $p = 0.02$); T2–T3: ($t(42) = -3.89^{**}$, $p < 0.01$); T1–T3: ($t(36) = -5.06^{**}$, $p < 0.01$). Before the training, experts assessed their competence to address the mentees’ feelings ($M_{exp} = 5.03$) and to assess the quality of novice teachers’ teaching skills ($M_{exp} = 5.0$) the highest.

Since the mentor training programme focused especially on supporting mentors with building a trustful relationship, initiating reflection by novice teachers, adapting to novice teachers’ specific needs, and building resilience in novice teachers, we specifically examined the statements regarding mentoring competences which revolved around these topics.

Experts’ self-assessed competence increased over time for the four statements, as depicted in Figure 21. In fact, experts assessed themselves highest at the end of the first and at the end of the school year 2022/2023 regarding building a supportive relationship with their mentee.

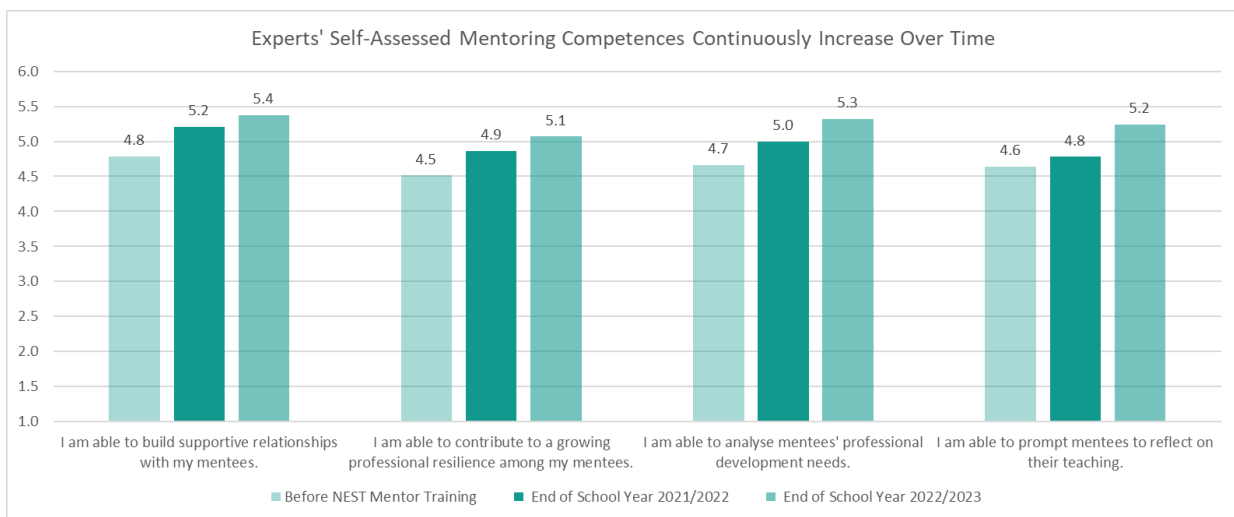


Figure 21: Development of Experts' Mentoring Competence (Bulgaria)

3.4.4.5 Novice Teachers Find NEST-Trained Experts Highly Competent

In the second survey, novice teachers had to assess their expert’s mentoring competence by agreeing on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with twelve statements about the expert’s mentoring competence. This scale was included in the survey to examine mentoring competence not only from the perspective of experts but also to capture the perceptions by novice teachers as the recipients of mentoring. In the control group, this question was only posed to novice teachers who had reported on an earlier question that they had a mentor to support them.

The majority of novice teachers in both groups strongly agreed with the statements about their experts’ competence, with means ranging from 3.50–3.74 in the intervention group and 3.20–3.53 in the control group. Even so, teachers in the intervention group assessed their expert’s mentoring competence

significantly higher than novice teachers in the control group ($t(301) = -3.72^{**}$, $p < 0.01$). Agreement in both groups was highest with the statement 'My expert works on building a supportive relationship with me', with 76% of novice teachers in the intervention group and 59% of novice teachers in the control group strongly agreeing with the statement. A higher percentage of novice teachers in the intervention group felt that their expert helped them to develop professional resilience (70% strongly agreed) than in the control group (53% strongly agreed). The same was true regarding the expert prompting reflection about teaching. Here, 60% of novice teachers in the intervention group strongly agreed, compared to 43% in the control group. In the control group, novice teachers agreed least with the statement that their mentor analysed their professional development needs. Only 38% strongly agreed with this statement, while in the intervention group, 64% of novice teachers strongly agreed with this statement.

For further analysis of mentoring competence, we calculated an ordinary least squares (OLS) regression with mentoring competence as the dependent variable, i.e. we wanted to examine what variables affect mentoring competence. As mentioned above, this analysis can only be based on novice teacher data; therefore, we can only examine what affects mentoring competence from the perspective of novice teachers. As independent or predictor variables, we used the extent of mentoring focus, the time allocation and organisation of mentoring conversations, the perceived fit of mentoring practices, and a dummy variable taking the value 1 for novice teachers in the intervention group and the value 0 for novice teachers in the control group. This variable was created to test the effect of having been part of the intervention as opposed to having been part of the control group during the school year. Gender and age were used as control variables. We would have liked to include even more predictors, such as the number of formal and informal mentoring conversations. However, these were too highly correlated with other predictors. We also tested interaction effects between the intervention dummy variable and the predictors, but there were no significant interaction effects. Correlations of predictive variables in our final model are lower than 0.39. Results for the OLS regression show that the model was significant ($F(6, 289) = 69.31^{**}$, $\text{Prob}>F = 0.00$) and explained 66% of the variance of mentoring competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded significant effects for the allocation of time and organisation of mentoring, extent of mentoring focus, and the perceived fit of mentoring practices. Whether novice teachers were in the intervention group or in the control group did not affect their perceptions of their experts' mentoring competence. The strongest predictor was the allocation of time and organisation of mentoring, i.e. the better novice teachers perceived the allocation of time and organisation of their mentoring conversations, the higher they assessed their experts' mentoring competence (*beta*: 0.69^{**}). The next strongest significant predictor was the extent of mentoring focus, i.e. the stronger novice teachers perceived a focus of their mentoring on specific challenges, the higher they rated their experts' mentoring competence (*beta*: 0.2^{**}). And lastly, the weakest, yet still significant, predictor was the perceived fit of mentoring practices (*beta*: 0.11^{**}). The better novice teachers perceived the fit between the frequency of mentoring practices used with the need they felt for those practices, the better they rated their experts' mentoring competence.

3.4.4.6 Teaching Competences of Novice Teachers Supported by NEST-Trained Experts Increase Over Time

In the first and the second survey, novice teachers had to assess their own teaching competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding different skills relevant for teaching in general, for interacting with students, and for supporting parents. The data allowed for building one subscale on competences to interact with students (eleven statements) and one subscale on interaction with parents (four statements). The scales were included because we wanted to examine whether novice teachers with the support of a NEST-trained expert increased their teaching competence to a higher degree than novice teachers without a specially trained expert. Furthermore, we were interested in what other factors influence the teaching competence of novice teachers.

In the intervention group, novice teachers' self-assessed teaching competences regarding student interactions were significantly lower at the beginning of the school year than the self-assessed teaching competences of novice teachers in the control group with expert support ($t(306) = 3.83^{**}$, $p < 0.01$) and without expert support ($t(584) = 6.09^{**}$, $p = 0.00$). However, the intervention group's self-assessed teaching competences regarding student interactions significantly increased between the beginning and the end of the school year ($t(234) = 2.24^{**}$, $p = 0.01$), while the self-assessed competence of the control group with experts did not significantly change during the same time, and the self-assessed competence of the control group without expert support significantly decreased between the beginning and the end of the school year ($t(341) = -4.66^{**}$, $p = 0.00$). As a result, the significantly lower self-assessed competence of the intervention group compared to the control groups at the beginning of the school year did no longer exist at the end of the school year. On average, novice teachers in all groups thought they had average to high abilities regarding competences for student interactions at the end of the school year (T2: $M_{IG} = 4.58$; $M_{CG_exp} = 4.73$; $M_{CG_no_exp} = 4.65$). In the intervention group, 30% of novice teachers thought they had high or very high abilities, and in the control groups, 39% of novice teachers thought they had high or very high abilities.

Examining the individual statements revolving around student interactions, novice teachers in all groups assessed themselves highest at the end of the school year regarding the competences about showing an open attitude so that students can approach them with their problems (T2: $M_{IG} = 4.89$, 75% high or very high ability; $M_{CG_exp} = 4.85$, 80% high or very high ability; $M_{CG_no_exp} = 4.95$, 77% high or very high ability) and creating an open classroom climate for students to voice their own ideas (T2: $M_{int} = 4.72$, 70% high or very high ability; $M_{CG_exp} = 4.85$, 71% high or very high ability; $M_{CG_no_exp} = 4.85$, 71% high or very high ability).

Results for the competence of supporting parents are very similar to the results for competences regarding student interactions. In the intervention group, novice teachers' self-assessed teaching competences regarding parent support were significantly lower at the beginning of the school year than the self-assessed teaching competences of novice teachers in the control group with expert support ($t(305) = 2.11^*$, $p = 0.02$) and without expert support ($t(580) = 4.34^{**}$, $p < 0.01$). However, the intervention group's self-assessed teaching competences regarding parent support significantly increased between the beginning and the end of the school year ($t(230) = 3.84^{**}$, $p < 0.01$), while the self-assessed competence of the control group with experts did not significantly change during the same time, and the self-assessed competence of the control group without expert support significantly decreased between the beginning

and the end of the school year ($t(337) = -1.83^*$, $p = 0.03$). As a result, the differences in the self-assessed competence of the intervention group compared to the control groups at the beginning of the school year were no longer manifest at the end of the school year. On average, novice teachers in all groups thought they had average abilities regarding competences for parent support at the end of the school year (T2: $M_{IG} = 4.1$; $M_{CG_exp} = 4.2$; $M_{CG_no_exp} = 4.1$). However, in all groups, 20% of novice teachers thought they had high or very high abilities.

Examining the individual statements revolving around parent support, novice teachers in the intervention group and the control group without expert support assessed themselves highest at the beginning and end of the school year regarding the competence about dealing with conflict in parent-teacher interactions in a professional way (T2: $M_{IG} = 3.93$, 34% high or very high ability; $M_{CG_no_exp} = 4.01$, 37% high or very high ability). In the control group with expert support, novice teachers assessed themselves highest regarding showing parents how to positively influence the education of their children, with 32% assessing themselves high or very high ability ($M_{CG_exp} = 3.88$).

For further analysis of teaching competence, we calculated an OLS regression with teaching competence regarding student interactions at the end of the school year as the dependent variable since we wanted to examine what factors affect teaching competence. As independent or predictor variables, we used teacher qualification, the level of preparedness for school challenges provided by initial teacher education, satisfaction with the school as a good workplace, the time allocation and organisation of mentoring conversations, resilience, competence at the beginning of the school year, and a dummy variable taking the value 1 for novice teachers in the intervention group supported by a NEST-trained expert and the value 0 for novice teachers in the control group with support from an expert. Gender and age were used as control variables. We also tested interaction effects between the intervention dummy variable and the predictors, but there were no significant interaction effects. Correlations of predictive variables in our final model are lower than 0.38. Results for the OLS regression show that the model was significant ($F(8, 280) = 21.06^{**}$, $\text{Prob}>F = 0.00$) and explained 36% of the variance of teaching competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded significant effects for satisfaction with the school as a good workplace, allocation of time and organisation of mentoring, resilience, and self-assessed teaching competence at the beginning of the school year. Whether novice teachers were in the intervention group or in the control group did not affect their self-assessed competence at the end of the school year. Unsurprisingly, the strongest significant predictor was self-assessed competence at the beginning of the school year, i.e. the better novice teachers assessed themselves at the beginning of the school year, the better they assessed their competences at the end of the school year (*beta*: 0.49^{**}). However, other predictors also showed significant effects on teaching competence. The other three significant predictors are similarly strong: satisfaction with the school as a workplace (*beta*: 0.12^{*}), resilience (*beta*: 0.11^{*}), and time allocation and organisation of mentoring conversations (*beta*: 0.11^{*}). The more satisfied novice teachers were with their school as a good workplace, the higher they rated their teaching competence. The more resilient novice teachers felt, the higher they rated their mentoring competence. And lastly, the better they perceived the time allocation and organisation of mentoring conversations, the better they assessed their teaching competence.

3.4.5 Discussion

The evaluation of the NEST programme indicates that novice teachers who work at disadvantaged schools in Bulgaria do benefit from being supported by a well-trained expert. In order to enable an effective scaling-up of the NEST training and the subsequent mentoring, we have to consider the implications of the results at the micro-, meso-, and macrolevel.

The analysis of the results implies that the NEST mentor training and NEST mentoring had many positive effects at the microlevel. According to both the Bulgarian experts themselves and the novice teachers they mentored, the mentoring provided after the NEST training was more focused on the specific challenges of novice teachers who are teaching at disadvantaged schools. The increase in focus was stronger straight after the training than a year later, which suggests that it could be beneficial to revitalise the mastery of the content of the training for the Bulgarian experts in the second (and subsequent) years after completing the initial training. In addition to the improvement in mentoring focus, the experts were also better able to adapt their mentoring practices (directive versus facilitative) to the needs of the novice teachers they were mentoring. The novice teachers experienced a very good fit between their needs and the frequency of use of the different mentoring practices by the experts that supported them. The experts also self-assessed their mentoring competence higher after completion of the training. This finding was corroborated by the novice teacher data; novice teachers in the Bulgarian intervention group assessed the mentoring competence of their mentors higher than those in the control group. This was mainly due to the very good time allocation and organisation of the mentoring by the NEST experts and the above-mentioned focus of the mentoring. Finally, the NEST mentoring that the Bulgarian experts provided led to an increase in the teaching competences of the novice teachers. These results show that the NEST mentor training had two positive impacts. First, it improved the mentoring provided by the Bulgarian experts. Second, the NEST mentoring clearly had positive effects on the novice teachers working at disadvantaged schools in Bulgaria.

At the mesolevel, schools are the main institutions involved with the NEST project. Schools are the workplace of novice teachers and therefore play an essential role in the experiences of novice teachers. Although Bulgarian teachers seemed to be satisfied with their job and viewed their school as a good workplace in general, schools could also play a part in supporting the novice teachers better with the challenges they face during their first years of teaching. It is very positive that Bulgarian novice teachers did not feel that challenges related to, for example, the school building, instruction materials, or staff shortages at the school hindered the school in providing good quality instruction. However, schools would benefit from appointing more specialised teaching personnel (e.g. teachers who focus specifically on children with special educational needs) who could support the novice teachers in the classroom. Very few novice teachers in Bulgaria had participated in an induction programme at the start of their career. This means that Bulgarian schools could improve the support for their novice teachers by setting up induction programmes specifically focused on teaching at that school. These induction programmes should help novice teachers to feel better prepared for the challenges they might face during their first years of teaching at a disadvantaged school.

The implications of the results of the evaluation of the NEST project at the macrolevel are vast. For an effective continuation and scaling-up of the NEST project, consideration should be given to how the NEST training and subsequent mentoring could be embedded into the already existing structures of the

Bulgarian education system. The Bulgarian novice teachers who participated in the NEST project did not feel very well prepared for the challenges they faced at their schools by the initial teacher training programme they had completed. This means that Bulgarian novice teachers who work at disadvantaged schools might really benefit from the support of an expert to help them prepare for and deal with the challenges they face in their first years of teaching at a disadvantaged school. However, many novice teachers in the control group did not receive any mentoring during the first years of their teaching career. This would suggest that there seems to be a need for good quality mentoring for novice teachers working at disadvantaged schools in Bulgaria.

Further, our analysis suggests that the climate for the implementation of good quality mentoring in Bulgaria is very good. Both the experts and the novice teachers agreed that mentoring was generally accepted and valued in Bulgaria. Novice teachers also had very positive attitudes towards being mentored, and the experts showed high levels of enthusiasm for mentoring novice teachers. The combination of the absence of adequate support (not enough focus on challenges by the teacher training programme, lack of induction programmes at schools, and lack of mentoring) for novice teachers working at disadvantaged schools and the overall positive climate for mentoring in Bulgaria indicates that a better structure to support novice teachers working at disadvantaged schools would be well accepted by the teaching force. The NEST project implemented a minimal (in terms of time and cost) but multifaceted intervention which, according to our evaluation, positively affects both mentoring competences and teaching competences. Therefore, implementing a multifaceted intervention such as the NEST project seems a promising strategy for improving the Bulgarian education system from several angles at once.

3.5 NEST Evaluation Results for Romania

Key Takeaways – Mentors

- **Intervention group Mentors have high enthusiasm** for mentoring which even **increases** over time.
- Intervention group mentors **focus** their mentoring **to a greater degree** on specific challenges after the mentor training programme.
- Intervention group mentors **increase** their **use of facilitative practices** after NEST training while control group mentors decrease the use of such practices.
- Intervention group mentors' **mentoring competence increases** after NEST mentor training.
- **NEST** mentor training programme **helps to improve** intervention group mentors' **teaching practice**.

Key Takeaways – Novice Teachers

- **Novice teachers** have very **positive attitudes** towards being mentored.
- Novice teachers in the intervention group perceive a **stronger focus of their mentoring** than novice teachers in the control group.
- **Feelings of exhaustion decrease** only for novice teachers in the intervention group.
- Novice teachers in Romania **want to stay** in the teaching profession.
- Novice teachers find **intervention group mentors more competent**.
- **Teaching competences of novice teachers** with support from intervention group mentors **increase** over time.

The NEST evaluation report for Romania is structured in line with the NEST theory of change into sections discussing context, preconditions, processes, and outcomes. It starts by examining the role of mentoring in general in the context of the education system in Romania and analyses whether mentoring can be a promising strategy for this education system given the current preconditions for the NEST project. The report goes on to analyse processes and examines how well NEST mentoring is implemented compared to regular mentoring at schools in Romania. Finally, the report observes the outcomes of the NEST project in terms of the effects of the NEST mentor training programme on the mentors as well as the effects of NEST mentoring on novice teachers. The report closes with a brief discussion of findings.

In order to understand the results better, it is important to explain the structure of the sample for Romania and to give a short description of the sample.

Structure: The overall sample for Romania consisted of NEST mentors who took part in the NEST mentor training programme (mentor intervention group) and mentors who did not take part in the NEST training programme (mentor control group). The sample also consisted of an intervention group of novice teachers who were supported by a NEST mentor, and a control group of novice teachers who were either supported by a mentor who did not undergo the NEST mentor training programme or who were not supported by any mentor at all. In panel designs in which the same individuals have to complete more than one survey, dropout of participants over time (panel mortality) is a well-known problem. In this respect, the NEST project is no exception. Participants from Romania—mentors as well as novice teachers—dropped out of the programme for various reasons (e.g. changing to a different school, maternity leave, long-term illness).

Some participants did not drop out of the programme but simply did not complete the surveys. The dropout reported here only refers to survey dropout rates. Since this report examines developments over time, we compare data from the first survey to the corresponding data from the other surveys. Therefore, the sample for the descriptive statistics and analyses in this report included only those mentors and novice teachers who filled out all required questionnaires.

The sample for Romania included 113 mentors; of those, 40 were NEST-trained mentors in the intervention group, and 73 were regular mentors who did not receive special training (control group mentors). Intervention group mentors filled out surveys at three points in time: at the beginning of the school year 2021/2022 in October 2021, before the NEST mentor training programme started (T1); at the end of the school year 2021/2022 in June 2022, when the theoretical and practical training had mostly finished (T2); and lastly, at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3). Mentors in the control group were only surveyed twice: at the beginning of the school year 2021/2022 in October 2021 (T1), and at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3).

The sample also consisted of 237 novice teachers from two cohorts. The first cohort (111 novice teachers) was surveyed in 2021/2022, and the second cohort (126 novice teachers) was surveyed in 2022/2023. The intervention group consisted of 110 novice teachers. Of those, 59 were in the first cohort and 51 were in the second cohort. The control group consisted of 127 novice teachers. Of those, 52 were in the first and 75 in the second cohort. Only 24% of the novice teachers in the control group reported that they were supported by a mentor. It is important to note that whenever data about mentors are presented from the perspective of novice teachers, the control group sample included only those novice teachers who reported that they were being supported by a mentor. In the sections on context and preconditions, the control group is handled as one group because baseline data are presented which were collected before the mentoring had started. In the sections on processes and outcomes, the intervention group is compared to the control group with support from a mentor and to the control group without mentor support. We would expect more noticeable differences between the intervention group and the control group without mentor support. We make the respective reference groups very explicit in the text.

Sample Description: The majority of novice teachers in both groups were female (IG: 94%; CG: 91%). The same was true for the mentor groups. Here, 95% of mentors were female. The average age of novice teachers had a wide range. The youngest person was 20 years old, and the oldest person was 57 years old. In the intervention group, the average age was 29.2 years, with a median age of 26.5 years, compared to an average age of 31.9 years with a median age of 29 years in the control group. Intervention group mentors were on average 45.4 years old, with a median age of 45.5 years, and control group mentors were on average 45.7 years, old with a median age of 45 years. Novice teachers in the intervention group had an average teaching experience of 1.8 years, which was very similar to that of novice teachers in the control group, who had an average teaching experience of 2.1 years. Teaching was not the first-choice career for 44% of novice teachers in the intervention group and 50% of novice teachers in the control group. The average teaching experience of mentors was almost identical in both groups (IG_m: 23.1 years, CG_m: 22.4 years). In the mentor intervention group 85% reported that they had mentored novice teachers in the past five years compared to 81% in the mentor control group. Control group mentors had on average one year more of mentoring experience than intervention group mentors (IG_m: 4.5 years, CG_m: 5.6 years). Mentors in both groups already had experience in working at disadvantaged schools (IG_m: 7.9 years, CG_m: 7.4 years). Detailed descriptive statistics regarding all reported results can be found in

Appendix A5 – Romania. More information on the variables used in the regression analyses can be found in the codebook for Romania on page 390.

3.5.1 Mentoring in the Broader Context of the Education System in Romania

This section considers the role of mentoring in general in the context of the education system in Romania. For this purpose, we examine data about the general acceptance of mentoring in Romania from the perspective of the participating novice teachers and the mentors. Furthermore, we examine the expectations both groups had about what attributes or characteristics a good mentor should have. Data used in this section were taken from the baseline survey conducted before the NEST mentor training programme started.

3.5.1.1 Novice Teachers and Mentors Think that Mentoring Is Generally Well Accepted in Romania

In the baseline survey, novice teachers and mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about the level of acceptance of mentoring in the education system in Romania in general. This scale was included in the survey to examine novice teachers' and mentors' perceptions of the general level of acceptance of mentoring by society as part of the professional development of teachers. On average, novice teachers in the intervention and control groups thought that mentoring was generally moderately well accepted in Romania, with means in the intervention group ranging from 2.65–3.05, and from 2.58–2.75 in the control group. However, the results of a *t* test show that the novice teachers in the intervention group agreed significantly more strongly with the general acceptability of mentoring in Romania than the control group ($t(235) = -1.96^*$, $p = 0.03$). Novice teachers in both groups agreed most that in their environment, people highly respect mentors who support novice teachers (IG: 81% agreed or strongly agreed; CG: 68% agreed or strongly agreed) and that mentoring novice teachers is valued in society (IG: 84% agreed or strongly agreed; CG: 65% agreed or strongly agreed).

Mentors thought that mentoring was generally moderately well accepted in Romania, with means in the intervention group ranging from 2.36–3.13, and from 2.69–2.94 in the control group. The highest level of agreement for both groups was with the statement 'In my school district, mentoring novice teachers is seen as a crucial part of the start of the teaching career of novice teachers', with 90% of intervention group mentors and 74% of control group mentors agreeing or strongly agreeing with the statement.

3.5.1.2 Novice Teachers and Mentors Have Mostly Similar Opinions about What Makes a Good Mentor

In the baseline survey, novice teachers and mentors were asked which attributes they found most important for being a good mentor. They could choose from seven different attributes and pick the three attributes they considered most important. This question was included because we wanted to examine which kind of expectations novice teachers and mentors had in general about what makes a good mentor. For the analysis, we calculated for each attribute whether it was chosen by a person as one of the three most important attributes. Thus, a percentage of 75 means that 75% of the respective group chose this attribute as one of the three most important attributes. Figure 22 shows that empathy was chosen most

often as one of the most important attributes by all groups. However, mentors found flexibility more important, while novice teachers found trustfulness and openness more important compared to mentors. Only a minority in both groups found curiousness and courage important attributes for a good mentor.

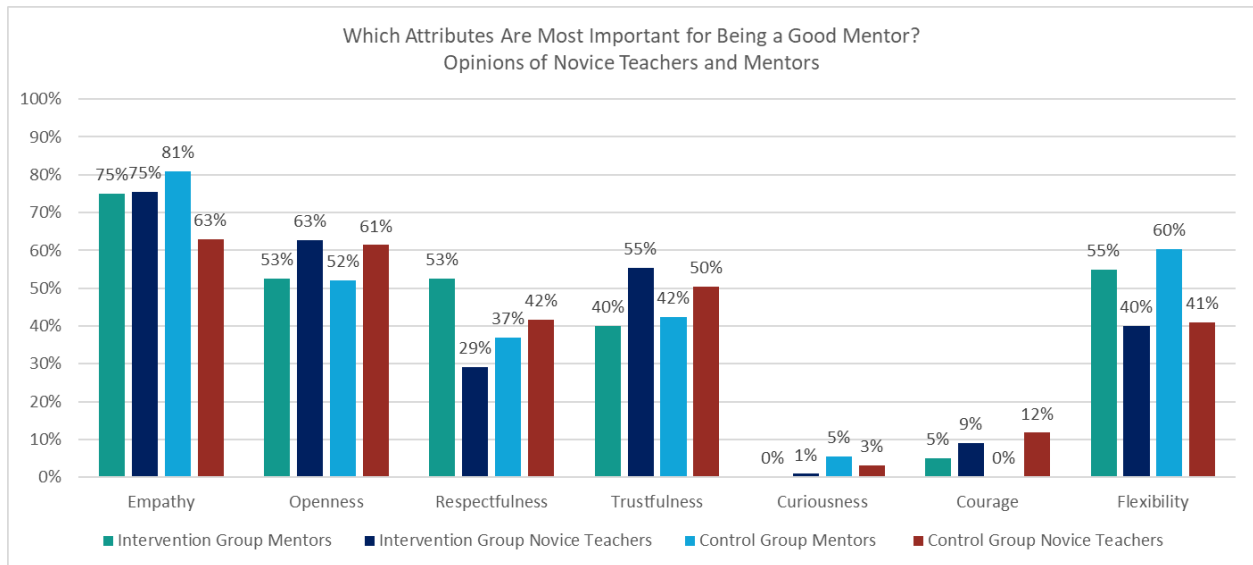


Figure 22: Important Attributes for Being a Good Mentor (Romania)

3.5.2 Preconditions for the NEST Project – Is Mentoring a Promising Strategy for the Education System in Romania?

This section analyses the preconditions for the NEST project. We examine the prerequisites of novice teachers and mentors working at disadvantaged schools to determine whether the conditions for a mentor training programme were favourable or not. In the following subsections, we report on data about novice teachers’ attitudes towards mentoring, mentors’ enthusiasm for mentoring, how well novice teachers and mentors feel prepared for dealing with challenges at disadvantaged schools, the availability of induction programmes for novice teachers, and the perceived school environment. Data used in the first three subsections were taken from the baseline survey conducted before the NEST mentor training programme started; data for the last section were taken from the second survey for novice teachers conducted at the end of the school year.

3.5.2.1 Positive Attitudes and High Enthusiasm for Mentoring

In the baseline survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with six statements about their attitudes towards being mentored. This scale was included in the survey to examine whether novice teachers had a general willingness to be mentored and whether they saw the benefits of being mentored. The analysis shows that on average, novice teachers in the intervention and control groups had very positive attitudes towards being mentored, with means ranging from 3.47–3.68 in the intervention group and from 3.44–3.61 in the control group. A *t* test comparing the means of the scale between the two groups shows no significant difference in attitudes towards mentoring between both groups of novice teachers. The highest level of agreement

in the intervention group was with the statement 'I think being mentored can have an important impact on my professional development.' Here, all novice teachers in the intervention group agreed or strongly agreed. In the control group, the highest level of agreement was with the statement 'I think being mentored will help me to improve my teaching.' Only one person in the control group disagreed with this statement, while 99% of novice teachers in the control group agreed or strongly agreed with this statement.

In the baseline as well as the final survey, mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with five statements about their enthusiasm for mentoring novice teachers. This scale was included in the survey to examine the extent to which mentors were motivated to support novice teachers with mentoring and whether this enthusiasm could be increased by the mentor training programme. Our analyses of the data show that mentors were already enthusiastic about mentoring at the beginning of the school year 2021/2022 before the NEST training for intervention group mentors started, with slightly higher means for the mentors in the intervention group (M_{m_IG} : 2.88–3.76) than for mentors in the control group (M_{m_CG} : 2.89–3.77). Comparing average levels of enthusiasm for mentoring before the training to average enthusiasm at the end of the school year 2022/2023 shows that enthusiasm for mentoring increased slightly over time for mentors in the intervention group, while it decreased over time for control group mentors. At the end of the school year 2022/2023, mentors in the intervention group were significantly more enthusiastic about mentoring than control group mentors ($t(109) = -2.06^*$, $p = 0.02$). The majority of mentors agreed or strongly agreed with all statements about mentoring enthusiasm, except with the statement 'Mentoring is the most fulfilling part of my job.' Here, 18% of mentors in the control group and 13% in the intervention group disagreed with this statement in the last survey. In both surveys, mentors in both groups agreed most with the statement 'I feel content when I see progress in my mentees' teaching.' In the last survey, all mentors agreed or strongly agreed with this statement.

3.5.2.2 Little Preparation for School Challenges by Initial Teacher Training

In the baseline survey, novice teachers were also asked to assess how well their initial teacher training had prepared them for six specific challenges they might face working at disadvantaged schools on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis of the data shows that on average, novice teachers in the intervention and control groups felt only to some extent prepared for challenging situations at school, with means ranging from 1.73–2.24 in the intervention group and from 1.86–2.32 in the control group. A t test comparing the means of the scale between the two groups shows no difference between the groups regarding their feeling of preparedness for challenging situations. The intervention group as well as the control group felt least prepared for teaching students with language barriers. Roughly 40% of either group felt not at all prepared for this challenge by their initial teacher training (IG: 44%; CG: 38%). Of all the challenges, both groups of novice teachers felt best prepared for managing a diverse classroom effectively. For this challenge, 39% of the intervention group and 37% of the control group felt quite a bit or a lot prepared by their initial teacher training.

3.5.2.3 Extensive Induction Is Implemented for a Minority of Novice Teachers at Romanian Schools

In the baseline survey, novice teachers were asked whether they were currently taking part or had taken part in any induction activities at the school at which they were currently teaching. By induction activities we referred to activities designed to support new teachers' introduction into the teaching profession and to support experienced teachers who are new to a school. These activities are either organised in formal, structured programmes or informally arranged as separate activities. This question was included in the survey to examine how well induction processes for new teachers are already implemented in the school system. For the novice teachers who reported that they had taken part in formal induction activities, we included questions on the type of activity. They could report their participation in a total of ten different induction activities: general or administrative introduction; courses or seminars attended in person; online courses or seminars; networking or collaboration with other new teachers; team-teaching with experienced teachers; supervision of portfolios, diaries, or journals; reduced teaching load; regular visits from the school principal and/or experienced teachers; supervision of teaching by the school principal and/or experienced teachers; and online activities, such as virtual communities.

Our data analysis shows that the majority of novice teachers in the intervention group (70%) and the control group (55%) had not taken part in any induction activities. Looking separately at formal and informal induction activities, the percentages of novice teachers who had not taken part are even larger. In the intervention group, 78% had not taken part in formal and 75% had not taken part in informal induction activities. In the control group, 64% had not taken part in formal and 66% had not taken part in informal induction activities. Of the 33 novice teachers in the intervention group who reported that they had taken part in induction activities, a maximum of 24 also gave information on the type of activity. In the control group, a maximum of 38 (of 57) reported on the type of activity. The majority of novice teachers in the intervention group (57%–83%) had taken part in five of the ten different induction activities. The activity that was reported least often was team-teaching with experienced teachers (33%). Nobody received a reduction in their teaching load. The most common induction activities were supervision of portfolios or journals and regular visits from the school principal and/or experienced teacher. The most common induction activities reported by the control group included: online activities such as virtual communities (78%), supervision of teaching and regular visits by the school principal and/or experienced teachers, online courses or seminars, and networking or collaboration with other new teachers (all 74%). Only two people reported a reduced teaching load. Thus, even though only a minority of novice teachers in both groups reported having had an induction programme at school, those people who were offered an induction programme seemed to have taken part in a broad range of activities.

3.5.2.4 Challenging Factors Only Slightly Hinder the School's Capacity to Provide Quality Instruction in Romania

To learn more about the school environment or the conditions under which novice teachers have to work at disadvantaged schools, novice teachers were asked in the second survey what factors hindered quality instruction at their school. Novice teachers had to assess on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) in how far 14 different challenges (such as staff shortages or lack of learning materials) hindered their school's capacity to provide quality instruction. The analysis shows that on average, the majority of novice teachers in both groups saw the school's capacity to provide quality instruction as not

hindered at all or only to some extent by the 14 challenges. However, novice teachers in the control group found that their school was hindered significantly more by three of the 14 challenges than novice teachers in the intervention group. These challenges were shortages or inadequacy of materials to teach vocational skills, insufficient time for instructional leadership, and shortage of instructional space such as classrooms. The largest differences between the intervention and the control group were found for this last challenge ($t(231) = 2.26^{**}$, $p = 0.01$). Both groups thought that the most hindering challenge was a shortage of support personnel. However, means overall were still quite low for both groups of novice teachers ($M_{IG} = 1.63-2.48$; $M_{CG} = 1.67-2.70$).

3.5.3 How Well Is NEST Mentoring Implemented Compared to Regular Mentoring at Schools in Romania?

This section analyses the implementation of NEST mentoring in comparison with regular mentoring at schools in Romania. We will examine the quantity of formal and informal mentoring conversations and the quality of mentoring in terms of the focus of mentoring as well as the match between the mentoring practices offered by mentors and the perceived need for those practices from the perspective of novice teachers. The section also gives insights into how well intervention group mentors were able to transfer knowledge and lessons learned from the NEST mentor training programme into their mentoring practice. For this purpose, we examine the changes in the mentoring focus and mentoring practices of the mentors. The scale about mentoring focus is the counterpart to the scale on preparedness, which was discussed in Section 3.5.2.2. Data for novice teachers were taken from the second survey; for the mentors, data from all mentor surveys were analysed. It is important to note that this section only included data of those novice teachers in the control group who reported that they were being supported by a mentor at the time of taking the survey. This sample comprised 30 people, which was roughly a quarter of the control group (24%), while in the intervention group, all novice teachers had a NEST mentor. Since the number of novice teachers with mentor support in the control group was so low, we will not calculate t tests but report descriptive statistics only.

3.5.3.1 Control Group Novice Teachers Have More Mentoring Conversations, While the Time Allocation and Organisation of Mentoring Conversations Work Better for Intervention Group Novice Teachers

In the second survey, novice teachers were asked how many formal and informal mentoring conversations they had with their mentor. We defined a formal mentoring conversation as a longer meeting between mentor and mentee to plan and/or to discuss and/or to reflect on, for instance, a lesson plan, actual teaching, or student behaviour. We defined an informal mentoring conversation as a conversation between mentor and mentee that was a short meeting to exchange information or materials or to receive advice or feedback on ideas. This question was included in the survey to have a quantitative measure for the meetings between mentors and their mentees.

The analysis shows that on average, novice teachers in the intervention group had 3.92 formal mentoring conversations ($Mdn = 4$). The range of the number of formal mentoring conversations was between one and twelve in the intervention group. The intervention group also reported an average of 5.2 informal mentoring conversations ($Mdn = 4$), with the frequency of meetings ranging between zero and 20. Since the NEST mentoring planned for three formal mentoring conversations, we expect these outliers to be

the result of typing mistakes or of a misunderstanding or misreading of the question. On average, novice teachers in the control group had 12.9 formal mentoring conversations (*Mdn* = 10). They also reported having had 17.5 informal mentoring conversations on average (*Mdn* = 9). The data collected suggest that novice teachers in the control group had more mentoring conversations than novice teachers in the intervention group. However, data have to be interpreted cautiously since only a quarter of novice teachers in the control group had a mentor, and of those, only 20 people answered the question. This means that the data might not represent the control group sample very accurately.

Novice teachers also had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with three statements about the time allocation and organisation of their mentoring conversations.

The analysis shows that on average, novice teachers in the intervention group perceived the time allocation and organisation of their mentoring conversations very positively, with means ranging from 3.58–3.61. Novice teachers in the control group were not as positive, with means ranging from 2.94–3.19. Novice teachers in the intervention group agreed distinctly more with statements regarding the organisation and time allocation of mentoring conversations than the control group. Of the three statements, novice teachers in the intervention group agreed most with the statement that their mentor took sufficient time for classroom observations (64% strongly agreed with this statement) while in the control group, 25% strongly agreed with this statement. The majority of novice teachers in the control group (28%) also strongly agreed that their mentor took sufficient time for their mentoring conversations. In the intervention group, only 64% of novice teachers strongly agreed with this statement.

3.5.3.2 Intervention Group Mentors Focus Their Mentoring to a Greater Degree on Specific Challenges After the Mentor Training Programme

Mentors were asked in all three surveys about the focus of their mentoring activities. We wanted to examine to what extent they focused on six challenges novice teachers might face while teaching and whether the extent of focus changed after the mentor training. For this purpose, mentors assessed in how far they focused their mentoring on six different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). This question directly complements the question for novice teachers. Figure 23 shows that intervention group mentors increased their focus on all of the different challenges in their mentoring after the NEST mentor training programme. Attention should be focused on the values at the end of the school year 2021/2022, which marks the time period after the training. Intervention group mentors thought that they had focused their mentoring quite a bit or a lot on most of the challenges. However, they felt they had focused their mentoring only to some extent on supporting novice teachers with teaching students with language barriers. Intervention group mentors thought that they had focused their mentoring most on supporting novice teachers with managing a diverse classroom effectively. At the end of the school year 2022/2023, intervention group mentors felt that they had focused their mentoring to the same extent compared to a year before, i.e. they were able to maintain their level of focus over time. This indicates that they really internalised the strategies for focusing their mentoring that they had learned in the training.

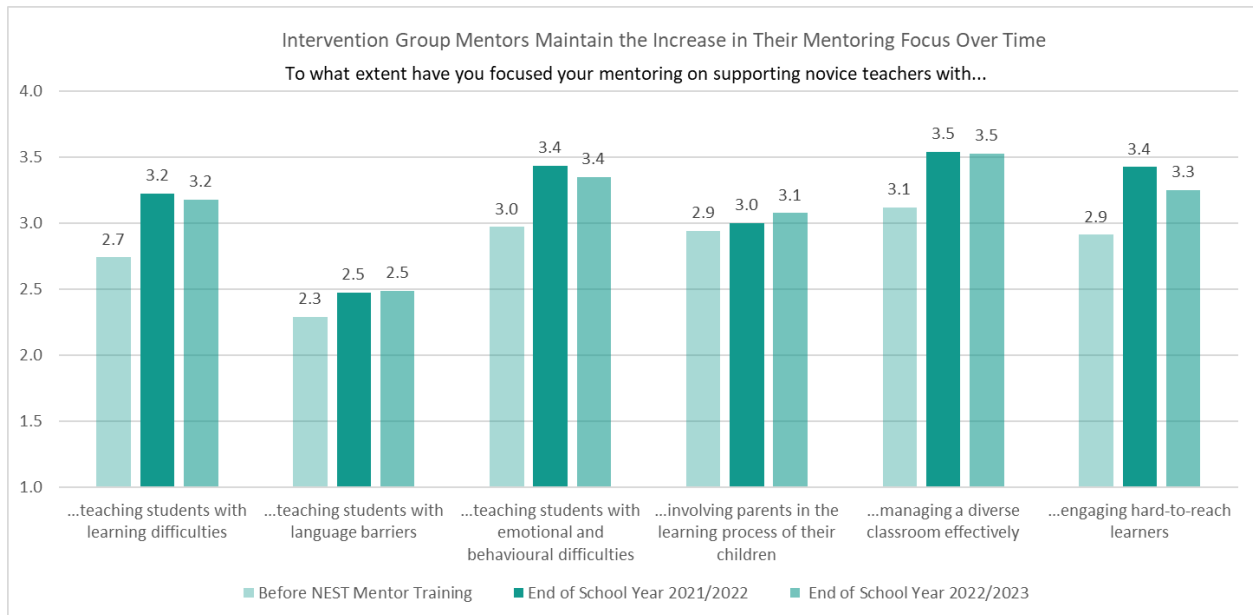


Figure 23: Intervention Group Mentors’ Development of Mentoring Focus (Romania)

3.5.3.3 Novice Teachers in the Intervention Group Perceive a Stronger Mentoring Focus than Novice Teachers in the Control Group

In the second survey, novice teachers were asked about the focus of the mentoring they received, so this issue can be examined from the perspectives of both the mentors and the mentees. To assess the extent to which the mentoring the novice teachers received focused on supporting them with dealing with certain challenges at school, they had to rate six statements regarding the different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis shows that novice teachers in the intervention group perceived mostly a moderate level of focus on the different challenges in their mentoring, with means ranging from 2.42–3.16. Means for the control group with mentor support were lower (2.30–2.76). The highest perceived difference in focus was for managing a diverse classroom effectively. Here, 39% of novice teachers in the intervention group thought that their mentoring had focused on this challenge a lot, compared to 18% in the control group. This was also the challenge for which novice teachers in both groups perceived the highest level of focus in their mentoring.

We also compared the data of the novice teacher intervention group to the mentor intervention group data. The novice teacher sample comprised two consecutive cohorts. The first cohort was the cohort of novice teachers that was supported by mentors directly after the mentor training programme. The second cohort of novice teachers was supported by mentors in the mentors’ second school year of the NEST project. We wanted to examine whether the development in the extent of focus of the mentors would be mirrored in the perceptions by the two novice teacher cohorts. As mentors thought that they had focused their mentoring mostly in a similar way at the end of both school years, the first cohort should have perceived a similar level of focus as the second cohort of novice teachers. Figure 24 shows that novice teachers’ perceptions only mirror the perceived development of the mentors to some extent. Intervention group mentors felt that they had focused their mentoring more strongly than transpired to novice

teachers in either cohort. However, novice teachers in the first cohort did perceive a higher level of focus in their mentoring than novice teachers in the second cohort. This implies that directly after the training, when it was still fresh on the mentors' mind, novice teachers also perceived the level of focus of their mentoring to have been stronger than the novice teachers in the second cohort who were supported by the mentors in the school year 2022/2023. Here, mentors thought that they were still implementing a quite focused approach to mentoring for their mentees when in fact their mentoring was no longer as focused as they thought.

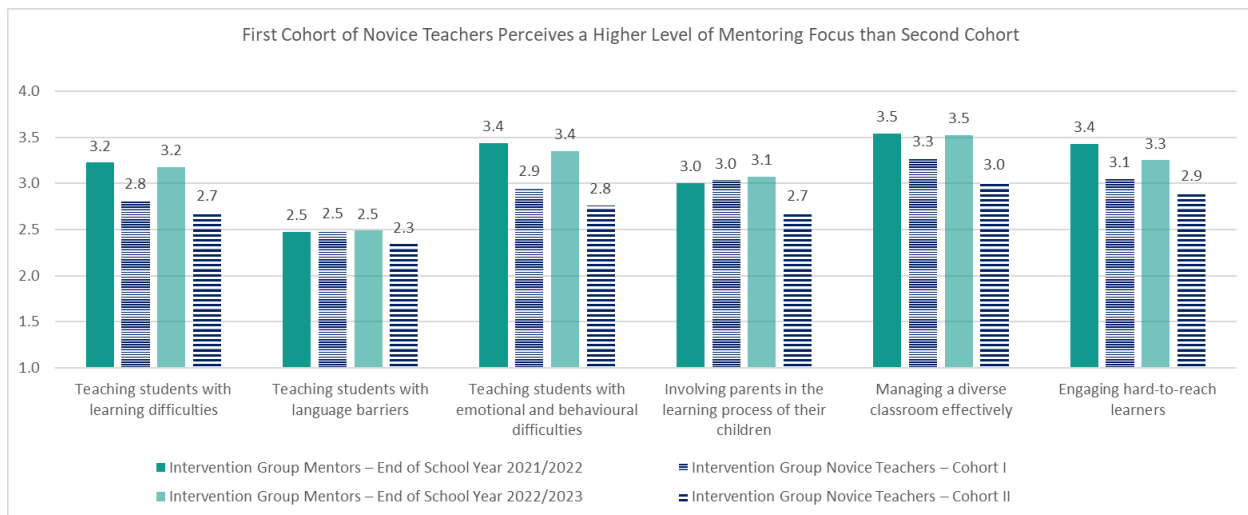


Figure 24: Intervention Group Novice Teachers' and Mentors' Perceptions of Mentoring Focus (Romania)

3.5.3.4 Intervention Group Mentors Increase Their Use of Facilitative Practices After the NEST Training, While Control Group Mentors Decrease the Use of Such Practices

Mentors were asked about their mentoring practices in all surveys. For this purpose, mentors rated how often they used 18 different mentoring practices on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*). We differentiated between more directive and more facilitative mentoring practices. More directive practices generally put the mentor in a more active role and include giving advice or using concrete examples from the mentor's own practice. The facilitative practices put the novice teacher in the more active role and include asking open questions, using active listening skills, or letting novice teachers find solutions on their own. We wanted to examine which practices mentors had used before the mentor training programme and whether these practices had changed over time. It is important to note that intervention group mentors were surveyed three times but control group mentors were only surveyed twice. More information about the data collection process can be found in the description of the structure of the sample.

The analysis shows that intervention group mentors continuously increased the frequency of the use of eight of the 18 practices. The largest increases in the frequency of use between the beginning of the first and the end of the school year 2022/2023 were visible regarding addressing feelings which they perceived during the lesson and asking for alternatives to the teaching implemented by novice teachers. Figure 25 shows that intervention group mentors used more facilitative than directive mentoring practices at the

beginning of the school year 2021/2022 (T1). Figure 25 further shows that for intervention group mentors, the frequency of use decreased for all mentoring practices after the training (T2). However, in the long term, the frequency of the use of practices increased again. Mentors were using more facilitative practices than directive practices at all measurement points. At the beginning of the school year 2021/2022, the control group mentors used facilitative as well as directive mentoring practices more frequently than the intervention group mentors. However, control group mentors decreased the frequency of use of both directive and facilitative mentoring practices over time and at the end of the school year 2022/2023 (T3) reported using fewer of the facilitative practices and more of the directive practices than intervention group mentors.

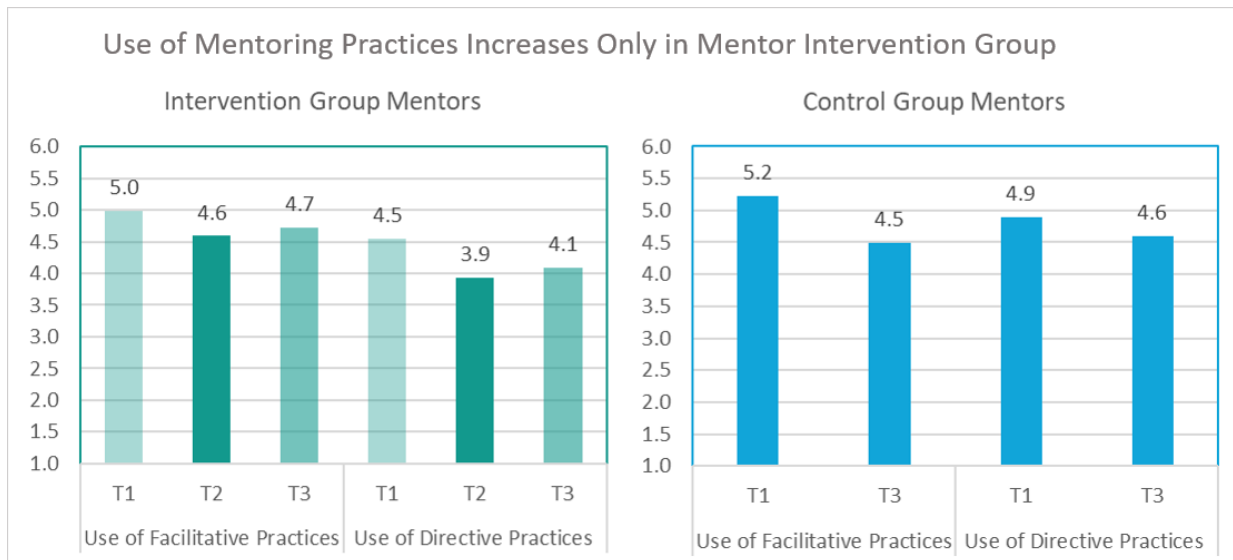


Figure 25: Development of Mentoring Practices Over Time by Mentor Group (Romania)

3.5.3.5 NEST Mentor Training Programme Helps Intervention Group Mentors to Use Their Mentoring Practices in a More Adaptive Way

In the last survey, intervention group mentors had to rate on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme had improved their competences to switch between different practices and to adapt their practices in a flexible way. If they thought that their competence level was already so high that they did not need to improve further, they could indicate this by ticking a box. Our analysis shows that intervention group mentors thought that the NEST mentor training programme helped them on average quite a bit to improve using different mentoring approaches for novice teachers with different personalities, changing their mentoring approach according to the social situation in the classroom, and adapting their mentoring approach according to the novice teacher's level of professional development ($M_{m_IG} = 3.45-3.70$). Overall, intervention group mentors thought the NEST mentoring programme helped them to improve most in using different mentoring approaches for novice teachers with different personalities (73% answered 'a lot').

3.5.3.6 Novice Teachers in the Control Group Perceive a Better Fit Between Their Needs and the Mentoring Practices Used by Their Mentors than the Novice Teachers in the Intervention Group

At the same time, we asked novice teachers to rate how well the frequency with which their mentor used these mentoring practices during their mentoring conversations fit with their perceived needs for such practices on a 3-point scale ranging from 1 (*not often enough*) to 2 (*exactly as often as I needed*) to 3 (*too often*). It is important to note that for the analysis of this question, only the data from the second cohort of novice teachers could be used. This was because there was a translation mistake in the questionnaire used for the first cohort; the answer choice 'too often' was mistranslated to 'very often', which could indicate both good and bad fit. This mistake was corrected in the survey before sending it out to novice teachers in the second cohort. Nevertheless, for this analysis, the sample size drops to 20 novice teachers in the control group and 51 novice teachers in the intervention group. Therefore, results should be interpreted cautiously as the sample is not very representative.

The analysis of novice teacher data shows that for all of the practices, the majority of novice teachers thought that mentors had used the practices exactly as often as they needed. However, this percentage was higher in the control group for all of the 20 practices. In the intervention group, percentages of novice teachers who stated that mentors had used mentoring practices not often enough were much smaller than percentages of novice teachers who stated that mentoring practices had been used too often. There seems to be a group of novice teachers in the intervention group who felt 'over-mentored' and would have liked their mentor to use less of each of the respective mentoring practices. Practices with the best fit in the intervention group, i.e. the highest percentage of novice teachers answering 'exactly as often as I needed', were the mentor starting the conversation with an open question as well as asking clarifying questions (all 84%), and the mentor confronting mentees with mistakes they made in their lessons (92%). In the control group of novice teachers who were supported by a control group mentor, the percentage of novice teachers who stated that mentors had used mentoring practices not often enough was much smaller than percentages of novice teachers who stated that mentoring practices had been used too often. This was true for most of the 20 practices. One quarter of novice teachers in the control group would have liked their mentor to prompt them more often for alternative approaches to the teaching that the novice teachers had implemented. The best perceived fit in the control group were the mentor starting the conversation with an open question, asking clarifying questions, and letting the novice teachers discover the principles behind a good lesson for themselves (all 95%).

To analyse further the fit between the frequency of use of a mentoring practice and perceived need from the perspective of novice teachers, we created a dichotomous variable. We categorised the answers 'not often enough' and 'too often' as bad fit, and the answer option 'exactly as often as I needed' as good fit, i.e. for each mentoring practice, novice teachers could have the value 0 for bad fit and the value 1 for good fit. Then we summed up the practices to receive a measure for an overall fit between mentoring practice and perceived need. This measure has a range from 0 (*no fit at all*) to 20 (*perfect fit*). The average fit between the frequency of mentoring practices and the perceived need for those practices is 15.37 for the intervention group and 17.1 for the control group with mentor support.

3.5.4 Positive Effects of the NEST Mentor Training Programme and NEST Mentoring

This section analyses the results of the NEST mentor training programme and NEST mentoring in comparison with regular mentoring at Romanian schools. We describe whether the NEST interventions had any effects on various outcome variables such as emotional exhaustion, satisfaction with the workplace, and the teaching competences of novice teachers and the mentoring competences of mentors. However, since the sample of mentors was small, we can perform regression analyses only with the novice teacher data, i.e. we can estimate effects on the mentors from the perspective of the novice teachers. Since we had two control groups, one comprising novice teachers with a mentor and one comprising novice teachers without a mentor, we should conduct two sets of comparisons for outcome variables which relate to novice teachers. However, there is another challenge in the Romanian data: only about a quarter of the novice teachers in the control group had a mentor to support them (24%, see Section 3.5.3). Therefore, this group was too small to run t tests, which will make it harder to find evidence for significant effects when controlling for the intervention in regression analysis. For this reason, we will compare the novice teacher intervention group to the novice teachers in the control group with mentors using descriptive statistics only. When comparing the novice teacher intervention group to the control group novice teachers without mentor support, we can perform t tests. Since we are mainly examining developments in this section, data for novice teachers and mentors were taken from all measurement points to have comparative measures over time.

3.5.4.1 Feelings of Exhaustion Decrease Only for Novice Teachers in the Intervention Group

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about their emotional exhaustion. This scale was included in the survey because exhaustion can be a predictor for leaving the job. The data show that novice teachers in the intervention and control groups on average felt moderately exhausted at the beginning of the school year, and there was no significant change in control group novice teachers' levels of exhaustion over time. Novice teachers in the intervention group, though, felt significantly less exhausted at the end of the school year compared to the beginning of the school year ($t(108) = 1.81^*$, $p = 0.04$). Means at the end of the school year ranged from 2.14–2.55 in the intervention group and 1.97–2.50 in the control group with mentor support ($M_{CG_no_ment} = 2.21 - 2.62$). At the end of the school year, the highest level of agreement in the intervention group and the control group without mentors was with the statement 'I often feel exhausted while I am working', while the control group with mentor support agreed most with the statement 'Overall, I feel overstrained by my workload.' All groups agreed least at both measurement points with the statement 'At the end of a day's work, I sometimes feel really depressed.'

In the second survey, novice teachers were also asked how resilient they felt to stress and negative setbacks at work. They had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about resilience. This scale was included in the survey as a counterpart to emotional exhaustion and can be a predictor for staying in the job. Novice teachers in the intervention and control groups on average felt rather resilient, with means ranging from 2.99–3.05 in the intervention group and 3.14–3.28 in the control group with mentor support ($M_{CG_no_ment} = 2.85-3.06$). The highest level of agreement in all groups was with the statement 'I can cope well with setbacks at work.' Here, 89% of novice teachers in the intervention group and 93% of the control group with mentors agreed

or strongly agreed with this statement (83% in the control group without mentors). Even though the majority of novice teachers experienced feelings of exhaustion, they felt resilient nonetheless.

3.5.4.2 Romanian Novice Teachers Think that Their School is a Good Workplace

The second survey also included questions on job satisfaction. Novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with ten statements about job satisfaction. One of the subscales revolved around satisfaction with the school as a workplace (three statements). The scale on job satisfaction was included in the survey as yet another predictor for staying in the job. The analysis of the data shows that novice teachers in the intervention group and the control groups were on average quite satisfied with their workplace, with means for individual statements ranging from 2.71–3.21 in the intervention group and 3.00–3.45 in the control group with mentor support ($M_{CG_no_ment} = 2.82\text{--}3.23$). There was no significant difference between the intervention group and the control group without mentor support regarding satisfaction with the school as a good workplace. The highest level of agreement in all groups was with the statement 'I enjoy working at this school'; 90% of novice teachers in the intervention group and 97% of novice teachers in the control group with mentors agreed or strongly agreed with this statement (93% in the control group without mentors). The lowest level of agreement overall was with the statement 'I would like to change to another school if that were possible.' Only 6% of novice teachers in the intervention group and 3% of novice teachers in the control group with mentor support strongly agreed with the idea of changing schools if it were possible (4% in the control group without mentors).

3.5.4.3 Novice Teachers in Romania Want to Stay in the Teaching Profession

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with two statements about their plans to make career changes. This scale was included in the survey to examine the tendency towards leaving the teaching profession. Our analysis shows that novice teachers on average had no tendency to leave the teaching profession at the end of the school year or in the long term. In the second survey, only 4% of novice teachers in the intervention group and 4% in the control groups agreed that they were planning to leave the teaching profession after the school year. There was no significant difference between the intervention group and the control group without mentor support in this respect. However, in the second survey, novice teachers in the intervention group agreed significantly more strongly with the idea of leaving the teaching profession compared to the beginning of the school year ($t(107) = 1.83^*$, $p = 0.04$). On average, more novice teachers in the control group without mentor support (22%) and control group with mentor support (13%) agreed with the idea of leaving the teaching profession in the long term, compared to 11% in the intervention group. A t test shows that at the end of the school year, novice teachers in the intervention group agreed significantly less with the statement about a career change than novice teachers in the control group ($t(204) = 2.22^{**}$, $p = 0.01$). The overall low tendency to leave the teaching profession was complemented by the average number of years novice teachers reported to be willing to stay in the teaching profession. However, there were quite a few outliers with ranges going up to 100 years. Nonetheless, the median (which is less affected by outliers than the mean) for the intervention group was 30 years, and for the control groups it was 25 years, which overall shows a strong dedication to stay in the teaching profession.

3.5.4.4 Intervention Group Mentors' Mentoring Competence Increases After the NEST Mentor Training

Mentors were asked to assess their own mentoring competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding twelve different skills. Our analysis shows that mentors assessed their mentoring competence prior to the mentor training programme quite well ($M_{m_IG} = 5.0$). However, at the end of the school year 2021/2022, i.e. after the NEST mentor training, they assessed their mentoring competence higher ($M_{m_IG} = 5.18$), and at the end of the school year 2022/2023, higher still, with a mean of 5.33. Compared to the mentor control group, they started with a lower self-assessment of their overall mentoring competence. However, while their self-assessed competence continuously increased over time, the self-assessed mentoring competence of the control group stayed the same, as depicted in Figure 26.

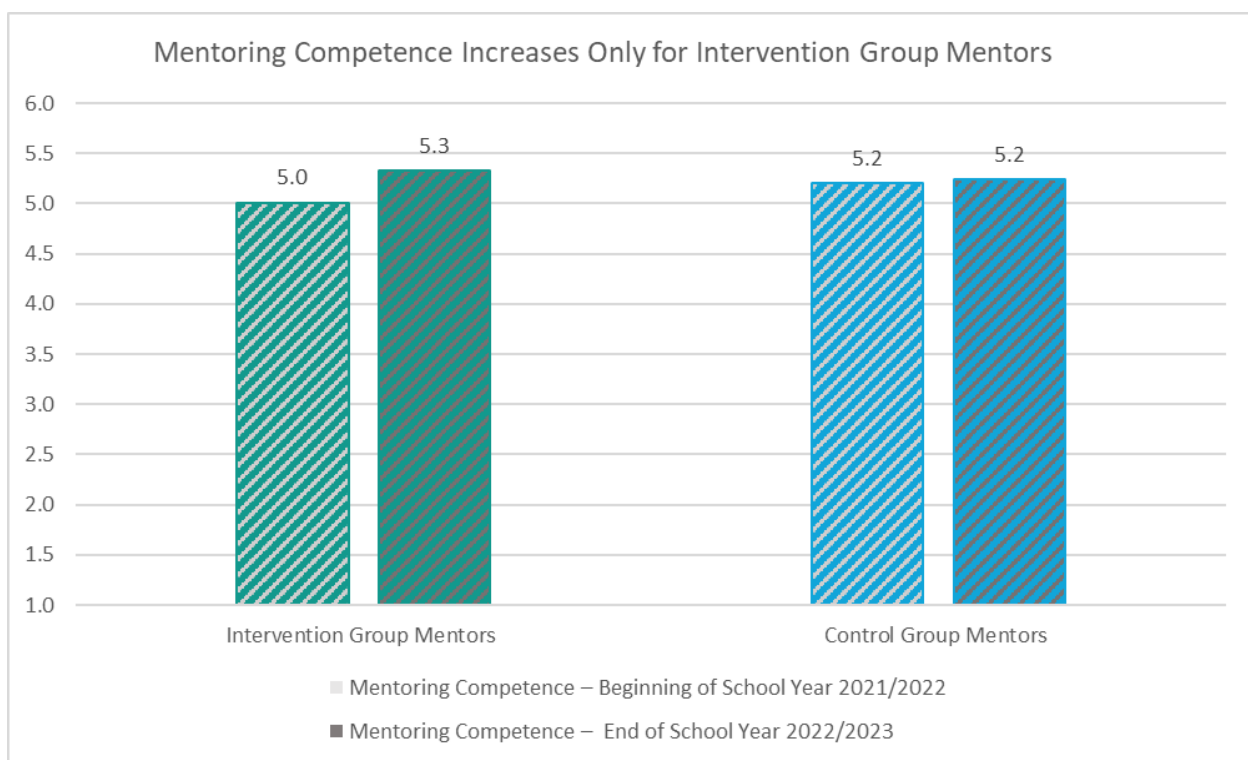


Figure 26: Development Mentors' Mentoring Competence Over Time by Mentor Group (Romania)

Since the mentor training programme focused especially on supporting mentors with building a trustful relationship, initiating reflection by novice teachers, adapting to novice teachers' specific needs, and building resilience in novice teachers, we specifically examined the statements regarding mentoring competences which revolved around these topics.

Mentors' self-assessed competence increased continuously over time for the four statements, as depicted in Figure 27. This is especially evident when comparing the mean from before the training to the mean at the end of the school year 2022/2023. Mentors assessed themselves highest regarding supportive relationship-building and prompting reflection.

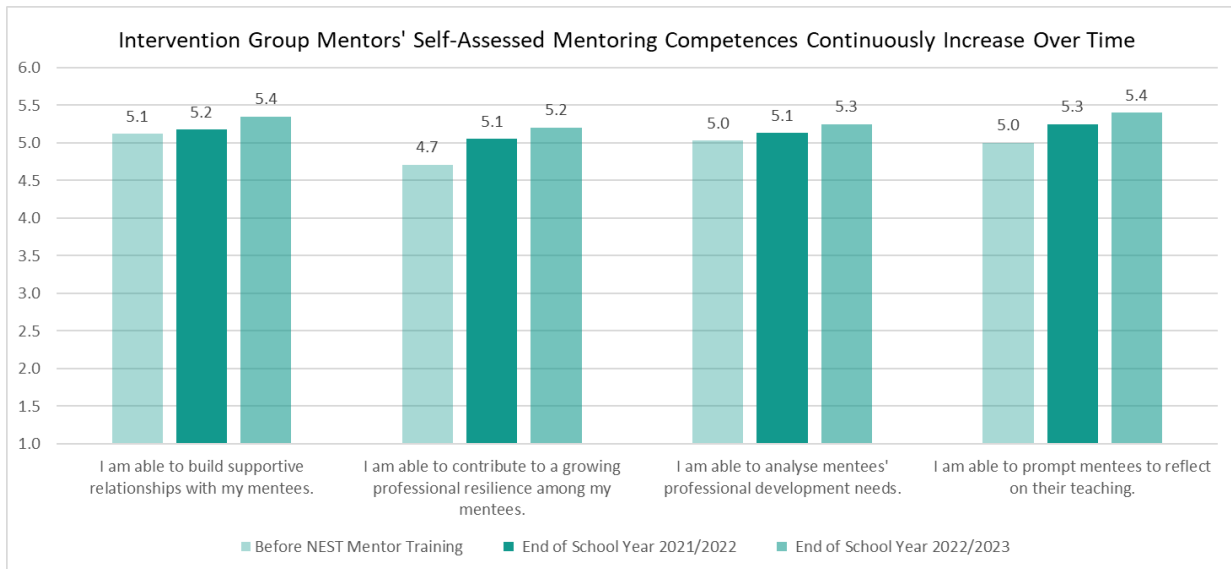


Figure 27: Intervention Group Mentors' Development of Mentoring Competence (Romania)

3.5.4.5 Novice Teachers Find Intervention Group Mentors More Competent than Control Group Mentors

In the second survey, novice teachers had to assess their mentor's mentoring competence by agreeing on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with twelve statements about their mentor's mentoring competence. This scale was included in the survey to examine mentoring competence not only from the perspective of mentors but also to capture the perceptions by novice teachers as the recipients of mentoring. In the control group, this question was only posed to novice teachers who had reported on an earlier question that they had a mentor to support them.

The majority of novice teachers in both groups strongly agreed with the statements about their mentors' competence, with means ranging from 3.52–3.70 in the intervention group and 3.03–3.37 in the control group. Looking at the mean of the scale, novice teachers in the intervention group assessed their mentors distinctly higher ($M_{IG} = 3.6$) than novice teachers in the control group assessed their control group mentors ($M_{CG_ment} = 3.2$). Agreement in both groups was highest for the statement 'My mentor gives me constructive feedback', with 71% of novice teachers in the intervention group and 37% of novice teachers in the control group strongly agreeing with the statement. Regarding the four statements which were analysed above for the mentors, the percentage of novice teachers who strongly agreed with the individual statements was always higher in the intervention group. This was especially true regarding the mentor prompting reflection about teaching. Here, 69% of novice teachers in the intervention group strongly agreed, compared to 24% in the control group.

For further analysis of mentoring competence, we calculated an ordinary least squares (OLS) regression with mentoring competence as the dependent variable, i.e. we wanted to examine which other variables affect mentoring competence. As already mentioned above, this analysis could only be based on the novice teacher data, which means that we can only examine what factors affect mentoring competence

from the perspective of novice teachers. As independent or predictor variables, we used the time allocation and organisation of mentoring conversations, the number of formal and informal mentoring conversations, and a dummy variable taking the value 1 for novice teachers in the intervention group and the value 0 for novice teachers in the control group. This variable was created to test the effect of having been part of the intervention opposed to having been part of the control group during the school year. Gender and age were used as control variables. We would have liked to include more predictors, such as the extent of mentoring focus and the perceived fit of mentoring practices. However, these were too highly correlated with other predictors. The intervention variable was also moderately correlated with the time allocation and organisation of mentoring conversations, so we included an interaction effect between the intervention dummy variable and this predictor in the model. Correlations between the other independent variables were all smaller than 0.16. Results for the OLS regression show that the model was significant ($F(5, 132) = 51.41^{**}$, $\text{Prob}>F = 0.00$) and explained 65% of the variance of mentoring competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded a significant effect only for the allocation of time and organisation of mentoring, i.e. the better novice teachers perceived the organisation and time allocation of their mentoring conversations, the higher they assessed their mentor's mentoring competence (*beta*: 0.61). Whether novice teachers were in the intervention group or in the control group did not affect their perception of their mentor's mentoring competence. There was also no significant interaction effect.

3.5.4.6 NEST Mentor Training Programme Helps to Improve Intervention Group Mentors' Teaching Practice

Intervention group mentors were also asked to answer on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme helped them to improve their own teaching practice. All mentors reported that the training helped them at least to some extent to improve their own teaching practice, but the majority, 55% of the mentors, thought that the NEST training programme helped them a lot to improve their own teaching practice ($M_{m_IG} = 3.4$).

3.5.4.7 Teaching Competences of Novice Teachers with Support from Intervention Group Mentors Increase Over Time

In the first and the second survey, novice teachers had to assess their own teaching competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding different skills relevant for teaching in general, for interacting with students, and for supporting parents. The data allowed for building one subscale on competences to interact with students (eleven statements) and one subscale on interaction with parents (four statements). The scales were included because we wanted to examine whether novice teachers with an intervention group mentor increased their teaching competence to a higher degree than novice teachers without a specially trained mentor. Furthermore, we were interested in what other factors influenced the teaching competence of novice teachers.

The analysis shows that there was no significant difference between the intervention group and the control group without mentor support regarding their self-assessed teaching competence at the beginning of the school year. For the control group, there was also no significant change in their self-assessments between the beginning and end of the school year. For the novice teachers in the intervention group, however, the *t* test result shows a significant increase in their self-assessed teaching

competence over time ($t(109) = 3.69^{**}$, $p < 0.01$). Moreover, the intervention group's self-assessed teaching competence regarding student interactions was significantly higher at the end of the school year compared to the control group without mentor support ($t(109) = -1.75^*$, $p = 0.04$).

On average, novice teachers in all groups thought they had average to high abilities regarding competences for student interactions at the end of the school year (T2: $M_{IG} = 4.88$; $M_{CG_ment} = 4.9$; $M_{CG_no_ment} = 4.7$). In the intervention group, 48% of novice teachers thought they had high or very high abilities (CG_{ment}: 47%; CG_{no_ment}: 40%).

Examining the individual statements revolving around student interactions, novice teachers in all groups assessed themselves highest at the end of the school year regarding the competences about imparting self-confidence even in timid students. (T2: $M_{IG} = 5.15$; $M_{CG_ment} = 5.27$; $M_{CG_no_ment} = 4.97$).

Results for the competence of supporting parents are very similar to the results for competences regarding student interactions. In the intervention group, novice teachers' self-assessed teaching competences regarding parent support were significantly higher at the end of the school year than their self-assessed teaching competences at the beginning of the school year ($t(108) = 3.18^{**}$, $p < 0.01$). The teaching competence regarding parent support did not change over time for novice teachers in either of the control groups. There was no difference between the intervention group and the control group without mentor support either at the beginning nor at the end of the school year.

On average, novice teachers in the intervention group and the control group without mentor support thought they had average abilities regarding competences for parent support at the end of the school year (T2: $M_{IG} = 4.22$; $M_{CG_no_ment} = 4.07$), while novice teachers in the control group with mentor support rated their own abilities average or high ($M_{CG_ment} = 4.47$). Overall, 34% of novice teachers in the intervention group thought they had high or very high abilities (CG_{ment}: 38%; CG_{no_ment}: 29%).

Examining the individual statements revolving around parent support, novice teachers in the intervention group and the control groups assessed themselves highest at the end of the school year regarding the competence of showing parents how to positively influence the education of their children (T2: $M_{IG} = 4.28$; $M_{CG_ment} = 4.76$; $M_{CG_no_ment} = 4.1$) and advising parents how to influence the learning environment of their children (T2: $M_{IG} = 4.28$; $M_{CG_ment} = 4.51$; $M_{CG_no_ment} = 4.14$).

For further analysis of teaching competence, we calculated an OLS regression with teaching competence regarding student interactions at the end of the school year as the dependent variable since we wanted to examine which other variables affect teaching competence. As independent or predictor variables, we used the preparedness for school challenges by initial teacher education, satisfaction with the school as a workplace, extent of mentoring focus, resilience, competence at the beginning of the school year, and a dummy variable taking the value 1 for novice teachers in the intervention group supported by an intervention group mentor and the value 0 for novice teachers in the control group with support from a control group mentor. We would have liked to include more variables, such as time allocation and organisation of mentoring or the number of formal and informal mentoring conversations. However, these were too highly correlated with other predictor variables. Gender, age, and whether or not novice teachers had had induction programmes were used as control variables. Correlations between predictors

were all under 0.26. Results for the OLS regression show that the model was significant ($F(9, 127) = 7.71^{**}$, $\text{Prob}>F = 0.00$) and explained 31% of the variance of teaching competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded a significant effect for the self-assessed teaching competence at the beginning of the school year and the satisfaction with the school as a good workplace. The intervention dummy variable had no significant effect, i.e. whether novice teachers were in the intervention group or in the control group did not affect their self-assessed competence at the end of the school year. Unsurprisingly, the self-assessed competence at the beginning of the school year was a very strong significant predictor, i.e. the better novice teachers assessed themselves at the beginning of the school year, the better they assessed their competences at the end of the school year (*beta*: 0.52). However, satisfaction with the school as a workplace also had a strong effect on the novice teachers' teaching competence (*beta*: 0.26), i.e. the more satisfied novice teachers were with their school as a good workplace, the better they assessed their teaching competence regarding student interactions.

3.5.5 Discussion of Evaluation Results

The evaluation of the NEST programme indicates that novice teachers working at disadvantaged schools in Romania do benefit from being supported by a well-trained mentor. In order to enable an effective scaling-up of the NEST training and the subsequent mentoring, we have to consider the implications of the results at the micro-, meso-, and macrolevel.

The analysis of the results implies that the NEST mentor training and NEST mentoring had many positive effects at the microlevel in Romania. According to the mentors themselves, the mentoring provided after the NEST training was more focused on the specific challenges of novice teachers who are teaching at disadvantaged schools. The mentors believed they kept up their level of focus, but the novice teachers in the second cohort experienced less focused mentoring than the novice teachers in the first cohort. However, novice teachers in the intervention group did experience a higher level of focus in their mentoring than the control group, which suggests that the mentor training in Romania helped mentors to focus more on the challenges faced by the novice teachers. In addition to the improvement in mentoring focus, the intervention group mentors also increased the use of facilitative mentoring practices, whereas there was a decrease in the use of mentoring practices (both directive and facilitative) for the control group mentors. Likewise, mentors in the intervention group indicated that the training had helped them to adapt their mentoring practices to the needs of the novice teachers. However, this was not confirmed by the novice teachers in Romania. The novice teachers in the intervention group experienced a good fit between their needs and the use of the different mentoring practices by the mentor who supported them, but the novice teachers in the control group thought the fit was even better. The Romanian intervention group mentors self-assessed their mentoring competence higher after completion of the training. This finding was corroborated by the novice teacher data as Romanian novice teachers in the intervention group assessed their mentors' mentoring competence higher than those in the control group. This was mainly due to the good allocation of time and the organisation of the mentoring. Mentors who completed the training also perceived a positive effect of the training on their own teaching competences. Finally, mentoring led to an increase in the teaching competences of the Romanian novice teachers in the intervention group. These results show that the NEST mentor training had two positive impacts. First it had positive effects on the mentors themselves. Second, the resulting NEST mentoring clearly had positive effects on the novice teachers working at disadvantaged schools in Romania.

At the mesolevel, schools are the main institutions involved with the NEST project. Schools are the workplace of novice teachers and therefore play an essential role in the experiences of novice teachers. Although Romanian novice teachers were satisfied with their job and viewed their school as a good workplace in general, schools could also play a part in supporting the novice teachers better with the challenges they face during their first years of teaching. It is positive that the novice teachers in Romania felt that challenges related to the school building, instruction materials, or staff shortages at the school only slightly hindered the school in providing good quality instruction. However, schools would still benefit from appointing more support personnel and more specialised teaching personnel (e.g. teachers who focus specifically on children with special educational needs) who could support the novice teachers in the classroom. The majority of the novice teachers in Romania had not participated in an induction programme at the start of their career, but the few that did received a quite extensive induction. In light of this, more disadvantaged schools in Romania could set up induction programmes to improve the support for their novice teachers. This should help novice teachers to feel better prepared for the challenges they might face during their first years of teaching at a disadvantaged school.

The implications of the results of the evaluation of the NEST project at the macrolevel are vast. For an effective continuation and scaling-up of the NEST project, consideration should be given to how the NEST training and subsequent mentoring could be embedded into the already existing structures of the Romanian education system. The novice teachers who participated in the NEST project did not feel very well prepared for the challenges they faced at their schools by the initial teacher training programme they had completed. This means that novice teachers who work at disadvantaged schools in Romania might really benefit from the support of a mentor to help them prepare for and deal with the challenges they face in their first years of teaching at a disadvantaged school. However, only 24% of the novice teachers in the control group had a mentor during the first years of their teaching career. So, there seems to be a need for good quality mentoring for novice teachers working at Romanian disadvantaged schools.

Further, our analysis suggests that the climate for the implementation of good quality mentoring in Romania is good. Both the mentors and the novice teachers agreed that mentoring was generally well accepted and valued in Romania. In addition, novice teachers had very positive attitudes towards being mentored, and the mentors showed high levels of enthusiasm for mentoring novice teachers. The combination of the absence of adequate support (not enough focus on challenges by the teacher training programme, lack of induction programmes at schools, and lack of mentoring) for novice teachers working at disadvantaged schools and the overall positive attitudes towards mentoring by both mentors and novice teachers indicates that a better structure to support novice teachers working at disadvantaged schools would be well accepted by the Romanian teaching force. The NEST project implemented a minimal (in terms of time and cost) but multifaceted intervention which, according to our evaluation, positively affects both mentoring competences and teaching competences. Therefore, implementing a multifaceted intervention such as the NEST project seems a promising strategy for improving the Romanian education system from several angles at once.

3.6 NEST Evaluation Results for Spain – Catalonia

Key Takeaways – Mentors

- **Intervention group mentors** have **high enthusiasm** for mentoring which even **increases** over time.
- Intervention group mentors focus their mentoring to a larger degree on specific challenges after the mentor training programme.
- Intervention group mentors **increase** their **use of facilitative practices** over time, while control group mentors decrease the use of such practices.
- Intervention group mentors' mentoring **competence increases** after NEST mentor training.
- **NEST mentor training programme helps to improve** intervention group mentors' teaching practice.

Key Takeaways – Novice Teachers

- **Novice teachers** have positive attitudes towards mentoring.
- Novice teachers in the intervention group **perceive a better fit** between their needs and the mentoring practices used by their mentors.
- Novice teachers in the intervention group feel **more resilient** than novice teachers in the control group.
- Novice teachers in Catalonia **want to stay** in the teaching profession.
- Compared to novice teachers in the control group, **novice teachers in the intervention group find their mentors more competent.**
- **Teaching competences** of novice teachers with support from intervention group mentors **increase over time.**

The NEST evaluation report for Catalonia is structured in line with the NEST theory of change into sections discussing context, preconditions, processes, and outcomes. It starts by examining the role of mentoring in general in the context of the education system in Catalonia and analyses whether mentoring can be a promising strategy for this education system given the current preconditions for the NEST project. The report goes on to analyse processes and examines how well NEST mentoring is implemented compared to regular mentoring at schools in Catalonia. Finally, the report observes the outcomes of the NEST project in terms of the effects of the NEST mentor training programme on the mentors as well as the effects of NEST mentoring on novice teachers. The report closes with a brief discussion of findings.

In order to understand the results better, it is important to explain the structure of the sample for Catalonia and to give a short description of the sample.

Structure: The overall sample consisted of NEST mentors who took part in the NEST mentor training programme (mentor intervention group) and mentors who did not take part in the NEST training programme (mentor control group). The sample also consisted of an intervention group of novice teachers who were supported by a NEST mentor, and a control group of novice teachers who were either supported by a mentor who did not undergo the NEST mentor training programme or who were not supported by any mentor at all. In panel designs in which the same individuals have to complete more than one survey, dropout of participants over time (panel mortality) is a well-known problem. In this respect, the NEST

project is no exception. Participants from Catalonia—mentors as well as novice teachers—dropped out of the programme for various reasons (e.g. changing to a different school, maternity leave, long-term illness). Some participants did not drop out of the programme but simply did not complete the surveys. The dropout reported here only refers to survey dropout rates. Since this report examines developments over time, we compare data from the first survey to the corresponding data from the other surveys. Therefore, the sample for the descriptive statistics and analyses in this report included only those mentors and novice teachers who filled out all required questionnaires.

The Catalanian sample included 47 mentors; of those, 29 were NEST-trained mentors in the intervention group, and 18 were regular mentors who did not receive special training (control group mentors). Intervention group mentors filled out surveys at three points in time: at the beginning of the school year 2021/2022 in October 2021, before the NEST mentor training programme started (T1); at the end of the school year 2021/2022 in June 2022, when the theoretical and practical training had mostly finished (T2); and at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3). Mentors in the control group were only surveyed twice: at the beginning of the school year 2021/2022 in October 2021 (T1), and at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3).

The sample also consisted of 233 novice teachers from two cohorts. The first cohort (151 novice teachers) was surveyed in 2021/2022, and the second cohort (85 novice teachers) was surveyed in 2022/2023. The intervention group consisted of 94 novice teachers. Of those, 70 were in the first cohort and 24 were in the second cohort. The control group consisted of 139 novice teachers. Of those, 81 were in the first and 58 in the second cohort. Less than half of the novice teachers in the control group reported that they were supported by a mentor (43%). It is important to note that whenever data about mentors are presented from the perspective of novice teachers, the control group sample included only those novice teachers who reported that they were being supported by a mentor. In the sections on context and preconditions, the control group is handled as one group because baseline data are presented which were collected before the mentoring had started. In the sections on processes and outcomes, the intervention group is compared to both the control group with support from a mentor and the control group without mentor support. We would expect more noticeable differences between the intervention group and the control group without mentor support. We make the respective reference groups very explicit in the text.

Sample Description: The majority of novice teachers in the intervention group were female (73%). While this was also true for the control group, the gender distribution was much more balanced (54% female). In both mentor groups, the majority were also female (IG_m: 79%; CG_m: 67%). The average age of novice teachers had a wide range. The youngest person was 22 years old, and the oldest person was 55 years old. In the intervention group, the average age was 31.2 years, with a median age of 29 years, compared to an average age of 33.9 years with a median age of 32 years in the control group. Intervention group mentors were on average 46.4 years old, with a median age of 46 years, and control group mentors were on average 48.3 years old, with a median age of 47.5 years. Novice teachers in the intervention group had an average teaching experience of 2.3 years, while novice teachers in the control group had less teaching experience, with an average of 1.7 years. Teaching was not the first-choice career for 30% of novice teachers in the intervention group and 61% of novice teachers in the control group. All reported descriptive statistics can be found in Appendix A6 – Spain – Catalonia. More information on the variables used in the regression analyses can be found in the codebook for Catalonia on page 378.

3.6.1 Mentoring in the Broader Context of the Education System in Catalonia

This section considers the role of mentoring in general in the context of the education system in Catalonia. For this purpose, we examine data about the general acceptance of mentoring in Catalonia from the perspective of the participating novice teachers and the mentors. Furthermore, we examine the expectations both groups had about what attributes or characteristics a good mentor should have. Data used in this section were taken from the baseline survey conducted before the NEST mentor training programme started.

3.6.1.1 Novice Teachers and Mentors Do Not Think that Mentoring Is Generally Well Accepted

In the baseline survey, novice teachers and mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about the level of acceptance of mentoring in the education system in Catalonia in general. This scale was included in the survey to examine novice teachers' and mentors' perceptions of the general acceptance of mentoring by society as part of the professional development of teachers. On average, novice teachers in the intervention and control groups thought that mentoring was generally not well accepted in Catalonia, with means in the intervention group ranging from 2.27–2.67, and from 1.93–2.39 in the control group. However, *t* test result show that the novice teachers in the intervention group agreed significantly more strongly with the general acceptability of mentoring in Catalonia than the control group ($t(229) = -3.11^{**}$, $p < 0.01$). The highest level of agreement in the intervention group was with the statement 'In my environment, people highly respect mentors who support novice teachers.' The majority of novice teachers in the intervention group agreed or strongly agreed with this statement (66%). In the control group, agreement was highest with the statement 'In my school district, mentoring novice teachers is seen as a crucial part of professional development.' Here, 48% of control group novice teachers agreed or strongly agreed with this statement.

Mentors thought that mentoring was generally moderately well accepted in Catalonia, with means in the intervention group ranging from 2.43–2.64, and from 2.24–2.69 in the control group. The highest level of agreement for both groups was with the statement 'In my school district, mentoring novice teachers is seen as a crucial part of the start of the teaching career of novice teachers', with 54% of intervention group mentors and 62% of control group mentors agreeing or strongly agreeing with the statement.

3.6.1.2 Novice Teachers and Mentors Have Mostly Similar Opinions About What Makes a Good Mentor

In the baseline survey, novice teachers and mentors were asked which attributes they found most important for being a good mentor. They could choose from seven different attributes and pick the three attributes they considered most important. This question was included because we wanted to examine which kind of expectations novice teachers and mentors had in general about what makes a good mentor. For the analysis, we calculated for each attribute whether it was chosen by a person as one of the three most important attributes. Thus, a percentage of 90 means that 90% of the respective group chose this attribute as one of the three most important attributes. Figure 28 shows that empathy was chosen most often as one of the most important attributes by all groups. The same was true for trustfulness to a lesser degree. Compared to all other groups, mentors in the intervention group found flexibility quite important.

Only a minority in both groups considered curiousness and courage important attributes for a good mentor.

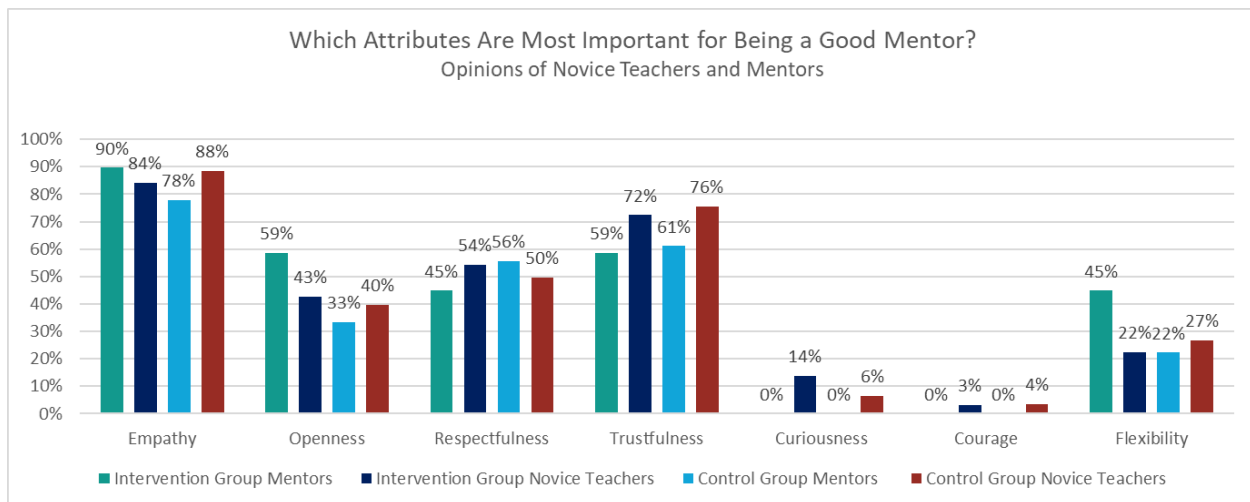


Figure 28: Important Attributes for Being a Good Mentor (Catalonia)

3.6.2 Preconditions for the NEST Project – Is Mentoring a Promising Strategy for the Education System in Catalonia?

This section analyses the preconditions for the NEST project. We will examine the prerequisites of the novice teachers and mentors working at disadvantaged schools to determine whether the conditions for a mentor training programme were favourable or not. In the following subsections, we report on data about novice teachers’ attitudes towards mentoring, mentors’ enthusiasm for mentoring, how well novice teachers and mentors feel prepared for dealing with challenges at disadvantaged schools, the availability of induction programmes for novice teachers, and the perceived school environment. Data used in the first three subsections were taken from the baseline survey conducted before the NEST mentor training programme started; data for the last section were taken from the second survey for novice teachers conducted at the end of the school year.

3.6.2.1 Positive Attitudes and High Enthusiasm for Mentoring

In the baseline survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with six statements about their attitudes towards being mentored. This scale was included in the survey to examine whether novice teachers had a general willingness to be mentored and whether they saw the benefits of being mentored. The analysis shows that on average, novice teachers in the intervention and control groups had positive attitudes towards being mentored, with means ranging from 3.47–3.61 in the intervention group and from 3.40–3.59 in the control group. A *t* test comparing the means of the scale between the two groups shows no significant difference in attitudes towards mentoring between the groups of novice teachers. On average, the highest level of agreement in both groups was with the statement ‘From my mentor(s) I expect good ideas for my further professional development.’ More than half of the novice teachers in both groups strongly agreed with this statement; 61% in the intervention group and 60% in the control group.

In the baseline as well as the final survey, mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with five statements about their enthusiasm for mentoring novice teachers. This scale was included in the survey to examine the extent to which mentors were motivated to support novice teachers with mentoring and whether this enthusiasm could be increased by the mentor training programme. Our analyses of the data show that mentors were already enthusiastic about mentoring at the beginning of the school year 2021/2022 before the NEST training for intervention group mentors started, with slightly higher means for the mentors in the intervention group (M_{m_IG} : 2.43–3.57) than for mentors in the control group (M_{m_CG} : 2.40–3.40). Comparing average mentoring enthusiasm before the training to average enthusiasm at the end of the school year 2022/2023 shows that enthusiasm for mentoring increased over time for mentors in the intervention group, while it stayed more or less stable over time for control group mentors. The majority of mentors agreed or strongly agreed with all statements about mentoring enthusiasm, except with the statement ‘Mentoring is the most fulfilling part of my job.’ Here, 61% of mentors in the control group disagreed or strongly disagreed with the statement in the last survey. Also, in the mentor intervention group, the percentage of people disagreeing (31%) was highest for this statement at the end of the school year 2022/2023. In the last survey, mentors in the intervention group agreed most with the statement ‘I feel content when I see progress in my mentees’ teaching’, while mentors in the control group agreed most with the statement ‘I enjoy sharing my teaching expertise with novice teachers.’

3.6.2.2 Little Preparation for School Challenges by Initial Teacher Training

In the baseline survey, novice teachers were also asked to assess how well their initial teacher training had prepared them for six specific challenges they might face working at disadvantaged schools on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis of the data shows that on average, novice teachers in the intervention and control groups felt only to some extent prepared for challenging situations at school, with means ranging from 1.67–2.04 in the intervention group and from 1.54–2.01 in the control group. A *t* test comparing the means of the scale between the two groups shows no difference between the groups regarding their feeling of preparedness for challenging situations. The intervention group as well as the control group felt least prepared for teaching students with language barriers. Roughly half of either group felt not at all prepared for this challenge by their initial teacher training (IG: 46%; CG: 54%). Of all the challenges, both groups of novice teachers felt best prepared for teaching students with learning difficulties. For this challenge, 17% of the intervention group and 20% of the control group felt quite a bit or a lot prepared by their initial teacher training.

3.6.2.3 Extensive Induction Is Implemented for a Minority of Novice Teachers at Catalan Schools

In the baseline survey, novice teachers were asked whether they were currently taking part or had taken part in any induction activities at the school at which they were currently teaching. By induction activities we referred to activities designed to support new teachers' introduction into the teaching profession and to support experienced teachers who are new to a school. These activities can be organised either in formal, structured programmes or informally arranged as separate activities. This question was included in the survey to examine how well induction processes for new teachers are already implemented in the school system. For the novice teachers who reported that they had taken part in formal induction activities, we included questions on the type of activity. They could report their participation in a total of

ten different induction activities: general or administrative introduction; courses or seminars attended in person; online courses or seminars; networking or collaboration with other new teachers; team-teaching with experienced teachers; supervision of portfolios, diaries, or journals; reduced teaching load; regular visits from the school principal and/or experienced teachers; supervision of teaching by the school principal and/or experienced teachers; and online activities, such as virtual communities.

Our data analysis shows that the majority of novice teachers in the intervention group (67%) and control group (62%) had not taken part in any induction activities. Looking separately at formal and informal induction activities, the percentages of novice teachers who had not taken part in any induction activities are even larger. In the intervention group, 79% had not taken part in formal and 78% had not taken part in informal induction activities. In the control group, 68% had not taken part in formal and 85% had not taken part in informal induction activities. Of the 31 novice teachers in the intervention group who reported that they had taken part in induction activities, a maximum of 20 also gave information on the type of activity. In the control group, a maximum of 38 (of 45) reported on the type of activity. The majority of novice teachers in the intervention group (85%–95%) had taken part in all of the ten different induction activities. The activity reported least often was taking part in online activities such as virtual communities (80%). The most common induction activities reported by the control group included online courses or seminars (82%), team-teaching with experienced teachers (80%), and supervision of teaching by the school principal and/or experienced teachers (89%), although percentages of participation in the other activities were also high (between 64% and 75%). These high percentages of participation suggest that for the Catalan teachers who had taken part in induction activities, the programme was quite extensive.

3.6.2.4 Challenging Factors Only Slightly Hinder the School's Capacity to Provide Quality Instruction in Catalonia

To learn more about the school environment or the conditions under which novice teachers have to work at disadvantaged schools, novice teachers were asked in the second survey what factors hindered quality instruction at their school. Novice teachers had to assess on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) in how far 14 different challenges (such as staff shortages or lack of learning materials) hindered their school's capacity to provide quality instruction. The analysis shows that on average, the majority of novice teachers in both groups saw the school's capacity to provide quality instruction as not hindered at all or only to some extent by the 14 challenges. However, novice teachers in the control group found that their school was hindered significantly more by ten of the 14 challenges than novice teachers in the intervention group. The largest differences between the intervention and the control group were found for the challenges of shortages or inadequacy of necessary materials to teach vocational skills ($t(227) = 3.52^{**}$, $p < 0.01$) and shortage of teachers with competence in teaching students from socioeconomically disadvantaged homes ($t(228) = -3.87^{**}$, $p < 0.01$). Both groups thought that the most hindering challenge was a shortage of support personnel. However, means overall were still quite low for both groups of novice teachers ($M_{IG} = 1.45$ – 2.52 ; $M_{CG} = 1.58$ – 2.77).

3.6.3 How Well Is NEST Mentoring Implemented Compared to Regular Mentoring at Schools in Catalonia?

This section analyses the implementation of NEST mentoring in comparison with regular mentoring at schools in Catalonia. We will examine the quantity of formal and informal mentoring conversations and the quality of mentoring in terms of the focus of mentoring and the match between the mentoring practices offered by mentors as well as the perceived need for those practices from the perspective of novice teachers. The section also gives insights into how well intervention group mentors were able to transfer knowledge and lessons learned from the NEST mentor training programme into their mentoring practice. For this purpose, we examine the changes in the mentoring focus and mentoring practices of the mentors. The scale about mentoring focus is the counterpart to the scale on preparedness, which was discussed in Section 3.6.2.2. Data for novice teachers were taken from the second survey; for the mentors, data from all mentor surveys were analysed. It is important to note that this section only included data of those novice teachers in the control group who reported that they were being supported by a mentor at the time of taking the survey. This sample comprised 60 novice teachers, which was less than half of the control group (43%), while all novice teachers in the intervention group had a NEST mentor.

3.6.3.1 Control Group Novice Teachers Have More Mentoring Conversations, While the Organisation and Time Allocation of Mentoring Conversations Work Better for the Intervention Group

In the second survey, novice teachers were asked how many formal and informal mentoring conversations they had with their mentor. We defined a formal mentoring conversation as a longer meeting between mentor and mentee to plan and/or to discuss and/or to reflect on, for instance, a lesson plan, actual teaching, or student behaviour. We defined an informal mentoring conversation as a conversation between mentor and mentee that was a short meeting to exchange information or materials or to receive advice or feedback on ideas. This question was included in the survey to have a quantitative measure for the meetings between mentors and their mentees.

The analysis shows that on average, novice teachers in the intervention group had 3.89 formal mentoring conversations ($Mdn = 3$). Overall, 61% of the intervention group had between one and three formal mentoring conversations. Another 28% had four or five formal mentoring conversations, and the rest are outliers (6–20 formal mentoring conversations). Since the NEST mentoring planned for three formal mentoring conversations, we expect these outliers to be the result of typing mistakes; there would hardly have been time within the school year to have 20 formal mentoring conversations with one mentor. The frequency of informal mentoring conversations was higher. On average, novice teachers reported having had ten informal mentoring conversations ($Mdn = 6$). Overall, novice teachers in the intervention group reported between zero and 50 informal mentoring conversations, with most having taken part in either three (14%) or ten (15%) informal mentoring conversations. Another 20% reported having had between 12 and 50 informal mentoring conversations. Novice teachers in the control group reported between zero and 10 formal and between zero and 100 informal mentoring conversations. Here again we expect higher numbers (outliers) to be the result of typing mistakes. On average, novice teachers in the control group had 3 formal mentoring conversations ($Mdn = 3$). Overall, 60% of the novice teachers in the control group reported between one and three formal mentoring conversations. On average, the control group reported having had 15 informal mentoring conversations ($Mdn = 7$). The data collected suggest that novice teachers in the control group had more mentoring conversations than novice teachers in the intervention

group. However, the data have to be interpreted cautiously since less than half of the novice teachers in the control group had a mentor, and of those, only roughly half (27 respondents) answered the question. This means that the data might not represent the control group sample very accurately.

Novice teachers also had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with three statements about the time allocation and organisation of mentoring conversations.

The analysis shows that on average, novice teachers in the intervention group perceived the time allocation and organisation of their mentoring conversations very positively, with means ranging from 3.57–3.82. Novice teachers in the control group were not as positive, with means ranging from 2.88–3.20. A *t* test comparing the means of the scale between the two groups confirms that novice teachers in the intervention group agreed significantly more with statements regarding the organisation and time allocation of mentoring conversations than the control group ($t(150) = -7.51^{**}$, $p < 0.01$). Of the three statements, both groups of novice teachers agreed most that they knew well in advance when their mentor would visit them for a classroom observation. In the intervention group, 82% strongly agreed with this statement, and in the control group, 42% strongly agreed with this statement. The majority of novice teachers in the intervention group (67%) also strongly agreed that their mentor took sufficient time for the mentoring conversations. In the control group, only 28% strongly agreed with this statement.

3.6.3.2 Intervention Group Mentors Focus Their Mentoring to a Greater Degree on Specific Challenges After the Mentor Training Programme

Mentors were asked in all three surveys about the focus of their mentoring activities. We wanted to examine to what extent they focused on six challenges novice teachers might face while teaching and whether the extent of focus changed after the mentor training. For this purpose, mentors assessed in how far they focused their mentoring on six different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). This question directly complements the question for novice teachers. Figure 29 shows that intervention group mentors already reported quite a strong focus on the different challenges before they took part NEST mentor training programme. After the training programme, the focus for supporting novice teachers to teach students with language barriers as well as the focus on how to involve parents in the learning process distinctly decreased. However, due to the fact that the majority of mentors in the intervention group did not have any previous mentoring experience and therefore could not answer questions about their mentoring focus, this result might not be very representative. Attention should be focused on the values at the end of the school year 2021/2022, which marks the time period after the training. Intervention group mentors thought that they had focused their mentoring quite a bit on most of the challenges. However, they felt they had focused their mentoring only to some extent on supporting novice teachers with teaching students with language barriers and with involving parents in the learning process of their children. Intervention group mentors thought that they had focused their mentoring most on supporting novice teachers with managing a diverse classroom effectively. After the school year 2022/2023, the strongest focus areas stayed the same, and the extent of focus increased even further for most of the challenges. This indicates that interveniiong group mentors really internalised the strategies for focusing that they learned in the training.

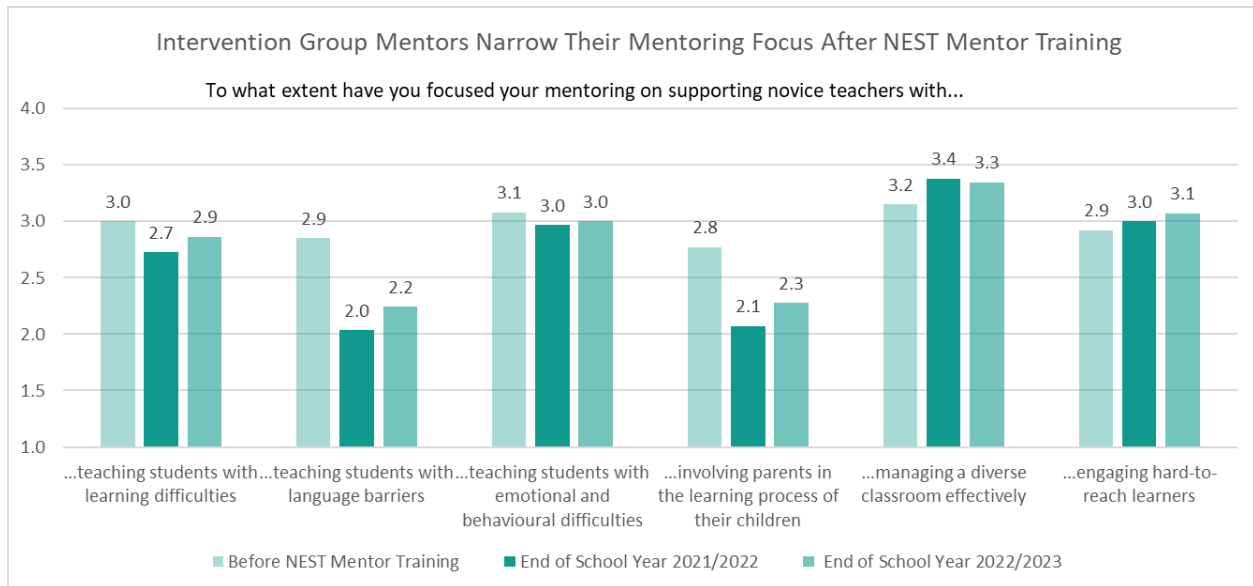


Figure 29: Intervention Group Mentors’ Development of Mentoring Focus (Catalonia)

3.6.3.3 Novice Teachers in the Intervention Group Perceive a Stronger Mentoring Focus than Novice Teachers in the Control Group

In the second survey, novice teachers were asked about the focus of the mentoring they received, so this issue can be examined from the perspective of both the mentors and the mentees. To assess the extent to which the mentoring the novice teachers received focused on supporting them with dealing with certain challenges at school, they had to rate six statements regarding the different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis shows that novice teachers in the intervention group perceived mostly a moderate level of focus on the different challenges in their mentoring, with means ranging from 2.02–3.07. Means for the control group with mentor support were lower (1.67–2.5). In fact, *t* tests show that novice teachers in the intervention group perceived a significantly stronger focus of their mentoring than the novice teachers in the control group on all six challenges. The highest perceived difference in focus was in engaging hard-to-reach learners ($t(147) = -5.45^{**}$, $p < 0.01$). Here, 27% of novice teachers in the intervention group thought that their mentoring had focused on this challenge a lot, compared to only 5% in the control group. Novice teachers in both groups perceived the highest focus of their mentoring on managing a diverse classroom effectively, with 73% of novice teachers in the intervention group reporting quite a bit or a lot of focus compared to 45% in the novice teacher control group.

We also compared the data of the novice teacher intervention group to the mentor intervention group data. The novice teacher sample comprised two consecutive cohorts. The first cohort was the cohort of novice teachers that was supported by mentors directly after the mentor training programme. The second cohort of novice teachers was supported by mentors in the mentors’ second school year of the NEST project. We wanted to examine whether the development in the extent of focus of the mentors would be mirrored in the perceptions by the two novice teacher cohorts. As mentors thought that they had focused their mentoring more strongly at the end of the school year 2022/2023, the first cohort should have

perceived a lower extent of focus than the second cohort of novice teachers. Figure 30 shows that novice teachers' perceptions mirror the perceived development of the mentors. The focus of mentoring activities increased over time, and the second cohort of novice teachers perceived a stronger focus in their mentoring. Interestingly enough, the novice teachers in the first cohort did not perceive as strong a focus as mentors thought they were providing. This implies that after the training, mentors thought they were implementing focused mentoring activities, while novice teachers did not perceive these activities as focused as the mentors thought. However, this changed over time. Novice teachers in the second cohort mostly perceived a similar level of focus as their mentors did; for some of the challenges, they even perceived a stronger level of focus than mentors thought they were providing.

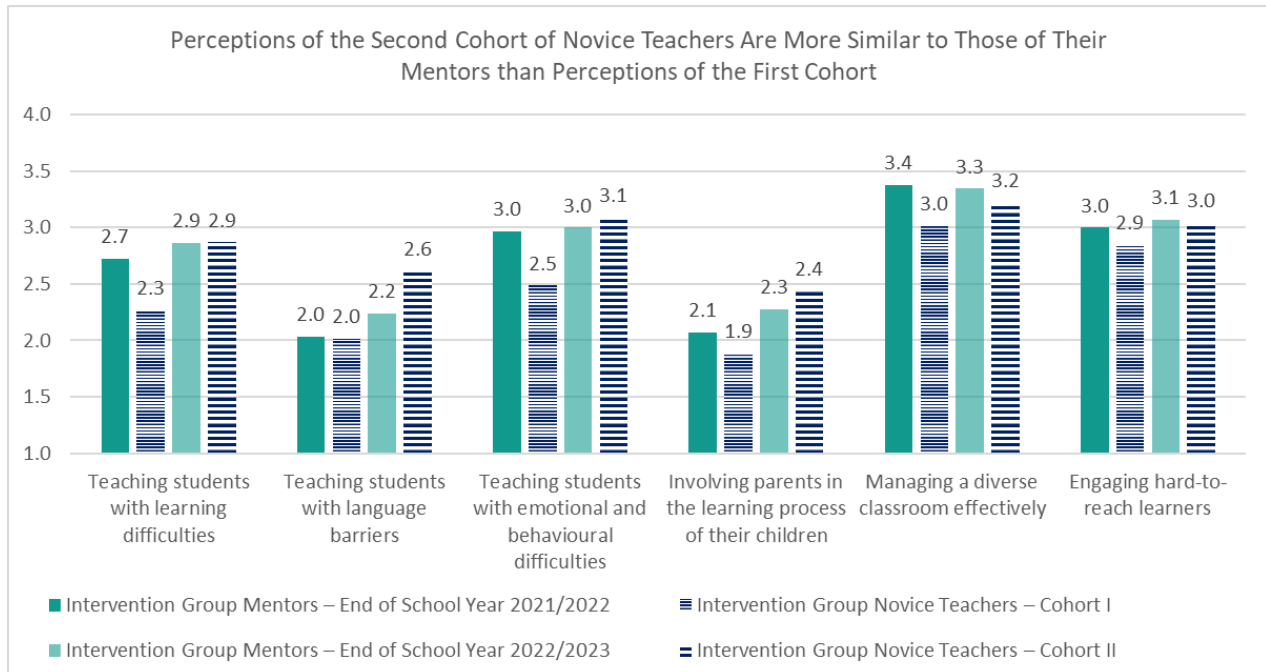


Figure 30: Intervention Group Novice Teachers' and Mentors' Perceptions of Mentoring Focus (Catalonia)

3.6.3.4 Intervention Group Mentors Increase Their Use of Facilitative Practices Over Time, While Control Group Mentors Decrease the Use of Such Practices

Mentors were asked about their mentoring practices in all surveys. However, since only a minority of mentors in the Catalonian sample had mentoring experience at the beginning of the school year 2021/2022 when the NEST project started (T1), results comparing data from the baseline survey with data from the end of the school year 2022/2023 (T3) are to be interpreted very cautiously. For this purpose, mentors rated how often they used 18 different mentoring practices on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*). We differentiated between more directive and more facilitative mentoring practices. More directive practices generally put the mentor in a more active role and include giving advice or using concrete examples from the mentor's own practice. The facilitative practices put the novice teacher in the more active role and include asking open questions, using active listening skills, or letting novice teachers find solutions on their own. We wanted to examine which practices mentors had used before the mentor training programme and whether these practices had changed over time. It is

important to remember that intervention group mentors were surveyed three times, but control group mentors were only surveyed twice. More information about the data collection process can be found in the description of the structure of the sample.

The analysis shows that intervention group mentors continuously increased the frequency of half of the 18 practices. The largest increases in the frequency of use between the beginning of the school year 2021/2022 and the end of the school year 2022/2023 were visible regarding asking clarifying questions, summarising the content at the end of the mentoring conversation, and asking novice teachers to elaborate on their intentions and considerations for a lesson. Figure 31 shows that intervention group mentors used both facilitative and directive practices in equal measure before the training. However, as explained above, only a few mentors (13 in the intervention group and five in the control group) were able to answer the questions about mentoring practices in the first survey because the others did not have any previous mentoring experience. Therefore, it is more sensible to compare the use of mentoring practices after the training at the end of the school year 2021/2022 to the use of practices at the end of the school year 2022/2023. Figure 31 shows that for intervention group mentors, the frequency of use increased for facilitative practices while it decreased for directive practices. Compared to control group mentors, intervention group mentors used more facilitative practices, while both groups used directive mentoring practices in equal measure at the end of the school year 2022/2023 (T3).

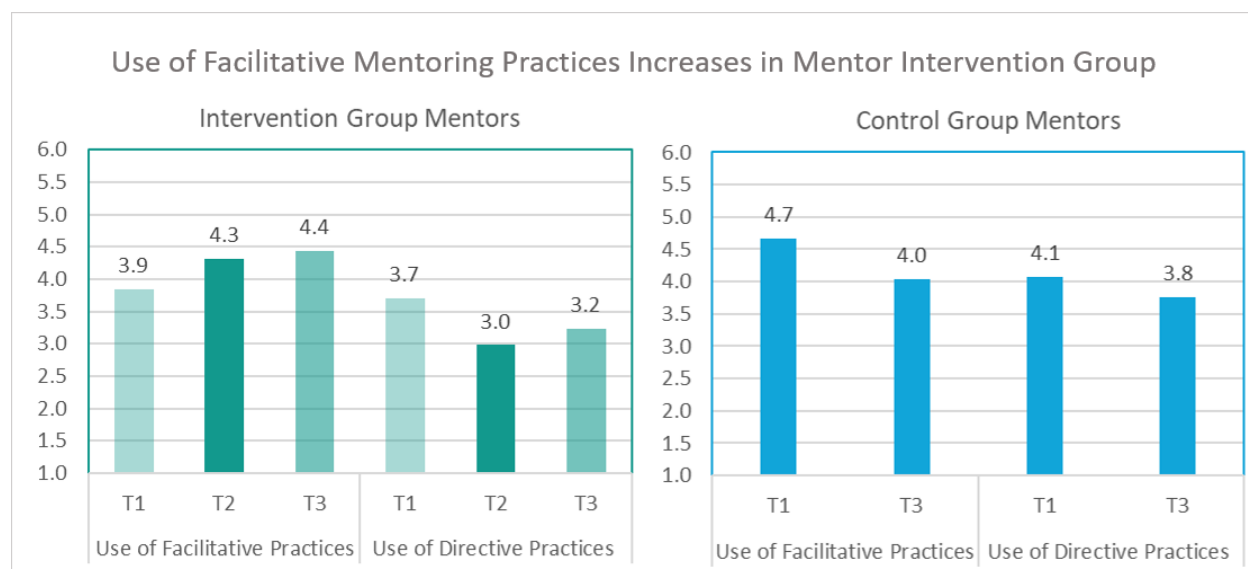


Figure 31: Development of Mentoring Practices Over Time by Mentor Group (Catalonia)

3.6.3.5 NEST Mentor Training Programme Helped Intervention Group Mentors to Use Their Mentoring Practices in a More Adaptive Way

In the last survey, intervention group mentors had to rate on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme had improved their competences to switch between different practices and to adapt their practices in a flexible way. If they thought that their competence level was already so high that they did not need to improve further, they could indicate this

by ticking a box. Our analysis shows that intervention group mentors thought that the NEST mentor training programme helped them on average quite a bit to improve using different mentoring approaches for novice teachers with different personalities, changing their mentoring approach according to the social situation in the classroom, and adapting their mentoring approach according to the novice teacher's level of professional development ($M_{m_IG} = 3.00\text{--}3.38$). Overall, intervention group mentors thought the NEST mentoring programme helped them to improve most in using different mentoring approaches for novice teachers with different personalities (52% answered 'a lot').

3.6.3.6 Novice Teachers in the Intervention Group Perceive a Better Fit Between Their Needs and the Mentoring Practices Used by Their Mentors than the Control Group

At the same time, we asked novice teachers to rate how well the frequency with which their mentor used these mentoring practices during their mentoring conversations fit with their perceived needs for such practices on a 3-point scale ranging from 1 (*not often enough*) to 2 (*exactly as often as I needed*) to 3 (*too often*).

The analysis of novice teacher data shows that for all of the practices, the majority of novice teachers thought that mentors had used the practices exactly as often as the novice teachers needed. However, this percentage was higher in the intervention group for all of the 20 practices. In the intervention group, percentages of novice teachers who stated that mentors had used mentoring practices not often enough were overall larger than percentages of novice teachers who stated that mentoring practices had been used too often. This was especially evident for the directive practices. With that, there seems to be a small group of novice teachers in the intervention group who would have liked their mentor to use more of the directive practices. Practices with the best fit in the intervention group, i.e. the highest percentage of novice teachers answering 'exactly as often as I needed', were the mentor starting the conversation with an open question as well as asking clarifying questions (98%), and the mentor supporting them in trying out different teaching methods (98%). In the control group of novice teachers who were supported by a control group mentor, even more novice teachers thought that their mentor had not used the practice often enough compared to the novice teachers who thought the mentor had used the practices too often. This was true for most of the 20 practices. Thus, even though the majority thought that the fit was good, those novice teachers who were dissatisfied with the fit would have liked their mentor to use more of the practices rather than fewer practices. The best perceived fit in the control group was for the practice of assessing their teaching skills (80%) and the mentor using active listening skills during the mentoring conversations (83%).

To analyse further the fit between the frequency of use of a mentoring practice and the perceived need from the perspective of novice teachers, we created a dichotomous variable. We categorised the answers 'not often enough' and 'too often' as bad fit, and the answer option 'exactly as often as I needed' as good fit, i.e. for each mentoring practice, novice teachers could have the value 0 for bad fit and the value 1 for good fit. Then we summed up the practices to receive a measure for an overall fit between mentoring practice and perceived need. This measure has a range from 0 (*no fit at all*) to 20 (*perfect fit*). The average fit between the frequency of mentoring practices and the perceived need for those practices is 18.03 for the intervention group and 13.5 for the control group with mentor support. This difference is statistically significant, i.e. novice teachers in the intervention group perceived a better fit than novice teachers in the control group with mentor support ($t(150) = -6.94^{**}$, $p < 0.01$). This is also true when we examine the

facilitative practices ($t(150) = -6.38^{**}$, $p < 0.01$) and directive practices separately ($t(150) = -4.37^{**}$, $p < 0.01$).

3.6.4 Positive Effects of the NEST Mentor Training Programme and NEST Mentoring

This section analyses the results of the NEST mentor training programme and NEST mentoring in comparison with regular mentoring at school. We examine whether the NEST interventions had any effects on various outcome variables such as emotional exhaustion, satisfaction with the workplace, and the teaching competences of novice teachers and the mentoring competences of mentors. However, since the sample of mentors was small, we can perform regression analyses only with the novice teacher data, i.e. we can estimate effects on the mentors from the perspective of the novice teachers. Another challenge is that only about half of the novice teachers in the control group had a mentor to support them (43%, see Section 3.6.3), while all novice teachers in the intervention group had a mentor to support them. This makes it harder to find evidence for significant effects when controlling for the intervention in regression analysis. Since we had two control groups, one comprising novice teachers with a mentor and one comprising novice teachers without a mentor, we must conduct two sets of comparisons for outcome variables which relate to novice teachers. First, we compare the novice teacher intervention group to the novice teachers in the control group who had mentors to support them; and second, we compare the novice teacher intervention group with the control group novice teachers without support from a mentor. We expect the differences between the latter two groups to be more pronounced. Since we are mainly examining developments in this section, data for novice teachers and mentors were taken from all measurement points to have comparative measures over time.

3.6.4.1 Novice Teachers in the Intervention Group Feel More Resilient than Novice Teachers in the Control Group

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about their emotional exhaustion. This scale was included in the survey because exhaustion can be a predictor for leaving the job. The data show that novice teachers in the intervention and control groups on average felt moderately exhausted, and there was no significant change in novice teachers' exhaustion over time. However, at the end of the school year, novice teachers in the intervention group felt significantly less exhausted than the control group without mentor support ($t(170) = 2.1^*$, $p = 0.02$). There was no significant difference between novice teachers in the intervention group and the control group with mentor support. Means at the end of the school year 2022/2023 ranged from 1.92–2.78 in the intervention group and 2.18–2.62 in the control group with mentor support ($M_{CG_no_ment} = 2.11$ –2.99). The highest level of agreement in all groups at both measurement points was with the statement 'Overall, I feel overstrained by my workload.' All groups agreed with the statement 'At the end of a day's work, I sometimes feel really depressed' at both measurement points.

In the second survey, novice teachers were also asked how resilient they felt to stress and negative setbacks at work. They had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about resilience. This scale was included in the survey as a counterpart to emotional exhaustion and can be a predictor for staying in the job. Novice teachers in the intervention and control groups on average felt rather resilient, with means ranging from 2.99–3.12 in the

intervention group and 2.90–3.07 in the control group with mentor support ($M_{CG_no_ment} = 2.74 - 3.04$). However, novice teachers in the intervention group felt significantly more resilient at the end of the school year than novice teachers with mentor support ($t(150) = -1.64^*$, $p = 0.05$) and without mentor support ($t(169) = -2.88^{**}$, $p < 0.01$). The highest agreement in all groups was with the statement ‘I do not let stress at work get me down’. Here, 80% of novice teachers in the intervention group and 77% of the control group with mentors agreed or strongly agreed with this statement (77% in the control group without mentors). So even though the majority of novice teachers experienced feelings of exhaustion, they felt resilient nonetheless.

3.6.4.2 Novice Teachers in the Intervention Group Think Their School Is a Better Workplace than Novice Teachers in the Control Groups

The second survey also included questions on job satisfaction. Novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with ten statements about job satisfaction. One of the subscales revolved around satisfaction with the school as a workplace (three statements). The scale on job satisfaction was included in the survey as yet another predictor for staying in the job. The analysis of the data shows that novice teachers in the intervention group and the two control groups were on average quite satisfied with their workplace, with means for individual statements ranging from 3.12–3.34 in the intervention group and 2.60–2.90 in the control group with support from a mentor ($M_{CG_no_ment} = 2.59 - 2.91$). However, the results of t tests show that novice teachers in the intervention group were significantly more satisfied with their workplace than novice teachers in the control group with mentors ($t(151) = -3.8^{**}$, $p < 0.01$) and without mentor support ($t(170) = -5.08^{**}$, $p < 0.01$). The highest level of agreement in all groups was with the statement ‘I enjoy working at this school.’; 92% of novice teachers in the intervention group and 72% of novice teachers in the control group with mentors agreed or strongly agreed with this statement (74% in the control group without mentors). The lowest level of agreement overall was with the statement ‘I would like to change to another school if that were possible.’ Only 4% of novice teachers in the intervention group yet 13% of novice teachers in the control group with mentors strongly agreed with the idea of changing schools if it were possible (11% in the control group without mentors).

3.6.4.3 Novice Teachers in Catalonia Want to Stay in the Teaching Profession

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with two statements about their plans to make career changes. This scale was included in the survey to examine the tendency towards leaving the teaching profession. Our analysis shows that novice teachers had on average no tendency to leave the teaching profession at the end of the school year or in the long term. In the second survey, only 2% of novice teachers in the intervention group and the control group with mentor support agreed that they were planning to leave the teaching profession after the school year. In the control group without mentor support, no one agreed with this statement. There was no significant difference between the intervention group and the control groups with or without mentor support in this respect. On average, more novice teachers in the control group with mentor support (22%) and in the control group without mentor support (19%) agreed with the idea of leaving the teaching profession in the long term, compared to 15% in the intervention group. However, novice teachers in the intervention group agreed significantly more strongly that they were thinking of a career change in the long term in the second survey compared to when they

were asked at the beginning of the school year ($t(92) = 1.63^*$, $p = 0.05$). The same was true for novice teachers in the control group with mentor support ($t(59) = 2.73^{**}$, $p < 0.01$). For novice teachers in the control group without mentor support, there was no difference. Their tendency to leave at the end of the school year or to envisage a career change in the long term was stable over the two measurement points. The overall low tendency to leave the teaching profession was complemented by the average number of years novice teachers reported to be willing to stay in the teaching profession. However, there were quite a few outliers as well, with ranges going up to 100 years. Nonetheless, the median (which is less affected by outliers than the mean) for the intervention group was 30 years, and for the control group with mentor support, it was 25 years. In the control group without mentor support, the value was smaller (20 years).

3.6.4.4 Intervention Group Mentors' Mentoring Competence Increases After the NEST Mentor Training

Mentors were asked to assess their own mentoring competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding twelve different skills. Our analysis shows that mentors assessed their mentoring competence prior to the mentor training programme quite high, with a mean of 4.75. However, at the end of the school year 2021/2022, i.e. after the NEST mentor training, they assessed their mentoring competence distinctly higher ($M_{m_IG} = 4.85$), and at the end of the school year 2022/2023, higher still, with a mean of 5.01. Compared to the mentor control group, they started with a higher self-assessment of their overall mentoring competence. The self-assessed mentoring competence of mentors in both groups increased over time; however, the competence of intervention group mentors increased slightly more than the competence of control group mentors, as depicted in Figure 32.

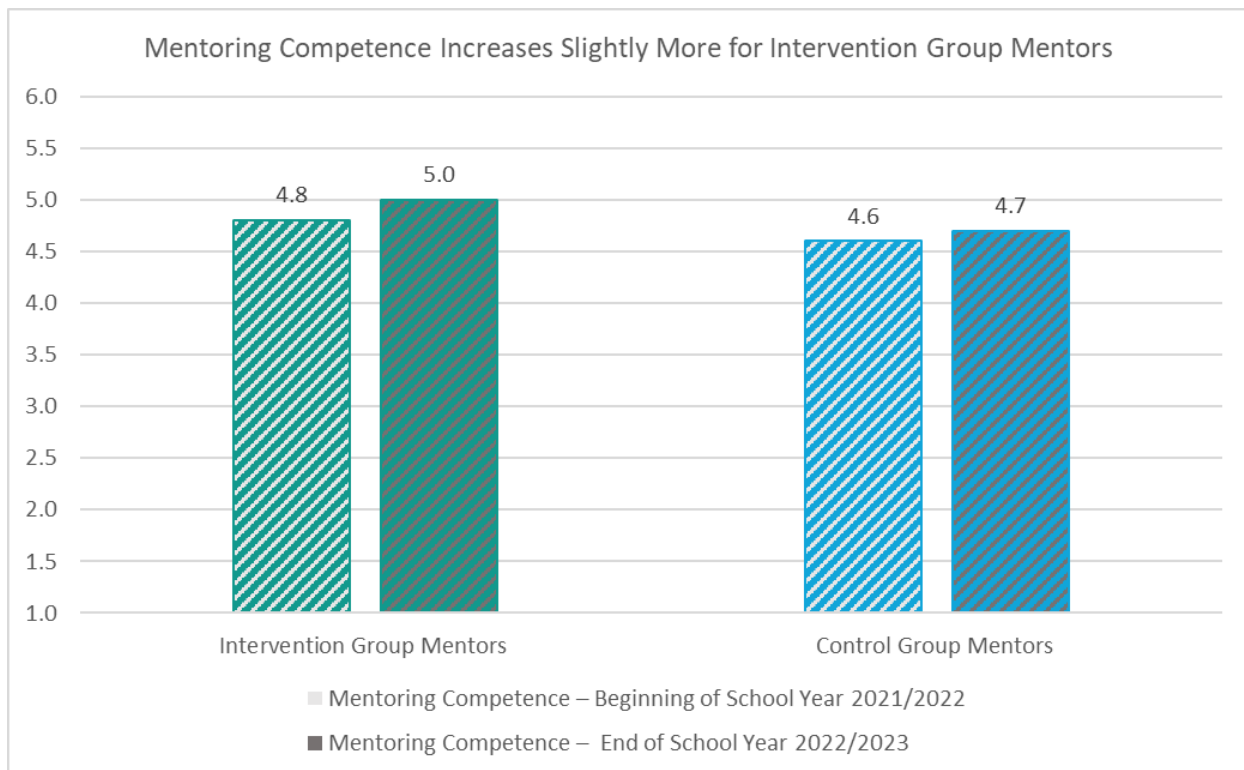


Figure 32: Development of Mentors' Mentoring Competence Over Time by Mentor Group (Catalonia)

Since the mentor training programme focused especially on supporting mentors with building a trustful relationship, initiating reflection by novice teachers, adapting to novice teachers’ specific needs, and building resilience in novice teachers, we specifically examined the statements regarding mentoring competences which revolved around these topics.

Mentors’ self-assessed competence increased over time for the four statements, as depicted in Figure 33. This is especially evident when comparing the mean from before the training to the mean at the end of the school year 2022/2023. Mentors assessed themselves highest regarding supportive relationship-building and prompting reflection.

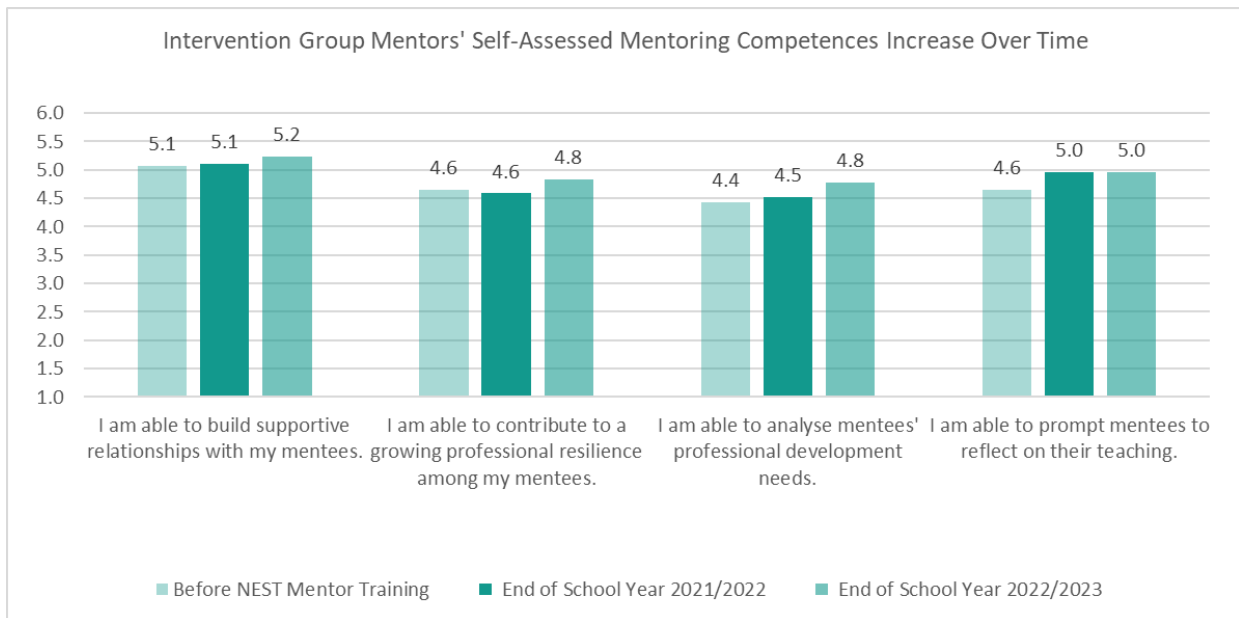


Figure 33: Intervention Group Mentors' Development of Specific Mentoring Competences (Catalonia)

3.6.4.5 Novice Teachers Find Intervention Group Mentors More Competent than Control Group Mentors

In the second survey, novice teachers had to assess their mentor’s mentoring competence by agreeing on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with twelve statements about their mentor’s mentoring competence. This scale was included in the survey to examine mentoring competence not only from the perspective of mentors but also to capture the perception of novice teachers as the recipients of mentoring. In the control group, this question was only posed to novice teachers who had reported on an earlier question that they had a mentor to support them.

The majority of novice teachers in both groups strongly agreed with the statements about their mentors’ competence, with means ranging from 3.43–3.80 in the intervention group and 2.88–3.35 in the control group. Even so, teachers in the intervention group assessed their mentor’s mentoring competence significantly higher than novice teachers in the control group ($t(150) = -5.86^{**}, p < 0.01$). Agreement in both groups was highest for the statement ‘My mentor gives me constructive feedback’, with 81% of

novice teachers in the intervention group and 43% of novice teachers in the control group strongly agreeing with the statement. Regarding the four statements which were analysed above for the mentors, the percentage of novice teachers who strongly agreed with the individual statements was always higher in the intervention group. This was especially true regarding the mentor prompting reflection about teaching. Here, 68% of novice teachers in the intervention group strongly agreed compared to 25% in the control group.

For further analysis of mentoring competence, we calculated an ordinary least squares (OLS) regression with mentoring competence as the dependent variable, i.e. we wanted to examine what variables affect mentoring competence. As mentioned above, this analysis can only be based on novice teacher data; therefore, we can only examine what affects mentoring competence from the perspective of novice teachers. As independent or predictor variables, we used the time allocation and organisation of mentoring conversations, the number of formal and informal mentoring conversations, and a dummy variable taking the value 1 for novice teachers in the intervention group and the value 0 for novice teachers in the control group. This dummy variable was created to test the effect of having been part of the intervention as opposed to having been part of the control group during the school year. Gender and age were used as control variables. We would have liked to include more predictors, such as the extent of mentoring focus and the perceived fit of mentoring practices. However, these were too highly correlated with other predictors. The intervention variable was also moderately correlated with the time and organisation of mentoring conversations, so we included an interaction between the intervention dummy variable and this predictor in the model. There was no significant interaction effect. Results for the OLS regression show that the model was significant ($F(7, 109) = 25.08^{**}$, $\text{Prob}>F = 0.00$) and explained 59% of the variance of mentoring competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded a significant effect only for the allocation of time and organisation of mentoring, i.e. the better novice teachers perceived the organisation and time allocation of their mentoring conversations, the higher they assessed their mentor's mentoring competence (*beta*: 0.72), all else being equal. Whether novice teachers were in the intervention group or in the control group did not affect their perception of their mentor's mentoring competence.

3.6.4.6 NEST Mentor Training Programme Helps to Improve Intervention Group Mentors' Teaching Practice

Intervention group mentors were also asked to answer on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme helped them to improve their own teaching practice. All mentors reported that the training helped them at least to some extent to improve their own teaching practice, but the majority—59% of the mentors—thought that the NEST training programme helped them a lot to improve their own teaching practice ($M_{m_IG} = 3.41$).

3.6.4.7 Teaching Competences of Novice Teachers with Support from Intervention Group Mentors Increase Over Time

In the first and the second survey, novice teachers had to assess their own teaching competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding different skills relevant for teaching in general, for interacting with students, and for supporting parents. The data allowed for building one subscale on competences to interact with students (eleven statements) and one subscale on

interaction with parents (four statements). The scales were included because we wanted to examine whether novice teachers with an intervention group mentor increased their teaching competence to a higher degree than novice teachers without a specially trained mentor. We were also interested in what other factors influenced the teaching competence of novice teachers.

In the intervention group, novice teachers' self-assessed teaching competences regarding student interactions were significantly higher at the beginning of the school year than the self-assessed teaching competences of novice teachers in the control group with mentor support ($t(150) = -2.55^{**}$, $p < 0.01$). There was no significant difference between the intervention group and the control group without mentor support in this regard. The intervention group's self-assessed teaching competences regarding student interactions slightly increased between the beginning and the end of the school year; however, the difference was not significant. The same was true for the control group with mentor support. The teaching competence of novice teachers in the control group without mentor support decreased significantly between the beginning and end of the school year ($t(78) = -2.02^*$, $p = 0.02$). However, at the end of the school year, novice teachers in the intervention group had a significantly higher self-assessed teaching competence compared to the control group with mentor support ($t(150) = -2.85^{**}$, $p < 0.01$) as well as compared to the control group without mentor support ($t(169) = -2.62^{**}$, $p < 0.01$).

On average, novice teachers in all groups thought they had average to high abilities regarding competences for student interactions at the end of the school year (T2: $M_{IG} = 4.75$; $M_{CG_ment} = 4.46$; $M_{CG_no_ment} = 4.50$). In the intervention group, 41% of novice teachers thought they had high or very high abilities (CG_ment : 22%; CG_no_ment : 25%).

Examining the individual statements revolving around student interactions, novice teachers in all groups assessed themselves highest at the end of the school year regarding the competences about showing an open attitude so that students can approach them with their problems. (T2: $M_{IG} = 5.12$; $M_{CG_ment} = 5.07$; $M_{CG_no_ment} = 5.10$).

Results for the competence of supporting parents are very similar to the results for competences regarding student interactions. In the intervention group, novice teachers' self-assessed teaching competences regarding parent support were significantly higher at the beginning of the school year than the self-assessed teaching competences of novice teachers in the control group with mentor support ($t(150) = -3.51^{**}$, $p < 0.01$) and without mentor support ($t(169) = -1.87^*$, $p = 0.03$). The intervention group's self-assessed teaching competences regarding parent support slightly increased between the beginning and the end of the school year; however, the difference was not significant. The same was true for the control group with mentor support. The teaching competence of novice teachers in the control group without mentor support stayed the same. However, at the end of the school year, novice teachers in the intervention group had a significantly higher self-assessed teaching competence compared to the control group with mentor support ($t(150) = -3.75^{**}$, $p < 0.01$) as well as compared to the control group without mentor support ($t(168) = -2.67^{**}$, $p < 0.01$).

On average, novice teachers in the intervention group thought they had average abilities regarding competences for parent support at the end of the school year (T2: $M_{IG} = 3.82$), while novice teachers in the control groups rated their own abilities as basic ($M_{CG_ment} = 3.14$; $M_{CGI_no_ment} = 3.36$). However, 18% of

novice teachers in the intervention group thought they had high or very high abilities (CG_{ment}: 5%; CG_{no_ment}: 6%).

Examining the individual statements revolving around parent support, novice teachers in the intervention group and the control groups assessed themselves highest at the end of the school year regarding the competence of showing parents how to positively influence the education of their children (T2: $M_{IG} = 3.91$; $M_{CG_{ment}} = 3.28$; $M_{CG_{no_ment}} = 3.45$).

For further analysis of teaching competence, we calculated an OLS regression with teaching competence regarding student interactions at the end of the school year as the dependent variable since we wanted to examine what factors affect teaching competence. As independent or predictor variables, we used the level of preparedness for school challenges by initial teacher education, the fit between facilitative mentoring practices used and the perceived need for those practices, resilience, competence at the beginning of the school year, and a dummy variable taking the value 1 for novice teachers in the intervention group supported by an intervention group mentor and the value 0 for novice teachers in the control group with support from a control group mentor. We would have liked to include more variables, such as mentoring focus or the time allocation and organisation of mentoring; however, these were too highly correlated with other predictor variables. Gender and age were used as control variables.

Correlations between predictors were all under 0.29, except for the intervention variable. Therefore, we also tested interaction effects between the intervention dummy variable and the fit of facilitative mentoring practices, but there were no significant interaction effects. Results for the OLS regression show that the model was significant ($F(7, 140) = 15.7^{**}$, $\text{Prob}>F = 0.00$) and explained 40% of the variance of the teaching competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded a significant effect for the self-assessed teaching competence at the beginning of the school year and the fit of facilitative mentoring practices. As mentioned above, the interaction effect was not significant, and the intervention dummy variable also had no significant effect, i.e. whether novice teachers were in the intervention group or in the control group did not affect their self-assessed competence at the end of the school year. Unsurprisingly, the self-assessed competence from the beginning of the school year was a very strong significant predictor, i.e. the better novice teachers assessed themselves at the beginning of the school year, the better they assessed their competences at the end of the school year (*beta*: 0.5), all else being equal. However, the fit of use of facilitative mentoring practices also had a significant effect on the novice teachers' teaching competence (*beta*: 0.2), i.e. the better novice teachers experienced the fit between their mentors' use of facilitative mentoring practices and their own perceived need for such practices, the better they assessed their teaching competence regarding student interactions, all else being equal.

3.6.5 Discussion of Evaluation Results

The evaluation of the NEST programme indicates that novice teachers working at disadvantaged schools in Catalonia do benefit from being supported by a well-trained mentor. In order to enable an effective scaling-up of the NEST training and the subsequent mentoring, we have to consider the implications of the results at the micro-, meso-, and macrolevel.

The analysis of the results implies that the NEST mentor training and NEST mentoring had many positive effects at the microlevel in Catalonia. According to both the mentors themselves and the novice teachers they mentored, the mentoring provided after the NEST training was more focused for most of the specific challenges of novice teachers who are teaching at disadvantaged schools. Directly after the training, mentors thought their focus on the specific challenges was higher than the novice teachers perceived it. However, Catalanian mentors kept increasing their focus, and after the second year, mentors and novice teachers agreed that the mentors' focus on the challenges had increased a lot. This suggests that the Catalanian mentors internalised what they learned during the training about focusing their mentoring on the specific challenges for novice teachers who work at disadvantaged schools. In addition to the improvement in mentoring focus, the intervention group mentors also increased the use of facilitative mentoring practices, whereas there was a decrease in the use of both directive and facilitative mentoring practices among the control group mentors. Likewise, mentors in the intervention group indicated that the training helped them to adapt their mentoring practices to the needs of the novice teachers. This was confirmed by the novice teachers in the intervention group, who experienced a very good fit between their needs and the use of the different mentoring practices by the mentor who supported them. The Catalanian intervention group mentors self-assessed their mentoring competence higher after completion of the training. This finding was corroborated by the novice teacher data as Catalanian novice teachers in the intervention group assessed the mentoring competence of their mentors higher than those in the control group. This was mainly due to the good allocation of time and organisation of the mentoring. Mentors who completed the training also perceived a positive effect of the training on their own teaching competences. Finally, mentoring led to an increase in the teaching competences of the Catalanian novice teachers in the intervention group. These results show two positive impacts of the NEST mentor training. First, it had positive effects on the mentors themselves. Second, the resulting NEST mentoring had positive impacts on the novice teachers working at disadvantaged schools in Catalonia.

At the mesolevel, schools are the main institutions involved with the NEST project. Schools are the workplace of novice teachers and therefore play an essential role in the experiences of novice teachers. Although Catalanian novice teachers were satisfied with their job and viewed their schools as a good workplace in general, schools could also play a part in supporting the novice teachers better with the challenges they face during their first years of teaching. It is positive that the novice teachers in Catalonia felt that the challenges related to the school building, instruction materials, or staff shortages at their school only slightly hindered the school in providing good quality instruction. However, schools would still benefit from appointing more specialised teaching personnel (e.g. teachers who focus specifically on children with special educational needs) who could support the novice teachers in the classroom. Very few novice teachers in Catalonia had participated in an induction programme at the start of their career, but the few that did received extensive induction. This means that more disadvantaged schools in Catalonia could set up such extensive induction programmes to improve the support for their novice teachers. This should help novice teachers to feel better prepared for the challenges they might face during their first years of teaching at a disadvantaged school.

The implications of the results of the evaluation of the NEST project at the macrolevel are far-reaching. For an effective continuation and scaling-up of the NEST project, consideration should be given to how the NEST training and subsequent mentoring could be embedded into the already existing structures of the Catalanian education system. The novice teachers who participated in the NEST project did not feel very well prepared for the challenges they faced at their schools by the initial teacher training programme

they had completed. This means that novice teachers who work at disadvantaged schools in Catalonia might really benefit from the support of a mentor to help them prepare for and deal with the challenges they face in their first years of teaching at a disadvantaged school. However, only 43% of the novice teachers in the control group had a mentor during the first years of their teaching career. This would suggest that there seems to be a need for good quality mentoring for novice teachers working at Catalanian disadvantaged schools.

Further, our analysis suggests that the climate for the implementation of good quality mentoring in Catalonia is mixed. On the one hand, both the mentors and the novice teachers agreed that mentoring was not generally very well accepted and valued in Catalonia. On the other hand, novice teachers had very positive attitudes towards being mentored, and the mentors showed high levels of enthusiasm for mentoring novice teachers. The combination of the absence of adequate support (not enough focus on challenges by the teacher training programme, lack of induction programmes at schools, and lack of mentoring) for novice teachers working at disadvantaged schools and the overall positive attitudes towards mentoring by both mentors and novice teachers indicates that a better structure to support novice teachers working at disadvantaged schools would be well accepted by the Catalanian teaching force. The NEST project implemented a minimal (in terms of time and cost) but multifaceted intervention which, according to our evaluation, positively affects both mentoring competences and teaching competences. Therefore, implementing a multifaceted intervention such as the NEST project seems a promising strategy for improving the Catalanian education system from several angles at once.

3.7 NEST Evaluation Results for Spain – Community of Madrid

Key Takeaways – Mentors

- **Mentors have high enthusiasm** for mentoring.
- NEST mentor training programme helps intervention group mentors to use their mentoring practices in a **more adaptive** way.
- Intervention group mentors **increase** their use of **facilitative practices** over time, while control group mentors decrease the use of such practices.
- Intervention group mentors' **mentoring competence increases** after NEST mentor training.
- NEST mentor training programme **helps to improve** intervention group mentors' teaching practice.

Key Takeaways – Novice Teachers

- **Novice teachers** have **positive attitudes** towards mentoring.
- Novice teachers in the intervention group **perceive a better fit** between their needs and the mentoring practices used by their mentors.
- Novice teachers in the intervention group **feel less exhausted** than novice teachers in the control group.
- Novice teachers in the Community of Madrid **want to stay** in the teaching profession.
- Novice teachers in the intervention group **think their school is a better workplace** than novice teachers in the control groups.
- Novice teachers **find intervention group mentors more competent**.
- **Teaching competences** of novice teachers with support from intervention group mentors **increase** over time.

The NEST evaluation report for the Community of Madrid is structured in line with the NEST theory of change into sections discussing context, preconditions, processes, and outcomes. It starts by examining the role of mentoring in general in the context of the education system in the Community of Madrid, and analyses whether mentoring can be a promising strategy for this education system given the current preconditions for the NEST project. The report goes on to analyse processes and examines how well NEST mentoring is implemented compared to regular mentoring at schools in the Community of Madrid. Finally, the report observes the outcomes of the NEST project in terms of the effects of NEST mentor training programme on the mentors as well as the effects of the NEST mentoring on novice teachers. The report closes with a discussion of findings.

In order to understand the results better, it is important to briefly explain the structure of the sample for the Community of Madrid and to give a short description of the sample.

Structure: The overall sample for the Community of Madrid consisted of NEST mentors who took part in the NEST mentor training programme (mentor intervention group) and mentors who did not take part in the NEST training programme (mentor control group). The sample also consisted of an intervention group of novice teachers who were supported by a NEST mentor, and a control group of novice teachers who were either supported by a mentor who did not undergo the NEST mentor training programme or who were not supported by any mentor at all. In panel designs in which the same individuals have to complete

more than one survey, dropout of participants over time (panel mortality) is a well-known problem. In this respect, the NEST project is no exception. Participants from the Community of Madrid—mentors as well as novice teachers—dropped out of the programme for various reasons (e.g. changing to a different school, maternity leave, long-term illness). Some participants did not drop out of the programme, but simply did not complete the surveys. The dropout reported here only refers to survey dropout rates. Since this report examines developments over time, we compare data from the first survey to the corresponding data from the second survey for the novice teachers, and for the mentors, to corresponding data from the third survey. Therefore, the sample for the descriptive statistics and analyses in this report included only those mentors and novice teachers who filled out all required questionnaires.

The sample for the Community of Madrid included 52 mentors; of those, 29 were intervention group mentors who received the NEST mentor training, and 23 were regular mentors who did not receive special training. Intervention group mentors filled out surveys at three points in time: at the beginning of the school year 2021/2022 in October 2021, before the NEST mentor training programme started (T1); at the end of the school year 2021/2022 in June 2022, when the theoretical and practical training had mostly finished (T2); and lastly, at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3). Mentors in the control group were only surveyed twice: at the beginning of the school year 2021/2022 in October 2021 (T1), and at the end of the school year 2022/2023 in June 2023 as a follow-up survey (T3).

The sample also consisted of 257 novice teachers from two cohorts. The first cohort (162 novice teachers) was surveyed in 2021/2022, and the second cohort (95 novice teachers) was surveyed in 2022/2023. The intervention group consisted of 107 novice teachers. Of those, 72 were in the first cohort and 35 were in the second cohort. The control group consisted of 150 novice teachers. Of those, 90 were in the first and 60 in the second cohort. Half of the novice teachers in the control group reported that they were not supported by a mentor (49%). It is important to note that whenever data about mentors are presented from the perspective of novice teachers, the control group sample included only the novice teachers who reported that they were being supported by a mentor. In the sections on context and preconditions, the control group is handled as one group because baseline data are presented which were collected before the mentoring had started. In the sections on processes and outcomes, the intervention group is compared to the control group with support from a mentor and to the control group without mentor support. We would expect more noticeable differences between the intervention group and the control group without mentor support. We make the respective reference groups very explicit in the text.

Sample Description: The majority of novice teachers in both intervention (65%) and control group (77%) were female. In the mentor intervention group, the majority were female (69%), while in the control group of mentors the percentage of men and women was a little more balanced (57% female). The average age of novice teachers had a wide range. The youngest person was 23 years old, and the oldest person was 56 years old. In the intervention group, the average age was 34.8 years, with a median age of 33 years, compared to an average age of 33.2 years with a median age of 31 years in the control group. Intervention group mentors were on average 46.9 years old, with a median age of 47 years, and control group mentors were on average 50.5 years old, with a median age of 51. Novice teachers in the intervention group had an average teaching experience of 2.3 years, while novice teachers in the control group had slightly more teaching experience, with an average of 3.1 years. Teaching was not the first-choice career for 63% of novice teachers in the intervention group and 37% of novice teachers in the control group. Detailed descriptive statistics can be found in Appendix A7 – Spain – Community of Madrid. More information on

the variables used in the regression analyses can be found in the codebook for the Community of Madrid on page 384.

3.7.1 Mentoring in the Broader Context of the Education System in the Community of Madrid

This section considers the role of mentoring in general in the context of the education system in the Community of Madrid. For this purpose, we examine data about the general acceptance of mentoring in the Community of Madrid from the perspective of the participating novice teachers and the mentors. Furthermore, we examine the expectations both groups had about what attributes or characteristics a good mentor should have. Data used in this section were taken from the baseline survey conducted before the NEST mentor training programme started.

3.7.1.1 Novice Teachers and Mentors Do Not Think that Mentoring Is Generally Accepted

In the baseline survey, novice teachers and mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about the level of acceptance of mentoring in the education system in the Community of Madrid in general. This scale was included in the survey to examine novice teachers' and mentors' perceptions of the general level of acceptance of mentoring by society as part of the professional development of teachers. On average, novice teachers in the intervention and control groups thought that mentoring was generally not well accepted in the Community of Madrid, with means in the intervention group ranging from 2.00–2.94 and means in the control group ranging from 1.79–2.56. However, the results of *t* tests show that the novice teachers in the intervention group agreed significantly more strongly with the general acceptability of mentoring in the Community of Madrid than the control group ($t(252) = -2.76^{**}$, $p = 0.01$). The highest level of agreement in both groups was with the statement 'In my environment, people highly respect mentors who support novice teachers.' The majority of novice teachers in the intervention group agreed or strongly agreed with this statement (79%); in the control group, 63% of novice teachers agreed or strongly agreed with this statement. Both groups of mentors shared the perceptions by novice teachers that mentoring was not well accepted. The highest agreement for both groups was with the statement 'In my environment, people highly respect me for being a mentor for novice teachers', with 33% of intervention group mentors and 32% of control group mentors agreeing or strongly agreeing with the statement. Interestingly enough, although novice teachers and mentors agreed most with the same statement, novice teachers did so to a larger percentage than mentors, i.e. more novice teachers thought that mentors are respected for their work than mentors thought they are respected themselves.

3.7.1.2 Novice Teachers and Mentors Have Mostly Similar Opinions about What Makes a Good Mentor

In the baseline survey, novice teachers and mentors were asked which attributes they found most important for being a good mentor. They could choose from seven different attributes and pick the three attributes they considered most important. This question was included because we wanted to examine which kind of expectations novice teachers and mentors had in general about what makes a good mentor. For the analysis, we calculated for each attribute whether it was chosen by a person as one of the three most important attributes. Thus, a percentage of 90 means that 90% of the respective group chose this attribute as one of the three most important attributes. Figure 34 shows that empathy was chosen most

often as one of the most important attributes by all groups. However, mentors found flexibility more important than novice teachers, while novice teachers thought trustfulness was more important than mentors did. Only a minority in both groups found curiousness and courage important attributes for a good mentor.

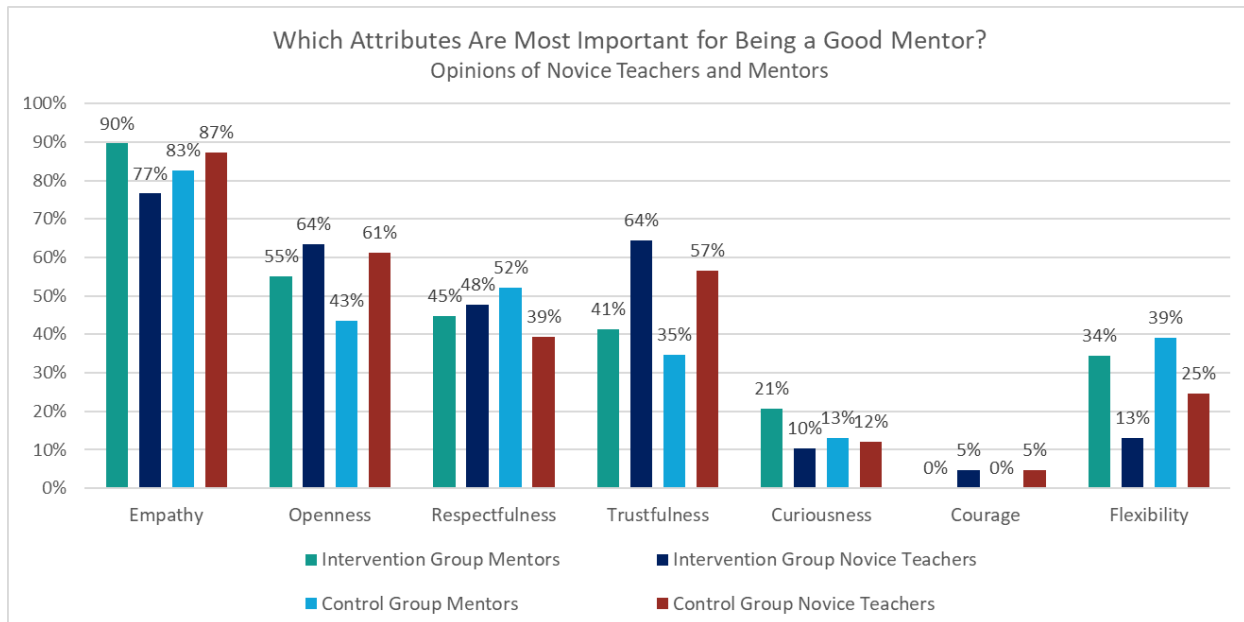


Figure 34: Important Attributes for Being a Good Mentor (Community of Madrid)

3.7.2 Preconditions for the NEST Project – Is Mentoring a Promising Strategy for the Education System in the Community of Madrid?

This section analyses the preconditions for the NEST project. We examine prerequisites of the novice teachers and the mentors working at disadvantaged schools to determine whether the conditions for a mentor training programme were favourable or not. In the following subsections, we report on data about novice teachers’ attitudes towards mentoring, mentors’ enthusiasm for mentoring, how well novice teachers and mentors feel prepared for dealing with challenges at disadvantaged schools, the availability of induction programmes for novice teachers, and the perceived school environment. Data used in the first three subsections were taken from the baseline survey conducted before the NEST mentor training programme started; data for the last section were taken from the second survey for novice teachers conducted at the end of the school year.

3.7.2.1 Positive Attitudes and High Enthusiasm for Mentoring

In the baseline survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with six statements about their attitudes towards being mentored. This scale was included in the survey to examine whether novice teachers had a general willingness to be mentored and whether they saw the benefits of being mentored. The analysis shows that novice teachers in the intervention and control groups on average had positive attitudes towards being mentored, with

means ranging from 3.36–3.61 in the intervention group and from 3.27–3.48 in the control group. A *t* test comparing the means of the scale between the two groups shows that the novice teachers intervention group had significantly more positive attitudes towards mentoring than the novice teacher control group ($t(255) = -2.4^{**}$, $p = 0.01$). On average, the highest level of agreement in both groups was with the statement ‘From my mentor(s) I expect good ideas for my further professional development.’ More than half of the novice teachers in both groups strongly agreed with this statement: 61% in the intervention group and 51% in the control group. For the intervention group, the statement rated the second highest was ‘I think being mentored will help me to develop reflection skills for my own teaching’ ($M_{IG} = 3.60$). Here, 60% of respondents strongly agreed with the statement. For the control group, agreement was second highest with the statement ‘I think being mentored will help me to improve my teaching.’ ($M_{CG} = 3.45$). Strong agreement was even higher with this statement (63%) than for the statement rated highest overall (see above).

In the baseline as well as the final survey, mentors had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with five statements about their enthusiasm for mentoring novice teachers. This scale was included in the survey to examine the extent to which mentors were motivated to support novice teachers with mentoring and whether this enthusiasm could be increased by the mentor training programme. Our analyses of the data show that mentors were already enthusiastic about mentoring at the beginning of the school year 2021/2022 before the NEST training for the intervention group mentors started, with slightly higher means for the intervention group ($M_{m_IG}: 2.30\text{--}3.70$) than for the control group mentors ($M_{m_CG}: 2.20\text{--}3.40$). Comparing average levels of enthusiasm for mentoring before the training to average enthusiasm at the end of the school year 2022/2023 shows that enthusiasm for mentoring stayed stable over time for both groups of mentors. The majority of mentors agreed or strongly agreed with all statements about mentoring enthusiasm, except with the statement ‘Mentoring is the most fulfilling part of my job.’ Here, 55% of mentors in the control group disagreed or strongly disagreed, and in the mentor intervention group, the percentage of respondents disagreeing was the highest of all statements (41%) at the beginning of the school year. In both groups, mentors agreed most with the statement ‘I feel content when I see progress in my mentees’ teaching’ ($M_{m_IG}: 3.65$; $M_{m_CG}: 3.24$) at the end of the school year.

3.7.2.2 Little Preparation for School Challenges by Initial Teacher Training

In the baseline survey, novice teachers were also asked to assess how well their initial teacher training had prepared them for six specific challenges they might face working at disadvantaged schools on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis of the data shows that on average, novice teachers in the intervention and control groups felt only to some extent prepared for challenging situations at school, with means ranging from 1.64–2.08 in the intervention group and from 1.72–2.01 in the control group. A *t* test comparing the means of the scale between the two groups shows no difference between the groups regarding their feeling of preparedness for challenging situations. The intervention group as well as the control group felt least prepared for teaching students with language barriers. Roughly half of either group felt not at all prepared for this challenge by their initial teacher training (IG: 53%; CG: 49%). Of all the challenges, both groups of novice teachers felt best prepared for managing a diverse classroom effectively. For this challenge, 29% of the intervention group and 27% of the control group felt quite a bit or a lot prepared by their initial teacher training.

3.7.2.3 Induction Is Still Not Very Common at Schools in the Community of Madrid

In the baseline survey, novice teachers were asked whether they were currently taking part or had taken part in any induction activities at the school at which they were currently teaching. By induction activities we referred to activities designed to support new teachers' introduction into the teaching profession and to support experienced teachers who are new to a school. These activities are either organised in formal, structured programmes or informally arranged as separate activities. This question was included in the survey to examine how well induction processes for new teachers are already implemented in the school system. For the novice teachers who reported that they had taken part in formal induction activities, we included questions on the type of activity. They could report their participation in a total of ten different induction activities: general or administrative introduction; courses or seminars attended in person; online courses or seminars; networking or collaboration with other new teachers; team-teaching with experienced teachers; supervision of portfolios, diaries, or journals; reduced teaching load; regular visits from the school principal and/or experienced teachers; supervision of teaching by the school principal and/or experienced teachers; and online activities, such as virtual communities.

Our data analysis shows that the majority of novice teachers in the intervention group (90%) and the control group (70%) had not taken part in any induction activities. Looking separately at formal and informal induction activities, the percentages of novice teachers who had not taken part are even larger. In the intervention group, 96% had not taken part in formal and 93% had not taken part in informal induction activities. In the control group, 75% had not taken part in formal and 81% had not taken part in informal induction activities. Of the 11 novice teachers in the intervention group who reported that they had taken part in induction activities, a maximum of 5 also gave information on the type of activity. In the control group, a maximum of 38 (of 45) reported on the type of activity. The majority of novice teachers in the intervention group (80%) had taken part in most of the ten different induction activities. The activity reported least often was networking with other novice teachers (60%). The most common induction activities (percentages all over 80%) reported by the control group included: courses or seminars attended in person, online courses or seminars, regular visits from the school principal and/or experienced teachers, and supervision of teaching by the school principal and/or experienced teachers.

3.7.2.4 Challenging Factors Only Slightly Hinder the School's Capacity to Provide Quality Instruction in the Community of Madrid

To learn more about the school environment or the conditions under which novice teachers have to work at disadvantaged schools, novice teachers were asked in the second survey what factors hindered quality instruction at their school. Novice teachers had to assess on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) in how far 14 different challenges (such as staff shortages or lack of learning materials) hindered their school's capacity to provide quality instruction. The analysis shows that on average, the majority of novice teachers in both groups saw the school's capacity to provide quality instruction as not hindered at all or only to some extent, with medians for all of the 14 challenges having values of 1 or 2. In other words, at least 50% of the novice teachers answered either 'not at all' or 'to some extent' for all challenges. No significant differences were found between the intervention and the control group. Both groups thought that the most hindering challenge was a shortage of support personnel. While intervention group novice teachers thought that the inadequacy of infrastructure such as school buildings, heating, or classrooms was hindering the school's capacity to provide quality instruction to some extent,

control group novice teachers thought the same about the inadequacy of instructional leadership. Both groups agreed that the school's capacity to provide quality instruction was hindered to some extent by insufficient time for students. However, means overall were still quite low ($M_{IG} = 1.38 - 2.28$; $M_{CG} = 1.54 - 2.65$).

3.7.3 How Well Is NEST Mentoring Implemented Compared to Regular Mentoring at Schools in the Community of Madrid?

This section analyses the implementation of NEST mentoring in comparison with regular mentoring at schools in the Community of Madrid. We will examine the quantity of formal and informal mentoring conversations and the quality of mentoring in terms of the focus of mentoring as well as the match between the mentoring practices offered by mentors and the perceived need for those practices from the perspective of novice teachers. The section also gives insights into how well intervention group mentors were able to transfer knowledge and lessons learned from the NEST mentor training programme into their mentoring practice worked. For this purpose, we examine the changes in the mentoring focus and mentoring practices of the mentors. The scale about mentoring focus is the counterpart to the scale on preparedness, which was discussed in Section 3.7.2.2. Data for novice teachers were taken from the second survey; for the mentors, data from all mentor surveys were analysed. It is important to note that this section only included data of those novice teachers in the control group who reported that they were being supported by a mentor at the time of taking the survey. This sample comprised 77 novice teachers, which was basically half of the control group (51%), while in the intervention group, all novice teachers had a mentor to support them.

3.7.3.1 Control Group Novice Teachers Have More Mentoring Conversations, While the Time Allocation and Organisation of Mentoring Conversations Work Better for Intervention Group Novice Teachers

In the second survey, novice teachers were asked how many formal and informal mentoring conversations they had with their mentor. We defined a formal mentoring conversation as a longer meeting between mentor and mentee to plan and/or to discuss and/or to reflect on, for instance, a lesson plan, actual teaching, or student behaviour. We defined an informal mentoring conversation as a conversation between mentor and mentee that was a short meeting to exchange information or materials or to receive advice or feedback on ideas. This question was included in the survey to have a quantitative measure for the meetings between mentors and their mentees.

The analysis shows that the majority of novice teachers in the intervention group (48%) had three formal mentoring conversations. Overall, 58% of the intervention group had between one and three formal mentoring conversations. Roughly 33% had four, five, or six formal mentoring conversations, and the rest are outliers who reported having had between seven and 25 formal mentoring conversations. Since the NEST mentoring planned for three formal mentoring conversations, we expect these outliers to be the result of typing mistakes; there would hardly have been time within the school year to have 25 formal mentoring conversations with one mentor. The frequency of informal mentoring conversations was higher. The majority reported having had between zero and ten informal mentoring conversations (71%), with most having taken part in either three (13%) or ten (15%) informal mentoring conversations. Another 23% reported having had between 15 and 30 informal mentoring conversations. A few teachers reported

between 50 and 100 informal mentoring conversations. The numbers for formal and informal mentoring conversations in the control group have even more variance. Novice teachers in the control group reported between zero and 36 formal and between zero and 100 informal mentoring conversations. Here again, we expect higher numbers (outliers) to be the result of typing mistakes. Overall, 50% of the novice teachers in the control group reported between one and nine formal mentoring conversations, although the majority (17%) reported having had ten formal mentoring conversations. They reported between zero and 100 informal mentoring conversations, with a majority of 18% reporting 20 informal conversations. The data collected suggest that novice teachers in the control group had more mentoring conversations than novice teachers in the intervention group. However, data have to be interpreted cautiously since only half of the novice teachers in the control group had a mentor, and of those, only roughly three quarters (57 people) answered the question. This means that the data might not represent the control group sample very accurately.

Novice teachers also had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with three statements about the time allocation and organisation of mentoring conversations.

A *t* test comparing the means of the scale between the two groups showed that the novice teachers in the intervention group agreed significantly more with statements regarding the organisation and time allocation of their mentoring conversations than the control group ($t(179) = -2.77^{**}$, $p < 0.01$). Of the three statements, both groups of novice teachers agreed most strongly that they knew well in advance when the mentor would visit them for a classroom observation. In the intervention group, 77% strongly agreed with this statement, and in the control group 61% strongly agreed with this statement. The majority of novice teachers in the intervention group (64%) also strongly agreed that the mentor took sufficient time for the mentoring conversations. In the control group, only 42% strongly agreed with this statement.

3.7.3.2 Mentors' Focus of Mentoring Decreases After the Mentor Training Programme

Mentors were asked in all three surveys about the focus of their mentoring activities. We wanted to examine to what extent they focused on six challenges novice teachers might face while teaching and whether the extent of focus changed after the mentor training. For this purpose, mentors assessed in how far they focused their mentoring on six different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). This question directly complements the question for novice teachers. Figure 35 shows that intervention group mentors increased their focus on few specific challenges in their mentoring after the NEST mentor training programme. However, due to the fact that the majority of mentors in the intervention group did not have any previous mentoring experience and therefore could not answer questions about their previous mentoring focus, this result is not very reliable. Attention should be focused on the values at the end of the school year 2021/2022, which marks the time period after the training. Intervention group mentors thought that they had focused their mentoring quite a bit on most of the challenges. However, they felt they had focused their mentoring only to some extent on supporting novice teachers with teaching students with language barriers and with involving parents in the learning process of their children. Intervention group mentors thought that they had focused their mentoring most on supporting novice teachers with managing a diverse classroom effectively. After the school year 2022/2023, the strongest focus areas stayed the same, but the focus decreased for most of the challenges. That said, intervention group mentors actually increased their mentoring focus on supporting novice

teachers with involving parents in the learning process of their children. The decreases in the mentoring focus could indicate that the training was still fresh in their minds after the first year, leading to a more focused mentoring approach. Alternatively, the decreases in mentoring focus could indicate that intervention group mentors had learned to adapt better to their novice teachers’ needs and to focus their mentoring on the areas where they perceived the highest demand.

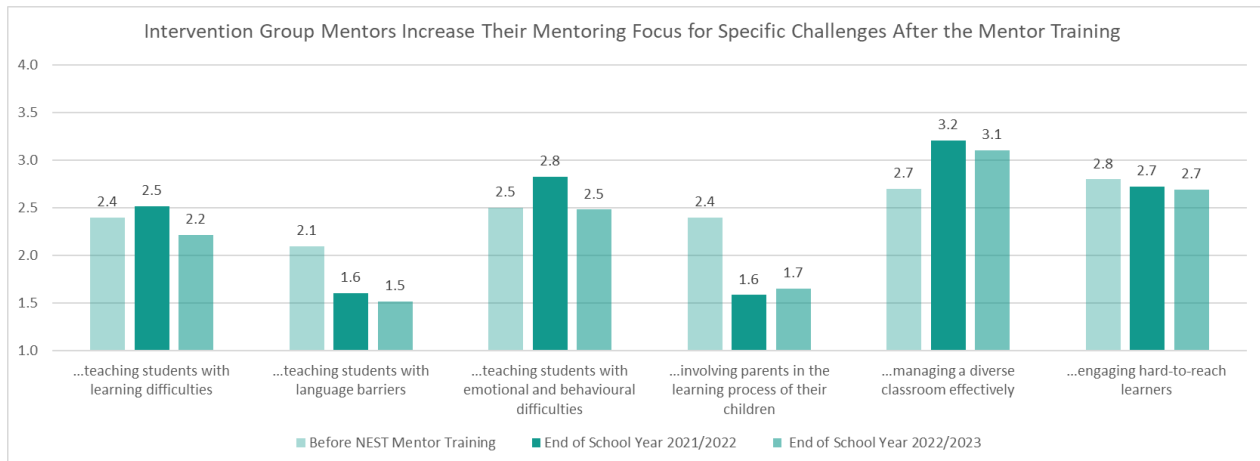


Figure 35: Intervention Group Mentors’ Development of Mentoring Focus (Community of Madrid)

3.7.3.3 Novice Teachers Perceive a Stronger Mentoring Focus than Mentors

In the second survey, novice teachers were asked about the focus of the mentoring they received, so this issue can be examined from the perspectives of both the mentors and the mentees. To assess the extent to which the mentoring the novice teachers received focused on supporting them with dealing with certain challenges at school, they had to rate six statements regarding the different challenges on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*). The analysis shows that both groups of novice teachers perceived mostly a moderate level of focus on the different challenges in their mentoring. Means for the intervention group ranged from 1.94–3.08, and means in the control group with mentor support ranged from 2.04–2.61. Novice teachers in the intervention group perceived the highest focus of their mentoring on engaging hard-to-reach learners (71% reported quite a bit or a lot of focus) and on managing a diverse classroom effectively (75% reported quite a bit or a lot of focus). In fact, *t* tests show that they perceived a significantly stronger focus of their mentoring on these challenges than the novice teachers in the control group ($t(180) = -4.14^{**}$, $p < 0.01$); ($t(180) = -3.52^{**}$, $p < 0.01$). However, they perceived a significantly lower focus of their mentoring on involving parents in the learning process of their children than novice teachers in the control group ($t(180) = 2.34^{**}$, $p = 0.01$). Novice teachers in the control group perceived the highest focus of their mentoring on teaching students with emotional and behavioural difficulties, with 52% having perceived quite a bit or a lot of focus on this challenge.

We also compared the data of the novice teacher intervention group to the mentor intervention group data. The novice teacher sample comprised two consecutive cohorts. The first cohort was the cohort of novice teachers that was supported by mentors directly after the mentor training programme. The second cohort of novice teachers was supported by mentors in the mentors’ second school year of the NEST

project. We wanted to examine whether the development in the extent of focus of the mentors would be mirrored in the perceptions by the two novice teacher cohorts. As mentors thought that they had focused their mentoring more strongly at the end of the school year 2021/2022, the first cohort should have perceived a higher level of focus in their mentoring; and as the extent of focus decreased after the mentor training programme according to the mentors' perception, the second cohort of novice teachers who was being supported by the mentors at that time should have perceived a lower level of focus in their mentoring. Figure 36 shows that the perceptions by novice teachers exactly mirror the development perceived by the mentors. The focus decreases, except for involving parents in the learning process, and here, the novice teacher data mirror the increase. Interestingly enough, novice teachers perceived a higher level of focus in their mentoring than mentors did.

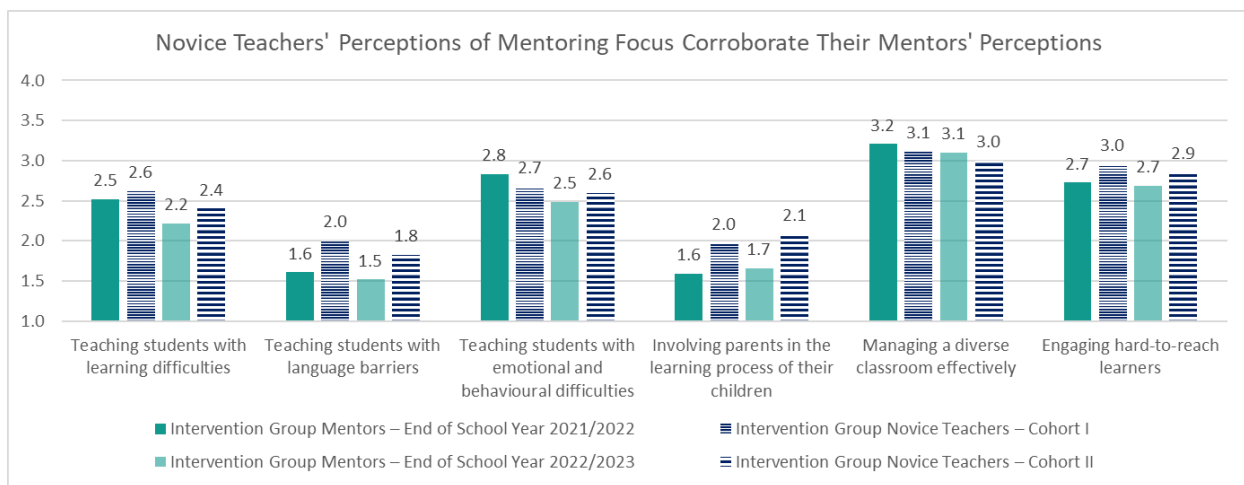


Figure 36: Intervention Group Novice Teachers' and Mentors' Perceptions of Mentoring Focus (Community of Madrid)

3.7.3.4 Intervention Group Mentors Increase Their Use of Facilitative Practices Over Time, While Control Group Mentors Decrease the Use of Such Practices

Mentors were asked about their mentoring practices in all surveys. For this purpose, mentors rated how often they used 18 different mentoring practices on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*). We differentiated between more directive and more facilitative mentoring practices. More directive practices generally put the mentor in a more active role and include giving advice or using concrete examples from the mentor's own practice. The facilitative practices put the novice teacher in the more active role and include asking open questions, using active listening skills, or letting novice teachers find solutions on their own. We wanted to examine which practices mentors had used before the mentor training programme and whether these practices had changed over time. It is important to note that mentors in the intervention group were surveyed three times but mentors in the control group were surveyed only twice. More information about the data collection process can be found in the description of the structure of the sample.

The analysis shows that intervention group mentors continuously increased the frequency of use of ten of the 18 practices. The largest increases in the frequency of use between the beginning of the school year 2021/2022 (T1) and the end of the school year 2022/2023 (T3) were visible regarding starting the

conversation with an open question and asking for alternatives to teaching implemented by the novice teacher. Only four of the 18 practices were used less on average at the end of the school year 2022/2023 compared to the beginning of the school year 2021/2022. Of those, the decrease in frequency of use was highest for giving examples of best practice from the mentors’ own experience. However, as explained above, only a few mentors (nine in the intervention group and ten in the control group) were able to answer the questions about mentoring practices in the first survey because the others did not have any previous mentoring experience. Therefore, it is more sensible to compare the use of mentoring practices after the training at the end of the school year 2021/2022 to the use of practices at the end of the school year 2022/2023. Figure 37 shows that increases in frequency of use were moderate directly after the training at the end of the school year 2021/2022 (T2), but evident especially for facilitative practices at the end of the school year 2022/2023. The frequency of use for the directive practices slightly decreased at the end of the school year 2022/2023. At the beginning of the school year 2021/2022 (T1), the control group mentors used facilitative as well as directive mentoring practices more frequently than the intervention group mentors. However, comparing the use of practices at the end of the school year 2022/2023 (T3), it is evident that control group mentors used fewer directive and fewer facilitative mentoring practices than intervention group mentors.

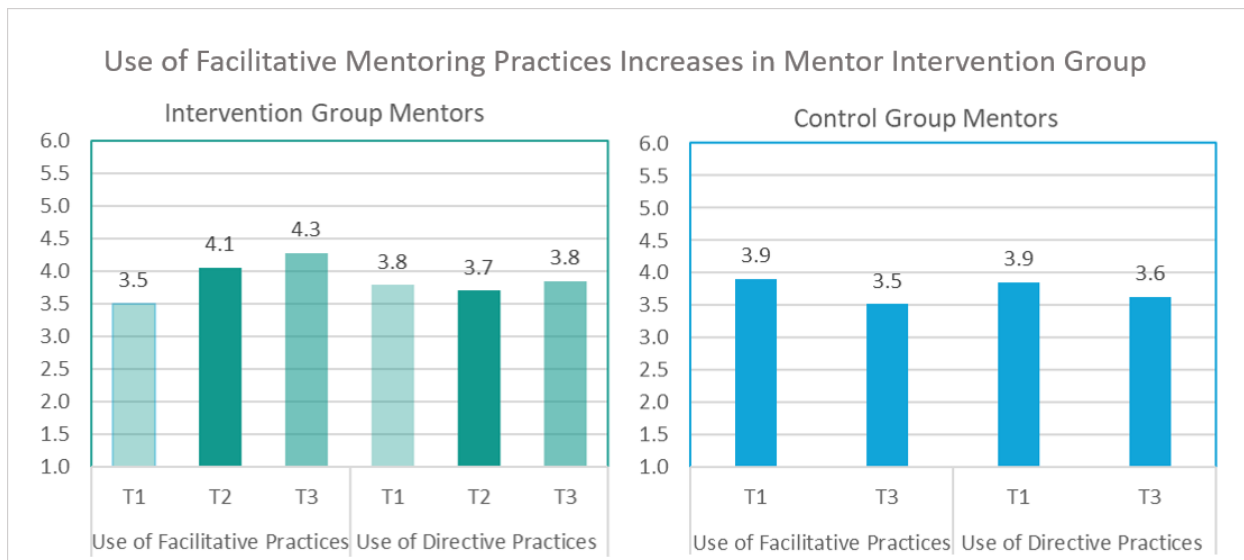


Figure 37: Development of Mentoring Practices Over Time by Mentor Group (Community of Madrid)

3.7.3.5 NEST Mentor Training Programme Helps Intervention Group Mentors to Use Their Mentoring Practices in a More Adaptive Way

In the last survey, intervention group mentors had to rate on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme had improved their competences to switch between different practices and to adapt their practices in a flexible way. If they thought that their competence level was already so high that they did not need to improve further, they could indicate this by ticking a box. Our analysis shows that intervention group mentors thought that the NEST mentor training programme helped them on average quite a bit to improve using different mentoring approaches for novice teachers with different personalities, changing their mentoring approach according to the social

situation in the classroom, and adapting their mentoring approach according to the novice teacher's level of professional development ($M_{m_IG} = 2.96-3.55$). Overall, intervention group mentors thought the NEST mentoring programme helped them to improve most in using different mentoring approaches for novice teachers with different personalities (55% answered 'a lot').

3.7.3.6 Novice Teachers in the Intervention Group Perceive a Better Fit Between Their Needs and the Mentoring Practices Used by Their Mentors than the Control Group

At the same time, we asked novice teachers to rate how well the frequency with which their mentor used these mentoring practices during their mentoring conversations fit with their perceived needs for such practices on a 3-point scale ranging from 1 (*not often enough*) to 2 (*exactly as often as I needed*) to 3 (*too often*).

The analysis of novice teacher data shows that for all of the practices, the majority of novice teachers thought that mentors had used the practices exactly as often as the novice teachers needed. However, this percentage was higher in the intervention group for all of the 20 practices. In the intervention group, percentages of novice teachers who stated that mentors had used mentoring practices not often enough were overall smaller than percentages of novice teacher who stated that mentoring practices had been used too often. However, where this relationship was reversed, it was usually the case for directive practices. There might be a small group of novice teachers in the intervention group who would have liked their mentor to have used more of the directive practices.

Practices with the best fit in the intervention group, i.e. the highest percentage of novice teachers answering 'exactly as often as I needed', were the mentor asking clarifying questions (92%) and the mentor giving novice teachers the opportunity to draw conclusions for themselves (92%). In the control group of novice teachers who were supported by a control group mentor, more novice teachers thought that their mentor had not used the practice often enough compared to the novice teachers who thought the mentor had used the practice too often. This was true for most of the 20 practices. Therefore, even though the majority of novice teachers thought that the fit was good, those novice teachers who were unsatisfied with the fit would have liked the mentor to have used the respective practices more frequently. The best perceived fit in the control group was for the practice of starting the conversation with an open question (82%) and the mentor using active listening skills during the mentoring conversations (81%).

To analyse further the fit between the frequency of use of a mentoring practice and perceived need from the perspective of novice teachers, we created a dichotomous variable. We categorised the answers 'not often enough' and 'too often' as bad fit, and the answer option 'exactly as often as I needed' as good fit, i.e. for each mentoring practice, novice teachers could have the value 0 for bad fit and the value 1 for good fit. Then we summed up the practices to receive a measure for an overall fit between mentoring practice and perceived need. This measure has a range from 0 (*no fit at all*) to 20 (*perfect fit*). The average fit between the frequency of mentoring practices and the perceived need for those practices is 17.27 for the intervention group and 14.42 for the control group with mentor support. This difference is statistically significant, i.e. novice teachers in the intervention group perceived a better fit than novice teachers in the control group with mentor support ($t(181) = -3.76^{**}$, $p < 0.01$). This is also true when we examine the

facilitative practices ($t(181) = -2.44^{**}$, $p = 0.01$) and directive practices separately ($t(181) = -2.28^{**}$, $p = 0.01$).

3.7.4 Positive Effects of the NEST Mentor Training Programme and NEST Mentoring

This section analyses the results of the NEST mentor training programme and NEST mentoring in comparison with regular mentoring at schools in the Community of Madrid. We describe whether the NEST interventions had any effects on various outcome variables such as emotional exhaustion, satisfaction with the workplace, and the teaching competences of novice teachers and the mentoring competences of mentors. However, since the sample of mentors was small, we can perform regression analyses only with the novice teacher data, i.e. we can estimate effects on the mentors from the perspective of the novice teachers. Another challenge is that only about half of the novice teachers in the control group had a mentor to support them (51%, see Section 3.7.3), while all novice teachers in the intervention group had a mentor to support them. This makes it harder to find evidence for significant effects when controlling for the intervention in regression analysis. Since we had two control groups, one comprising novice teachers with a mentor and one comprising novice teachers without a mentor, we must conduct two sets of comparisons for outcome variables which relate to novice teachers. First, we compare the novice teacher intervention group to the novice teachers in the control group who had mentors to support them; and second, we compare the novice teacher intervention group with the control group novice teachers without mentor support. We expect differences between the latter two groups to be more pronounced. Since we are mainly examining development in this section, data for novice teachers and mentors were taken from all measurement points to have comparative measures over time.

3.7.4.1 Novice Teachers in the Intervention Group Feel Less Exhausted than Novice Teachers in the Control Group

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about their emotional exhaustion. This scale was included in the survey because exhaustion can be a predictor for leaving the job. The data show that novice teachers in the intervention and control groups on average felt moderately exhausted. However, novice teachers in the intervention group felt significantly less exhausted at the beginning of the school year than novice teachers without mentor support ($t(177) = 2.38^{**}$, $p = 0.01$). At the end of the school year, they felt significantly less exhausted than both control groups (without mentor support: $t(172) = 2.06^*$, $p = 0.02$; with mentor support: $t(176) = 1.78^*$, $p = 0.04$). Looking at the scale, exhaustion decreased for all novice teachers. Interestingly enough, it decreased least over time for the control group with mentor support. Means at the end of the school year 2022/2023 ranged from 1.88–2.63 in the intervention group and 2.12–2.90 in the control group with mentor support ($M_{CG_no_ment} = 2.14$ –2.93). The highest level of agreement in all groups at both measurement points was with the statement ‘Overall, I feel overstrained by my workload.’ In the control groups, only roughly one quarter of novice teachers disagreed or strongly disagreed with this statement. In the intervention group, the percentage was a little higher; just over a third of novice teachers disagreed or strongly disagreed with the statement. At both measurement points, all groups agreed least with the statement ‘At the end of a day’s work, I sometimes feel really depressed.’

In the second survey, novice teachers were also asked how resilient they felt to stress and negative setbacks at work. They had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with four statements about resilience. This scale was included in the survey as a counterpart to emotional exhaustion and can be a predictor for staying in the job. Novice teachers in the intervention and control groups on average felt rather resilient, with means ranging from 2.86–3.05 in the intervention group and 2.79–2.96 in the control group with mentor support ($M_{CG_no_ment} = 2.64\text{--}2.89$). The highest level of agreement in all groups was with the statements ‘I think that I can cope well with work pressure’, with which 85% of novice teachers in the intervention group and 80% of novice teachers in the control group with mentors agreed or strongly agreed (74% in the control group without mentors), and ‘I do not let stress at work get me down’, with which 78% of novice teachers in the intervention group and 68% of the control group with mentor agreed or strongly agreed (73% in the control group without mentors). So even though the majority of novice teachers experienced feelings of exhaustion, they felt resilient nonetheless.

3.7.4.2 Novice Teachers in the Intervention Group Think Their School Is a Better Workplace than Novice Teachers in the Control Groups

The second survey also included questions on job satisfaction. Novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with ten statements about job satisfaction. One of the subscales revolved around satisfaction with the school as a workplace (three statements). The scale on job satisfaction was included in the survey as yet another predictor for staying in the job. The analysis of the data shows that novice teachers in the intervention group and the control groups were on average quite satisfied with their workplace, with means for individual statements ranging from 2.98–3.32 in the intervention group and 2.74–3.14 in the control group with support from a mentor ($M_{CG_no_ment} = 2.64\text{--}3.00$). However, the results of *t* tests show that novice teachers in the intervention group were significantly more satisfied with their workplace than novice teachers in the control group with mentors ($t(178) = -2.41^{**}$, $p = 0.01$) and without mentor support ($t(174) = -2.95^{**}$, $p = 0.01$). The highest level of agreement in all groups was with the statement ‘I enjoy working at this school’; 89% of novice teachers in the intervention group and 82% of novice teachers in the control group with mentors agreed or strongly agreed with this statement (78% in the control group without mentors). The lowest level of agreement overall was with the statement ‘I would like to change to another school if that were possible.’ That said, 8% of novice teachers in the intervention group and 10% of novice teachers in the control group with mentors strongly agreed with the idea of changing schools if it were possible (23% in the control group without mentors).

3.7.4.3 Novice Teachers in the Community of Madrid Want to Stay in the Teaching Profession

In the baseline survey as well as in the second survey, novice teachers had to agree on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with two statements about their plans to make career changes. This scale was included in the survey to examine the tendency towards leaving the teaching profession. Our analysis shows that novice teachers on average had no tendency to leave the teaching profession at the end of the school year or in the long term. In the second survey, only 2% of novice teachers in the intervention group and none in either control group agreed that they were planning to leave the teaching profession after the school year. However, the results of *t* tests show that novice

teachers in the intervention group agreed significantly more strongly with the idea of leaving the profession at the end of the year compared to the control group with mentor support ($t(177) = -1.95^*$, $p = 0.02$). There was no significant difference between the intervention group and the control group without mentor support in this respect. On average, more novice teachers in the intervention group (11%) and the control group without mentor support (14%) agreed with the idea of leaving the teaching profession in the long term, compared to 8% in the control group with mentor support. However, novice teachers in the intervention group agreed significantly more strongly that they were thinking of a career change in the long term in the second survey ($t(101) = 2.16^*$, $p = 0.02$) compared to when they were asked at the beginning of the school year. For novice teachers in either control group, there was no difference. Their tendency to leave at the end of the school year or change careers in the long term remained stable across the two measurement points. The overall low tendency to leave the teaching profession is complemented by the average number of years novice teachers reported to be willing to stay in the teaching profession. However, there were quite a few outliers as well, with ranges going up to 60 years. Nonetheless, the median (which is less affected by outliers than the mean) for both groups with mentor support was 30 years. In the control group without mentor support, the value was much smaller (17.5 years). Since the years one is willing to stay in the profession are correlated with one's age and the intervention group was almost two years older than the control group with mentors, this shows an even stronger willingness of the intervention group to stay in the teaching profession.

3.7.4.4 Intervention Group Mentors' Mentoring Competence Increases After the NEST Mentor Training

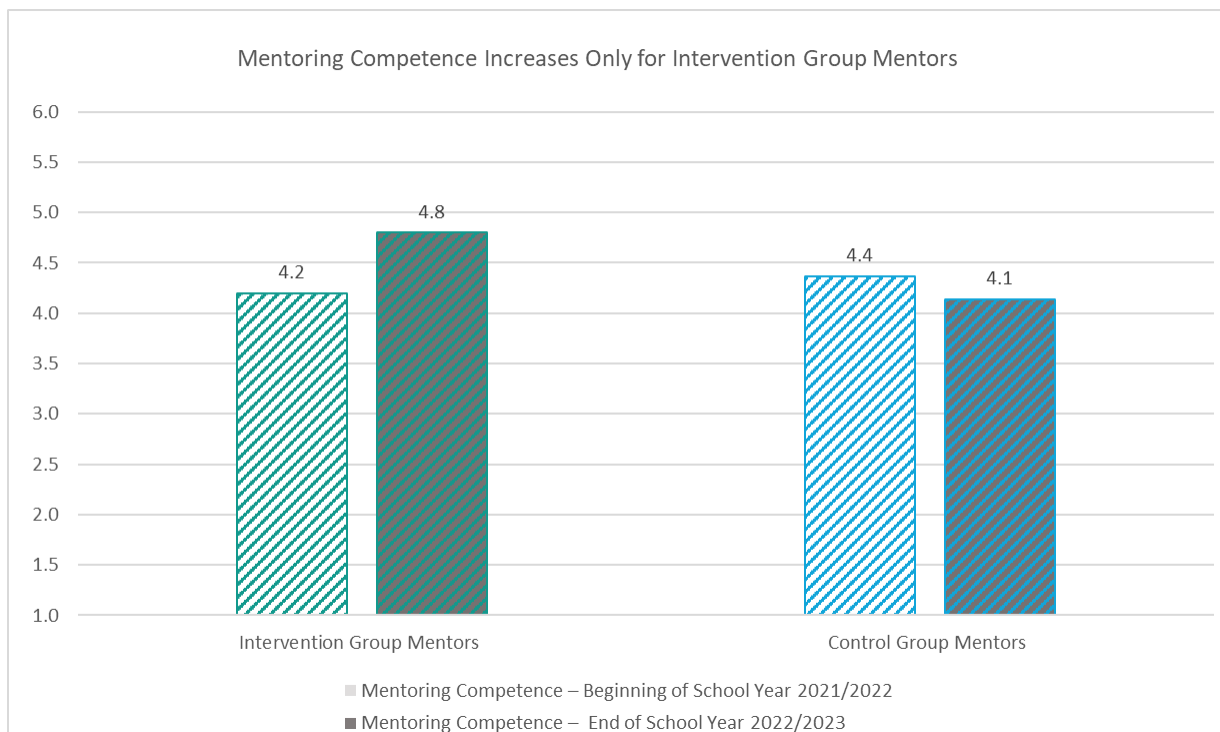


Figure 38: Development of Mentors' Mentoring Competence Over Time by Mentor Group (Community of Madrid)

Mentors were asked to assess their own mentoring competence on a 6-point Likert scale ranging from 1 (*no ability*) to 6 (*very high ability*) regarding twelve different skills. Our analysis shows that mentors assessed their mentoring competence prior to the mentor training programme as quite high, with a mean of 4.18. However, at the end of the school year 2021/2022, i.e. after the NEST mentor training, they assessed their mentoring competence distinctly higher ($M_{m_IG} = 4.7$), and at the end of the school year 2022/2023, higher still, with a mean of 4.78. Compared to the mentor control group, they started with a lower self-assessment of their overall mentoring competence. However, while their self-assessed competence continuously increased over time, the self-assessed mentoring competence of the control group decreased, as depicted in Figure 38.

Since the mentor training programme focused especially on supporting mentors with building a trustful relationship, initiating reflection by novice teachers, adapting to novice teachers' specific needs, and building resilience in novice teachers, we specifically examined the statements regarding mentoring competences which revolved around these topics.

Mentors' self-assessed competence increased over time for the four statements, as depicted in Figure 39. Mentors assessed themselves highest regarding supportive relationship-building and prompting reflection.

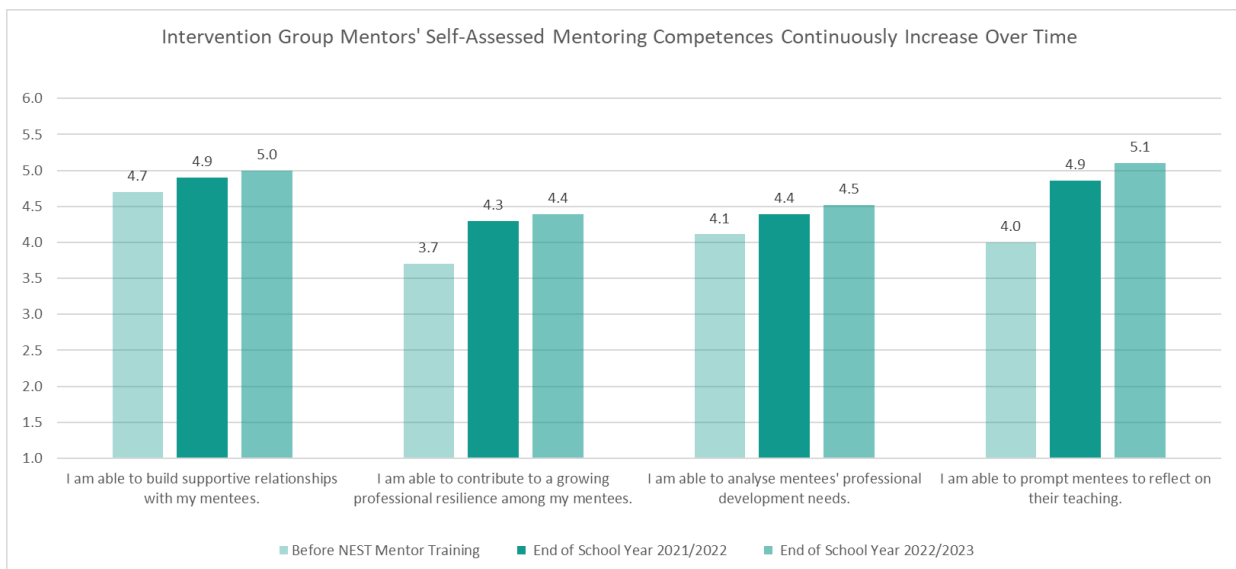


Figure 39: Intervention Group Mentors' Development of Specific Mentoring Competences (Community of Madrid)

3.7.4.5 Novice Teachers Find Intervention Group Mentors More Competent than Control Group Mentors

In the second survey, novice teachers had to assess their mentor's mentoring competence by agreeing on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) with twelve statements about their mentor's mentoring competence. This scale was included in the survey to examine mentoring competence not only from the perspective of mentors but also to capture the perceptions by novice

teachers as the recipients of mentoring. In the control group, this question was only posed to novice teachers who had reported on an earlier question that they had a mentor to support them.

The majority of novice teachers in both groups strongly agreed with the statements about their mentors' competence, with means ranging from 3.46–3.75 in the intervention group and 3.10–3.59 in the control group. Even so, novice teachers in the intervention group assessed their mentors' mentoring competence significantly higher than novice teachers in the control group ($t(181) = -3.56^{**}$, $p < 0.01$). Agreement in both groups was highest for the statement 'My mentor gives me constructive feedback', with 76% of novice teachers in the intervention group and 64% of novice teachers in the control group strongly agreeing with the statement. Regarding the four statements which were analysed above for the mentors, the percentage of novice teachers who strongly agreed with the individual statements was always higher in the intervention group. This was especially true regarding the mentor prompting reflection about teaching. Here, 72% of novice teachers in the intervention group strongly agreed, compared to 39% in the control group.

For further analysis of mentoring competence, we calculated an ordinary least squares (OLS) regression with mentoring competence as the dependent variable, i.e. we wanted to examine which variables affect mentoring competence. As previously mentioned, this analysis can only be based on novice teacher data, which means that we can only examine what factors affect mentoring competence from the perspective of novice teachers. As independent or predictor variables, we used the extent of mentoring focus, the time and organisation of mentoring conversations, the perceived fit of mentoring practices, and a dummy variable taking the value 1 for novice teachers in the intervention group and the value 0 for novice teachers in the control group. This variable was created to test the effect of having been part of the intervention as opposed to having been part of the control group during the school year. Gender and age were used as control variables. We would have liked to include even more predictors, such as the number of formal and informal mentoring conversations. However, these were too highly correlated with other predictors. We also tested interaction effects between the intervention dummy variable and the predictors, but there were no significant interaction effects. Correlations of predictive variables in our final model are lower than 0.45. Results for the OLS regression show that the model was significant ($F(6, 173) = 27.67^{**}$, $\text{Prob}>F = 0.00$) and explained 47% of the variance of the mentoring competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded a significant effect for the allocation of time and organisation of mentoring, i.e. the better novice teachers perceived the organisation and time allocation of their mentoring conversations, the higher they assessed their mentor's mentoring competence (*beta*: 0.54^{**}). It also yielded a significant effect for the extent of mentoring focus (*beta*: 0.19^{**}), i.e. the stronger a focus novice on various challenges novice teachers perceived in their mentoring, the better they rated their mentors' mentoring competence. There was also a small but significant effect for the intervention dummy variable (*beta*: 0.11^{*}). This means that novice teachers in the intervention group assessed their mentors' mentoring competence significantly higher than novice teachers in the control group.

3.7.4.6 NEST Mentor Training Programme Helps to Improve Intervention Group Mentors' Teaching Practice

Intervention group mentors were also asked to answer on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*a lot*) to what extent the NEST mentor training programme helped them to improve their own teaching practice. All mentors reported that the training helped them at least to some extent to improve their own teaching practice, but the majority, 52% of the mentors, thought that the NEST training programme helped them a lot to improve their own teaching practice ($M_{m_IG} = 3.41$).

3.7.4.7 Teaching Competences of Novice Teachers with Support from Intervention Group Mentors Increase Over Time

In the first and the second survey, novice teachers had to assess their own teaching competence on a 6-point Likert scale ranging from 1 (*no ability*) to 4 (*very high ability*) regarding different skills relevant for teaching in general, for interacting with students, and for supporting parents. The data allowed for building one subscale on competences to interact with students (eleven statements) and one subscale on interaction with parents (four statements). The scales were included because we wanted to examine whether novice teachers with an intervention group mentor increased their teaching competence to a higher degree than novice teachers without a specially trained mentor. Furthermore, we were interested in what other factors influenced the teaching competence of novice teachers.

In the intervention group, novice teachers' self-assessed teaching competences regarding student interactions were significantly lower at the beginning of the school year than the self-assessed teaching competences of novice teachers in the control group with mentor support ($t(182) = 3.27^{**}$, $p < 0.01$) and without mentor support ($t(178) = 3.81^{**}$, $p < 0.01$). However, the intervention group's self-assessed teaching competences regarding student interactions significantly increased between the beginning and the end of the school year ($t(102) = 1.93^*$, $p = 0.03$), while the self-assessed competence of the two control groups did not significantly change during the same time. As a result, the significant difference in the self-assessed competence of the intervention group compared to the control group with mentor support had eroded at the end of the school year, while there was still a significant difference compared to the control group without mentor support. However, the size of this difference decreased ($t(174) = 2.11^*$, $p = 0.02$). On average, novice teachers in all groups thought they had average to high abilities regarding competences for student interactions at the end of the school year (T2: $M_{IG} = 4.56$; $M_{CG_ment} = 4.71$; $M_{CG_no_ment} = 4.76$). In the intervention group, 22% of novice teachers thought they had high or very high abilities, and in the control groups, 30% of novice teachers thought they had high or very high abilities.

Examining the individual statements revolving around student interactions, novice teachers in all groups assessed themselves highest at the end of the school year regarding the competences about showing an open attitude so that students can approach them with their problems (T2: $M_{IG} = 5.05$, 78% high or very high ability; $M_{CG_exp} = 5.16$, 78% high or very high ability; $M_{CG_noexp} = 5.38$, 89% high or very high ability). In the intervention group and in the control group without mentor support, the skill that was rated second highest was creating an open classroom climate for students to voice their own ideas (T2: $M_{int} = 4.81$, 77% high or very high ability; $M_{CG_no_ment} = 5.15$, 84% high or very high ability), while in the control group with mentor support, the next highest rated skill was imparting self-confidence in timid pupils ($M_{CG_ment} = 4.99$, 79% high or very high ability).

Results for the competence of supporting parents are very similar to the results for competences regarding student interactions. In the intervention group, novice teachers' self-assessed teaching competences regarding parent support were significantly lower at the beginning of the school year than the self-assessed teaching competences of novice teachers in the control group with mentor support ($t(177) = 4.78^{**}$, $p < 0.01$) and without mentor support ($t(172) = 3.5^{**}$, $p < 0.01$). However, the intervention group's self-assessed teaching competences regarding parent support significantly increased between the beginning and the end of the school year ($t(96) = 3.1^{**}$, $p < 0.01$), while the self-assessed competence of the two control groups did not significantly change during the same time. Even though novice teachers' self-assessed competences significantly increased over time, they still felt significantly less competent than novice teachers in the control groups (CG_{ment}: $t(176) = 2.63^{**}$, $p < 0.01$; CG_{no_ment}: $t(172) = 2.1^*$, $p = 0.02$). On average, novice teachers in all groups thought they had average abilities regarding competences for parent support at the end of the school year (T2: $M_{IG} = 3.71$; $M_{CG_ment} = 4.09$; $M_{CGI_no_ment} = 4.01$). However, 10% of novice teachers in the intervention group thought they had high or very high abilities (CG_{ment}: 26%; CG_{no_ment}: 16%).

Examining the individual statements revolving around parent support, novice teachers in the intervention group and the control group without mentor support assessed themselves highest at the end of the school year regarding the competence of showing parents how to positively influence the education of their children (T2: $M_{IG} = 3.73$, 19% high or very high ability; $M_{CG_ment} = 4.26$, 43% high or very high ability; $M_{CG_no_ment} = 4.03$, 38% high or very high ability) and advising parents how to influence the learning environment of their children (T2: $M_{IG} = 3.73$, 23% high or very high ability; $M_{CG_ment} = 4.18$, 45% high or very high ability; $M_{CG_no_ment} = 4.14$, 42% high or very high ability).

For further analysis of teaching competence, we calculated an OLS regression with teaching competence regarding student interactions at the end of the school year as the dependent variable since we wanted to examine what factors affect teaching competence. As independent or predictor variables, we used the preparedness for school challenges by initial teacher education, the satisfaction with the school as a good workplace, the time allocation and organisation of mentoring conversations, resilience, competence at the beginning of the school year, and a dummy variable taking the value 1 for novice teachers in the intervention group supported by an intervention group mentor and the value 0 for novice teachers in the control group with support from a mentor. Gender and age were used as control variables. We also tested interaction effects between the intervention dummy variable and the predictors, but there were no significant interaction effects. Correlations of predictive variables in our final model are lower than 0.33. Results for the OLS regression show that the model was significant ($F(7, 169) = 19.54^{**}$, $\text{Prob}>F = 0.00$) and explained 42% of the variance of the teaching competence. To compare the impact of effects, we calculated standardised *beta* coefficients. The model yielded significant effects for the allocation of time and organisation of mentoring and the self-assessed teaching competence at the beginning of the school year. Whether novice teachers were in the intervention group or in the control group did not affect their self-assessed competence at the end of the school year. Unsurprisingly, the strongest predictor was the self-assessed competence at the beginning of the school year, i.e. the better novice teachers assessed themselves at the beginning of the school year, the better they assessed their competences at the end of the school year (*beta*: 0.53). However, the time allocation and organisation of mentoring conversations also had a significant effect on the novice teachers' teaching competence (*beta*: 0.14), i.e. the better novice teachers rated the time allocation and organisation of their mentoring conversations, the better they assessed their teaching competence regarding student interactions.

3.7.5 Discussion of Evaluation Results

The evaluation of the NEST programme indicates that novice teachers working at disadvantaged schools in the Community of Madrid do benefit from being supported by a well-trained mentor. In order to enable an effective scaling-up of the NEST training and the subsequent mentoring, we have to consider the implications of the results at the micro-, meso-, and macrolevel.

The analysis of the results implies that the NEST mentor training and the NEST mentoring had many positive effects at the microlevel in the Community of Madrid. According to both the mentors themselves and the novice teachers they mentored, the mentoring provided after the NEST training was more focused on some of the specific challenges of novice teachers who are teaching at disadvantaged schools. The increase in focus was perceived more strongly by the novice teachers than the mentors themselves. Moreover, the level of focus was stronger directly after the training than a year later, which suggests that it could be beneficial to revitalise the mastery of the content of the training for the mentors in the second (and subsequent) years after the initial training.

In addition to the improvement in mentoring focus, the intervention group mentors also increased the use of facilitative mentoring practices, whereas there was a decrease in the use of such mentoring practices among the control group mentors. Likewise, mentors in the intervention group indicated that the training helped them to adapt their mentoring practices to the needs of the novice teachers. This was confirmed by the novice teachers in the intervention group, who experienced a very good fit between their needs and the use of the different mentoring practices by the mentor who supported them. The intervention group mentors self-assessed their mentoring competence higher after the completion of the training. This finding was corroborated by the novice teacher data as novice teachers in the intervention group in the Community of Madrid assessed the mentoring competence of their mentors higher than those in the control group. This was mainly due to the good allocation of time and organisation of the mentoring and the previously discussed stronger level of focus of the mentoring. Mentors who completed the training also perceived a positive effect of the training on their own teaching competences. Finally, the mentoring led to an increase in the teaching competences of the novice teachers in the intervention group. These results show that the NEST mentor training had two positive impacts. First, it had positive effects on the mentors themselves. Second, there are clearly positive effects resulting from the NEST mentoring on the novice teachers working at disadvantaged schools in the Community of Madrid.

At the mesolevel, schools are the main institutions involved with the NEST project. Schools are the workplace of novice teachers and therefore play an essential role in the experiences of novice teachers. Although the teachers in the Community of Madrid seemed to be satisfied with their job and viewed their school as a good workplace in general, schools could also play a part in supporting the novice teachers better with the challenges they face during their first years of teaching. It is positive that the novice teachers in the Community of Madrid did not feel that challenges related to the school building, instruction materials, or staff shortages at the school hindered the school a lot in providing good quality instruction. However, schools would still benefit from appointing more specialised teaching personnel (e.g. teachers who focus specifically on children with special educational needs) who could support the novice teachers in the classroom. Very few novice teachers in the Community of Madrid had participated in an induction programme at the start of their career. With that, schools could improve the support for their novice teachers by setting up induction programmes specifically focused on teaching at that school.

Such induction programmes should help novice teachers to feel better prepared for the challenges they might face during their first years of teaching at a disadvantaged school.

The implications of the results of the evaluation of the NEST project at the macrolevel are vast. For an effective continuation and scaling-up of the NEST project, consideration should be given to how the NEST training and subsequent mentoring could be embedded into the already existing structures of the education system in the Community of Madrid. The novice teachers who participated in the NEST project did not feel very well prepared for the challenges they faced at their schools by the initial teacher training programme they had completed. This means that novice teachers who work at disadvantaged schools in the Community of Madrid might really benefit from the support of a mentor to help them prepare for and deal with the challenges they face in their first years of teaching at a disadvantaged school. However, only half of the novice teachers in the control group had a mentor during the first years of their teaching career. There seems to be a need for good quality mentoring for novice teachers working at disadvantaged schools in the Community of Madrid.

Further, our analysis suggests that the climate for the implementation of good quality mentoring in the Community of Madrid is mixed. On the one hand, both the mentors and the novice teachers agreed that mentoring was not generally very well accepted and valued in the Community of Madrid. On the other hand, novice teachers had very positive attitudes towards being mentored, and the mentors showed high levels of enthusiasm for mentoring the novice teachers. The combination of the absence of adequate support (not enough focus on challenges by the teacher training programme, lack of induction programmes at schools, and lack of mentoring) for novice teachers working at disadvantaged schools and the overall positive attitudes towards mentoring by both mentors and novice teachers indicates that a better structure to support novice teachers working at disadvantaged schools would be well accepted by the teaching force in the Community of Madrid. The NEST project implemented a minimal (in terms of time and cost) but multifaceted intervention which, according to our evaluation, positively affects both mentoring competences and teaching competences. Therefore, implementing a multifaceted intervention such as the NEST project seems a promising strategy for improving the education system in the Community of Madrid from several angles at once.

4 Discussion of Overall NEST Evaluation Results

This final evaluation report presents the results of the evaluation of the NEST mentor training programme and the subsequent adaptive mentoring for novice teachers working at disadvantaged schools. The NEST project was implemented in seven education systems. Due to structural and cultural differences between the education systems on the one hand and a large variation in sample sizes of both intervention and control groups in the different education systems on the other hand, it was not appropriate to compare the education systems on a one-to-one basis for all the different variables. However, in the following discussion, we will try to highlight some of the overarching similarities and/or striking differences between the education systems. We will look at the implications of the results at the micro-, meso-, and macrolevel. At the microlevel, the results will be discussed in light of the hypotheses that were stated in Section 2.2.2.1.

4.1 Microlevel Results

At the beginning of the project, all of our hypotheses were directed at the microlevel. Therefore, this section discusses to what extent the results of the evaluation corroborate the expectations that we had at the beginning of the project by comparing the actual results to the hypotheses detailed in Section 2.2.2.1. Our first research question and the four hypotheses derived from it focused on the effects of the mentor training programme on the mentors' mentoring skills. Although the samples for the mentors were too small to test for statistically significant differences, the large differences in the means do indicate that the mentor training programme had a very positive effect on the mentors.

In all education systems, the mentors' self-assessed level of mentoring competence increased after the NEST mentor training compared to before the training ($H1_{a1}$). This is in line with the expectations of the first hypothesis. In addition, for the education systems where a mentor control group existed, the NEST-trained mentors assessed their mentoring competence higher than the mentors in the control group ($H1_{a2}$). We expected the mentoring focus on specific challenges to be higher after the completion of the NEST training ($H1_b$), but the results are more mixed for this hypothesis. In most of the education systems, the mentors did indeed increase the level of focus of their mentoring directly after the training, but in some education systems (e.g. Bulgaria and the Community of Madrid), the level of focus of their mentoring activities decreased during the following year. In Catalonia and Romania, mentors really seemed to have internalised what they had learned regarding mentoring focus, and they kept their focus at the same level or even increased it further. In the Flemish Community and the Wallonia-Brussels Federation, the mentors' level of focus decreased for some and increased for other challenges, which suggests that the mentors might have adapted their level of focus to the needs of the novice teachers. We also expected the level of mentoring adaptivity to be higher after the training ($H1_c$). The adaptivity referred to in this hypothesis applied to the use of different types of mentoring practices, i.e. facilitative versus directive practices. In all education systems, mentors believed at least to some extent that the mentor training helped them to adapt their mentoring approach to the personality of the novice teacher or the social situation in the classroom. Overall, the results of the evaluation suggest that the NEST mentor training had very positive effects on the mentoring skills of the intervention group mentors in all education systems.

The second research question relates to how novice teachers working at disadvantaged schools assessed the mentoring they received. Since in most education systems except for the Flemish Community and Austria, the samples for the novice teachers were much larger than the mentor samples, we were able to test for significant differences at this level. In Bulgaria, Catalonia, and the Community of Madrid, novice teachers in the intervention group did indeed rate the competences of their mentor significantly higher than the novice teachers in the control group (H2_a). In Romania, means for the intervention group were also distinctly higher. In the Flemish Community and the Wallonia-Brussels Federation, however, the means showed no difference between the intervention and the control group or were even slightly higher for the control group. The difference between the education systems in this regard could possibly be explained by the way the NEST mentoring was implemented; for instance, in the Flemish Community and the Wallonia-Brussels Federation, it was not always possible to conduct the observation and feedback cycles as stipulated in the NEST training.

We see similar results for the second hypothesis related to the second research question. Again, in Bulgaria, Catalonia, and the Community of Madrid, novice teachers in the intervention group perceived a significantly better fit between the mentor practices used and their needs than the novice teachers in the control group (H2_b). This was also true in these three education systems when looking at facilitative and directive practices separately. In the Wallonia-Brussels Federation, intervention group novice teachers perceived a slightly better fit than the control group, but this was not significant. In the Flemish Community, the mean for the control group was slightly higher, but all novice teachers seemed to be very satisfied with the use of the different mentoring practices (i.e. high mean in both groups). In Romania, however, the control group perceived a much better fit, while many novice teachers in the intervention group would have liked their mentor to use the practices less.

With regard to the focus of mentoring as per the third hypothesis for this question, the perceived mentoring focus was significantly higher for the intervention group for all challenges only in Catalonia (H2_c). In Bulgaria and Madrid, the intervention group perceived a higher level of focus only for a few challenges, and in Madrid, the intervention group also perceived a significantly lower focus for one challenge. In Romania, means for the intervention group were slightly higher than for the control group, but the difference was not significant. In both the Flemish Community and the Wallonia-Brussels Federation, the control group perceived more focus than the intervention group. In the Wallonia-Brussels Federation, where we could test for significance, the difference in perceived mentoring focus was significant. In sum, we see a rather mixed picture when it comes to the assessment of mentoring by the novice teachers. In some education systems (Bulgaria, Catalonia, and the Community of Madrid), the novice teachers in the intervention group assessed the mentoring they received better than the novice teachers in the control group. For the other education systems, the differences were either not significant, or the control group assessed the mentoring as having been better. The qualitative study conducted in Austria indicated that the novice teachers there were highly satisfied with the mentoring provided by their NEST-trained mentor.

The third and final research question and the hypotheses derived from this question focus on the extent to which the mentoring provided by the NEST-trained mentors benefitted the novice teachers. In Catalonia and Romania, novice teachers in the intervention group had significantly higher teaching competences at the end of the school year than the control group without mentor support, and in Catalonia this is true also for the control group with mentor support (H3_a). However, in Bulgaria and the

Community of Madrid, the self-assessed teaching competences of the intervention group were significantly lower at the start of the year than those of the control group, but in the intervention group teaching competences had significantly increased at the end of the year compared to the beginning. This resulted in a smaller difference or no difference at all in self-assessed teaching competence at the end of the year. In the Flemish Community and the Wallonia-Brussels Federation, there were no significant differences between the groups, and the teaching competences also stayed stable over time.

With regard to the resilience-related hypothesis for the third question, results are a little mixed. The question on resilience was included only in the second survey, so we have data only for the end of the school year. In Catalonia, novice teachers in the intervention group were significantly more resilient than novice teachers in the two control groups (H3_b). In the other education systems, novice teachers mostly felt rather resilient at the end of the school year, but there was no difference between the intervention and control groups.

Turning now to the school as a workplace, in Catalonia and the Community of Madrid, novice teachers in the intervention group were significantly more satisfied with their school as a workplace than novice teachers in both control groups (H3_c). However, the intervention group teachers in Bulgaria were significantly less satisfied with their school as a workplace than both control groups. In the Flemish Community, the Wallonia-Brussels Federation, and Romania, there was quite a high level of satisfaction overall, but no significant differences between intervention and control groups.

Finally, the hypothesis that NEST novice teachers would express a significantly higher willingness to stay in the teaching profession than the novice teachers in the control group was not confirmed by the evaluation of the data (H3_d). Overall, novice teachers in the intervention group tended to agree more strongly that they might consider a career change than the novice teachers in the control groups. However, in all education systems, teachers in all groups showed a great willingness to stay in the profession, and the percentages of novice teachers that were thinking about leaving were very small.

Looking at the complete picture, we can conclude that the effects of the NEST mentor training are strongest closer to the initial intervention (i.e. the NEST mentor training) and decrease as time passes after the initial intervention, although this happened to a different extent in the six education systems in which we conducted an extensive quantitative evaluation. The mentors in all education systems seemed to be positive about the effects of the training they received. The assessment provided by the novice teachers of their NEST mentors' mentoring (i.e. one step further away from the NEST training) in some education systems showed fewer or less strong positive effects, although in Bulgaria, Catalonia, and the Community of Madrid, the novice teachers' assessment of their mentors' mentoring was still predominantly very positive.

Lastly, in most education systems, it was more difficult to see large effects regarding the impact of the mentoring on the novice teachers themselves, although the results in Catalonia were still very positive. In Romania, we actually found more positive impacts from the NEST mentoring on the novice teachers than in the assessment that the novice teachers received from their NEST mentors. It is possible that the novice teachers in Romania experienced a lot of support from their mentors, but that they were not really looking for more focused types of mentoring or for any adaptation of mentoring practices to their specific needs. Overall, the results of the NEST training at the microlevel are very positive. The NEST training seems to have positively influenced the mentoring provided by the NEST mentors. Moreover, the NEST mentors

seem to have been able to support novice teachers working at disadvantaged schools during the first years of their teaching career.

4.2 Mesolevel Results

The NEST project focuses specifically on novice teachers working at disadvantaged schools. Yet the evaluation concentrated mostly on the effects of the mentor training on both the mentors and their mentoring and the novice teachers and their teaching (microlevel). That notwithstanding, the evaluation highlights certain aspects that are related to the school (i.e. the mesolevel of the education system). The school is important since it is the place where the teaching and mentoring take place.

First of all, our analysis suggests that there are vast differences between the education systems in the extent to which disadvantaged schools offer induction activities to novice teachers. In the Flemish Community and the Wallonia-Brussels Federation, the majority of novice teachers in the sample had taken part in induction programmes. However, in Bulgaria, Catalonia, the Community of Madrid, and Romania, induction programmes were available only to a minority of the novice teachers. In almost all education systems, the induction programme consisted of a variety of different activities for those novice teachers who did take part. In other words, where schools did offer induction programmes, they were quite intensive. However, in most education systems, more schools should organise induction programmes in order to support the novice teachers better at the start of their teaching career.

Secondly, in some education systems, the mentors were teachers from the same school as the novice teachers (the Flemish Community, the Wallonia-Brussels Federation, Catalonia, and the Community of Madrid), whereas in other education systems, the mentors came mostly from outside the school (Austria, Bulgaria, and Romania). We did not ask any specific questions about how satisfied the novice teachers were with the mentor being either external or internal to their school. However, the novice teachers who were interviewed as part of the qualitative study in Austria mentioned that they really liked it that the mentors came from outside their school. External mentors made the novice teachers feel less judged, and the mentors were able to provide fresh viewpoints. We cannot conclude that external mentors would work better in each of the education systems since we did not conduct a comparable qualitative study in education systems where mentors were internal to the school. However, when schools are setting up mentoring to support novice teachers, they should consider the advantages and disadvantages of providing internal or external mentors.

Finally, we asked in the surveys to what extent the novice teachers believed that challenging factors related to the school (e.g. instruction materials, the school building, or the available support personnel) hindered the school's capacity to provide quality instruction. Novice teachers in all education systems thought that these factors at most slightly hindered the quality of instruction. In most education systems, novice teachers indicated that a shortage of support personnel was the most challenging factor hindering the quality of instruction. Overall, it can be considered a very positive result that novice teachers working at disadvantaged schools in the participating education systems felt capable of providing good quality instruction at their schools.

4.3 Macrolevel Results

Although the evaluation of the NEST training focuses mainly on the microlevel, the implications of the results are also large at the macrolevel. For an effective continuation and scaling-up of the NEST project, consideration should be given to how the NEST training programme and subsequent mentoring could be embedded into the already existing structures of the different education systems.

The climate for the implementation of good quality mentoring to support novice teachers is good in all education systems. In all education systems apart from Catalonia and the Community of Madrid, both mentors and novice teachers agreed that mentoring was generally well accepted in their society. Moreover, novice teachers in all education systems had positive attitudes towards being mentored, and the mentors showed high levels of enthusiasm for mentoring. But a good climate for mentoring is not the only prerequisite for a successful implementation of the NEST mentor training programme and subsequent mentoring.

Novice teachers in all education systems indicated that the initial teacher training programme they had completed had not prepared them well for the challenges related to teaching at a disadvantaged school. In most education systems, the teacher training prepared the novice teachers best for managing a diverse classroom effectively, but even so, many novice teachers did not feel well prepared for this challenge. The qualitative study we conducted in Austria suggests that the issues that novice teachers are facing in the disadvantaged school context are highly diverse. Since this is already the case within one education system, the diversity in challenges will probably be even bigger across the seven education systems. For this reason, it is important that the NEST mentor training programme should prepare the mentors to adapt their mentoring towards the specific needs of the novice teachers who they are mentoring.

The education systems also differ considerably in the extent to which novice teachers working at disadvantaged schools are already being supported by mentors. Mentor support was highest in the control groups in Austria, the Flemish Community, and the Wallonia-Brussels Federation. In the other education systems, only a minority of the novice teachers in the control group had a mentor to support them. This indicates that a mentoring structure in which all novice teachers who work at disadvantaged schools can benefit from the support of a well-trained mentor is lacking in these education systems. The combination of the overall positive climate for mentoring and the lack of existing support for novice teachers working at disadvantaged schools supports the assumption that there is a need for a mentor training programme and good quality mentoring for novice teachers in most of the participating education systems.

The NEST project shows that it is possible to implement a relatively small intervention in terms of time and cost that creates positive effects for both mentors and novice teachers teaching at disadvantaged schools. With only minor adaptations, the same training was provided for mentors in seven different European education systems, and the training has been shown to have positively impacted the subsequent mentoring and the competence and teaching practice of novice teachers in all education systems. However, the programme was more successful in some education systems than in others, especially when we are considering the impact on the novice teachers' teaching (i.e. the effects the furthest away from the locus of intervention). It is difficult to explain these differences in the level of success since we cannot easily compare the education systems due to their different structures, cultural

differences, and different sample sizes. However, it stands to reason that mentoring had a less positive impact on novice teachers in the Flemish Community and the Wallonia-Brussels Federation because it was not possible for the observation and feedback cycles to take place in all schools in these education systems; and it is these cycles that were the core of the mentoring provided by the NEST-trained mentors. Overall, however, the NEST project seems to have been successful in the implementation of a single, largely unified mentor training programme in seven European education systems with completely different cultures and existing structures.

4.4 Limitations and Outlook

The results of the evaluation of the NEST project should be interpreted cautiously. First of all, the NEST training and the subsequent NEST mentoring were implemented in seven European education systems in five countries. For this reason, the surveys were translated into seven languages. The combination of linguistic, cultural, and structural differences between the seven education systems required the inclusion of multiple measurement points in the evaluation design and introduced a certain level of difficulty and complexity in comparing the results of the NEST project between the different systems. Therefore, the evaluation focused mainly on the differences between the intervention and control groups within the same education system, and on differences between the two (for the novice teachers) or three (for the mentors) measurement points of the survey. In some instances, however, we considered differences and similarities between the education systems and tried to put them into context by exploring possible reasons for any such variations. However, since various factors, such as culture differences in the implementation of the NEST training and the subsequent mentoring, might have impacted the results, we cannot determine with certainty the exact reason for any differences or similarities.

The main focus of the evaluation, therefore, was on trying to find effects of the interventions within the individual education systems. For the mentors, we were able to compare the respective intervention and control groups only at a descriptive level due to the small sample sizes. However, this was already clear from the outset. In Bulgaria, only the mentors taking part in the NEST intervention were surveyed, and we could describe any development over time only for those intervention group mentors. Regarding novice teachers, we were able to test for differences between the intervention group and the control group in Bulgaria, Catalonia, the Community of Madrid, Romania, and the Wallonia-Brussels Federation; but in Austria and the Flemish Community, the sample sizes were too small to perform inferential tests. In Austria, the issue of low participation, especially for the second cohort of control group teachers, was expected. Due to a policy change, which obliged all novice teachers to participate in mentoring as part of an induction programme, interest to participate in the NEST programme declined drastically. Under this changed situation, we decided instead to conduct a qualitative study to complement the quantitative results of the evaluation.

In other education systems, the reasons for low sample sizes were related to two factors: participant recruitment during the pandemic, and high survey dropout rates. In terms of timing, it was very hard to recruit enough mentors and novice teachers for control groups and intervention groups during the COVID-19 pandemic. In a way, we were fortunate that the plan had been all along to use online surveys in all education systems. However, an online survey format in itself generally causes a higher dropout rate of participants than paper-and-pencil surveys which are administered in person. We found that, while most mentors and novice teachers did still take part in the NEST programme, some simply did not complete all

required surveys. Interestingly enough, Bulgaria and Romania proved to be more resilient than the other education systems. This might be partly due to the fact that the project partners in the Eastern countries more actively chased participants who had not yet completed the surveys. In particular, sending messages to participants via social media proved to be very effective. In addition, our evaluation showed that dropout rates were lower in education systems where there was a financial incentive to complete all surveys (i.e. Bulgaria, Catalonia, and the Community of Madrid). However, due to legal differences between the participating countries, it was not possible to use this strategy in all education systems. In terms of design considerations for future projects, our experience shows that it is critical to dedicate significant effort to recruiting large intervention and control groups. In concrete terms, the project design should aim to recruit at least 50 per cent more participants at the start of the project than are required for meaningful analysis at the end, especially so for the control group.

The project design deliberately included two successive cohorts of novice teachers who were followed over the course of one year each, rather than one cohort that was followed over two years. This design choice had at least three positive effects. Firstly, having two cohorts for the novice teachers helped to increase sample sizes since it gave the education systems two years rather than just one to find novice teachers who could participate in the project. Additionally, dropout was likely also lower because the novice teachers were obliged to be part of the project only for one school year instead of two. Secondly, having the two cohorts enabled us to compare the perspectives of the novice teachers in the two cohorts, which in concrete terms meant that we could capture mentees' perspectives on their mentor's mentoring immediately after the mentor training (year one) and a year later (year two). Thirdly, having the two cohorts meant that any questions in the survey for the first cohort that for various reasons turned out to be unproductive in terms of data analysis (i.e. respondents not understanding the question correctly, ceiling effects, etc.) could be changed or removed altogether from the survey for the second cohort. In an ideal world, we would have liked to conduct a pilot study to identify and filter out any such unproductive questions before the start of the main study. However, in reality, most projects do not allow the time or financial resources necessary for a pilot study, and the NEST project was no exception. In this case, field trials are the second-best option.

A mixture of strategies was used to develop the surveys for the evaluation. The majority of survey questions were taken from existing surveys, such as TALIS (OECD, 2018). These well-established questions worked well and resulted in reliable scales that could be used for the evaluation. For some constructs, however, the evaluation team developed bespoke questions, with mixed success. The items for the scale on mentoring practices were developed based on relevant literature. These items worked well, and we were able to establish two clear factors on this scale, one for directive and one for facilitative mentoring practices. In addition, the self-developed question on the fit between the frequency of use of mentoring practices and the mentees' perceived need for these practices enabled us to compare how well the mentors for the intervention and control groups were able to adapt their practices to the specific needs of the novice teachers; this kind of adaptivity was one of the key elements of the NEST mentor training. The self-developed scale on teachers' needs also worked well and resulted in two factors. To deal with acquiescence bias, we developed two questions in which the respondents had to use different ranking systems. To assess mentoring characteristics, respondents had to choose the three characteristics they deemed most important. To determine which incentives are most important to mentors to continue mentoring, mentors had to allocate 100 per cent in total across all answer choices; this meant that respondents had to weigh the importance of different incentives and were unable to state that everything

was very important. Both these questions worked well and avoided acquiescence bias. However, because it can be more challenging for respondents to allocate 100 per cent across various items, it is probably advisable to limit the number of such questions in the survey.

A few questions were included in the surveys that did not work in terms of statistical measures of validity. One of these questions related to the scale on reflection, which means that it was not possible to compare the reflection skills of the novice teachers in the intervention group to those of the control group. Furthermore, since the NEST project focused on novice teachers working at disadvantaged schools, we attempted to establish in what ways these schools could be seen as disadvantaged. To this end, the first survey for the first cohort included a question which asked novice teachers to compare their school to other schools in their education district with regard to certain aspects of disadvantage. However, initial results indicated that this question was too complicated. Therefore, we included a different question in the subsequent survey in which novice teachers had to indicate the percentage of the prevalence of these aspects for their school (e.g. the number of students who speak a different language at home than at school), but unfortunately this question did not work either. It is possible that the novice teachers were simply unable to assess or even 'guesstimate' these factors since they had only just started teaching at the school. In fact, we should actually have asked school principals for this information, but this was outside the scope of the evaluation. In future projects, we would probably frame such a question in terms of a target class – which is how the TALIS survey (OECD 2018) addresses this issue – in order to receive more information about the level of disadvantage of schools. Fortunately, the surveys included other questions, such as the teacher needs scale and the question about where extra budget needed to be invested, that indicate the areas in which novice teachers feel they need extra support. Drawing on the answers to these questions, we were able to get a sense of the challenges experienced by the novice teachers working at disadvantaged schools. Lastly, the open-ended questions (e.g. 'How many mentoring conversations did you have?') did not work well and yielded quite a few outliers and implausible answers. In a next iteration, it would be better to use predetermined answering categories for these questions.

The qualitative study in Austria yielded interesting insights into the perspectives of the novice teachers that complemented the quantitative results from all education systems. Due to language barriers and time constraints, we were unable to conduct qualitative research in the other education systems participating in the NEST project. However, our partners from Teach For Bulgaria and *Empieza por Educar* indicated that they noticed a shift in mindset among the mentors in the intervention group during the course of the project. The intervention group mentors changed their understanding of their role as a mentor. Where they originally thought that they should act as a model, instructing and teaching the tools of the trade, at the end of the project, they saw their role as less of a one-way street. Mentors stated that they invested in collaborative, trustful, and mutual relationships in which mentors do not only support the novice teachers but also learn from them. Through the NEST training they received and the mentoring they subsequently provided to their novice teachers, the mentors themselves also developed a more open attitude towards classroom observation in general. Apparently, the mentors reported that they made it a habit to observe their colleagues' lessons and, in turn, invite their peers to observe their own lessons. In this way, mentors started to create a culture of giving each other feedback and learning with and from each other. Developments such as these are difficult to capture in a quantitative survey, so future evaluation projects could benefit from using interviews or focus groups in addition to quantitative surveys. Such qualitative data could be used to provide context for and to try to identify the reasons behind the quantitative findings.

Overall, the NEST interventions were successful. The evaluation showed positive effects of the NEST mentor training on the mentors' mentoring practices in all seven education systems. In four of the seven education systems (Bulgaria, Catalonia, the Community of Madrid, and Romania), the novice teachers who received the NEST mentoring also clearly perceived more adaptive mentoring and a positive impact on their teaching compared to those in the control group. This shows that it is possible to develop one mentor training that, with only a few adjustments, can be implemented and positively affect mentoring in different European education systems. Of course, this evaluation considered only a small-scale implementation of the NEST project in seven education systems, and scaling-up this initiative in the participating education systems might lead to new challenges. As this present evaluation shows, the existing mentoring structures and legalities in the education systems seem to affect both the implementation and the effects of the NEST mentor training. The NEST mentor training seems more successful in those education systems where there is less of an existing national mentoring structure. Therefore, it is important to consider existing mentoring structures and legalities (e.g. whether mentors will be allowed to observe novice teachers in the classroom) in any given education system before scaling-up or introducing the NEST mentor training. That being said, the evaluation of the NEST training programme suggests that it could be promising to introduce the NEST training and its subsequent mentoring in European education systems that did not take part in this project.

5 Bibliography

Aguilar, E. (2013): *The art of coaching: Effective strategies for school transformation*. San Fransisco, California: Jossey-Bass.

Aguilar, E. (2020): *Coaching for equity: Conversations that change practice*. Hoboken, New Jersey: Jossey-Bass.

Aguilar, E. (2021): *The art of coaching workbook: Tools to make every conversation count*. Hoboken, New Jersey: Jossey-Bass.

Allen, R., Burgess, S., & Mayo, J. (2018). The teacher labour market, teacher turnover and disadvantaged schools: New evidence for England. *Education Economics*, 26(1), 4–23.
<https://doi.org/10.1080/09645292.2017.1366425>

Anderson-Park, E., Kindlinger, M., van Veldhuizen, M., & Abs, H. J. (2023). Examining different perspectives on ‘disadvantage’ in European education systems as a basis for developing remedial interventions for disadvantaged schools. *Zeitschrift Für Bildungsforschung*, 13(2), 259–283.
<https://doi.org/10.1007/s35834-023-00393-7>

Austria Presse Agentur (22 June 2022). *Lehrermangel – Engpässe in einigen Fächern und Regionen verschärft [Teacher shortage – Bottlenecks exacerbated in some subjects and regions]*. [Press release].
<https://science.apa.at/power-search/259068968530173176>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Baker B. O.; Hardyck, C. D.; Petrinovich, L. F. (1966). Weak measurements vs. strong statistics: An empirical critique of S. S. Stevens's proscriptions on statistics. In *Educational and Psychological Measurement* 26, pp. 291–309.

Brinkerhoff, R. O. (2002). *The success case method: Find out quickly what’s working and what’s not*. Berrett-Koehler.

Bundesinstitut BIFIE (Ed.). (2019). *Standardüberprüfung 2018 Mathematik, 4. Schulstufe. Landesergebnisbericht Wien [Examination of standards in mathematics, fourth grade, 2018]*.

Bundesministerium für Bildung, Wissenschaft und Forschung. (2021). *Nationaler Bildungsbericht Österreich 2021*. <https://doi.org/10.17888/nbb2021>

Burger, J. (2023). Constructivist and transmissive mentoring: Effects on teacher self-efficacy, emotional management, and the role of novices' initial beliefs. *Journal of Teacher Education*, Article 00224871231185371. Advance online publication. <https://doi.org/10.1177/00224871231185371>

Crasborn, F., Hennissen, P., Brouwer, N., Korthagen, F., & Bergen, T. (2008). Promoting versatility in mentor teachers' use of supervisory skills. *Teaching & Teacher Education*, 24(3), 499–514. <https://doi.org/10.1016/j.tate.2007.05.001>

Hall, C.; Lundin, M.; Sibbmark, K. (2020): Strengthening teachers in disadvantaged schools: Evidence from an intervention in Sweden's poorest city districts. In *Scandinavian Journal of Educational Research*, pp. 1–17. DOI: 10.1080/00313831.2020.1788154.

Heron, J. (2001). *Helping the Client*. (5th ed.) Thousand Oaks, California: Sage.

Hobson, A. J. (2016). Judgementoring and how to avert it: Introducing ONSIDE Mentoring for beginning teachers. *International Journal of Mentoring and Coaching in Education*, 5(2), 87–110.

Hobson, A. J., & Malderez, A. (2013). Judgementoring and other threats to realizing the potential of school-based mentoring in teacher education. *International Journal of Mentoring and Coaching in Education*, 2(2), 89–108.

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers. *Review of Educational Research*, 81(2), 201–233. <https://doi.org/10.3102/0034654311403323>

Kunter, M., Baumert, J., Leutner, D., Terhart, E., Seidel, T., Dicke, T., Holzberger, D., Kunina-Habenicht, O., Linninger, C., Lohse-Bossenz, H., SchulzeStocker, F., & Stürmer, K. (2016). *Dokumentation der Erhebungsinstrumente der Projektphasen des BilWiss-Forschungsprogramms von 2009 bis 2016: Bildungswissenschaftliches Wissen und der Erwerb professioneller Kompetenz in der Lehramtsausbildung (BilWiss). Die Bedeutung des bildungswissenschaftlichen Hochschulwissens für den Berufseinstieg von Lehrkräften (BilWiss-Beruf)*. file:///C:/Users/Hauptnutzer/Downloads/BilWiss_Skalenhandbuch_02052017.pdf

Kindlinger, M., Anderson-Park, E., & Abs, H. J. (in press). Evaluation eines internationalen Trainingsprogramms zum Mentoring von beginnenden Lehrkräften an benachteiligten Schulen [Evaluation of an international training programme for mentoring beginning teachers at disadvantaged schools]. *Lehrerbildung auf dem Prüfstand*, (2023/2).

Labovitz, S. (1967). Some observations on measurement and statistics. In *Social Forces* 46, pp. 151–160.

Long, J. S., McKenzie-Robblee, S., Schaefer, L., Steeves, P., Wnuk, S., Pinnegar, E., & Clandinin, D. J. (2012). Literature review on induction and mentoring related to early career teacher attrition and retention. *Mentoring & Tutoring: Partnership in Learning*, 20(1), 7–26. <https://doi.org/10.1080/13611267.2012.645598>

Marcus-Roberts, H. M.; Roberts, F. S. (1987). Meaningless statistics. In *Journal of Educational Statistics* 12, pp. 383–394.

OECD (2018). *Teaching and Learning International Survey (TALIS) 2018, Principal Questionnaire*. OECD Publishing. <https://www.oecd.org/education/school/TALIS-2018-MS-Principal-Questionnaire-ENG.pdf>

OECD (2019). *TALIS 2018 Results (Volume I): Teachers and school leaders as lifelong learners*, TALIS. OECD Publishing. <https://doi.org/10.1787/1d0bc92a-en>

OECD (2020). *TALIS 2018 Results (Volume II): Teachers and school leaders as valued professionals*, TALIS. OECD Publishing. <https://doi.org/10.1787/19cf08df-en>

Polikoff, M. S., Desimone, L. M., Porter, A. C., & Hochberg, E. D. (2015). Mentor policy and quality of mentoring. *The Elementary School Journal*, 116(1), 76–102.

Rechtsinformationssystem des Bundes. (2023). *Gesamte Rechtsvorschrift für Landesvertragslehrpersonengesetz 1966, Fassung vom 13.10.2023 [Complete legal regulation for the Provincial Contract Teaching Staff Act 1966, version dated 13 October 2023]*. <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10008213>

Richter, D., Kunter, M., Lüdtke, O., Klusmann, U., Anders, Y., & Baumert, J. (2013). How different mentoring approaches affect beginning teachers' development in the first years of practice. *Teaching & Teacher Education*, 36, 166–177. <https://doi.org/10.1016/j.tate.2013.07.012>

Schleicher, A. (2011). *Building a high-quality teaching profession*. OECD. <https://doi.org/10.1787/9789264113046-en>

Tomaševski, K. (2001): Human rights obligations: Making education available, accessible, acceptable and adaptable. *Right to Education Primers*, Primer No. 3, 13–16.

van Ginkel, G., Oolbekkink, H., Meijer, P. C., & Verloop, N. (2016). Adapting mentoring to individual differences in novice teacher learning: The mentor's viewpoint. *Teachers and Teaching*, 22(2), 198–218. <https://doi.org/10.1080/13540602.2015.1055438>

van Veldhuizen, M., Anderson-Park, E., & Abs, H. J. (2023). *Concepts and first data of the NEST project: Developing an adaptive mentor training programme for novice teachers at disadvantaged schools in seven European education systems*. <https://doi.org/10.17185/dupublico/78698>

6 Acknowledgements

We would first like to express our gratitude to all the mentors and novice teachers who were willing to answer our questionnaires or participate in interviews. Without their time investment and motivation, our evaluation of the NEST project and research on mentoring novice teachers who work in disadvantaged school contexts would not be possible.

We extend our thanks to all the partners of the NEST project for their willingness to provide additional information and participate in interviews. Their transparency and openness in sharing necessary documents and insights have been fundamental to the thoroughness of this evaluation.

We also thank everyone who supported us with writing our evaluation reports during the course of the NEST project. These are, among others, our student assistants Lisa Gans, Simone Jouk and Clarissa Hohlfeld, who supported us with table and figure formatting as well as with transcribing and coding interviews.

Last but not least, we would like to thank Nicky Wells for her excellent work in language editing which made this report clearer and easier to understand for our esteemed readers.

Eva Anderson-Park, Myrte van Veldhuizen, Marcus Kindlinger and Hermann Josef Abs

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Appendix A0

Table 8: Constructs Measured in the Second Survey for the Mentors in the Intervention Group

Category	Construct	Source
Evaluation of NEST mentor training programme	Satisfaction with organisation of NEST mentor training programme	Developed by the evaluation team
	Satisfaction with NEST online platform	Developed by the evaluation team
	Satisfaction with NEST toolbox	Developed by the evaluation team
	Satisfaction with NEST trainers	Developed by the evaluation team
	Usefulness of training content for own mentoring practice	Developed by the evaluation team
	Opportunities to learn	Developed by the evaluation team
Organisational characteristics of NEST mentor training programme	Mentors' weekly and monthly time investment	Developed by the evaluation team
	Number of mentees to support	Developed by the evaluation team
Professional mentoring practice	Mentoring focus	Developed by the evaluation team
	Mentoring practices	Van Ginkel et al. 2016; Adapted from Crasborn et al., 2008
	Mentoring competence	Developed by the evaluation team

A.0.1 Overall Sample Novice Teachers

Table 9: Novice Teachers in the Control and Intervention Group by Cohort (Overall Sample)

Cohort	Control Group	Intervention Group	Total
1 (School Year 2021/2022)	527	383	910
2 (School Year 2022/2023)	430	263	693
Total	957	646	1603

Table 10: Novice Teachers' Gender Distribution (Overall Sample)

Gender	Control Group		Intervention Group	
	N	Percent	N	Percent
Male	227	23.72	154	23.88
Female	728	76.07	489	75.81
Other	2	0.21	2	0.31
Total	957	100.00	645	100.00

Table 11: Novice Teachers' Age (Overall Sample)

Age	N	M	SD	Min	Max
Control Group	956	32.88	7.76	20	58
Intervention Group	646	32.85	8.412	20	56

Table 12: Novice Teachers' Teaching Experience (Overall Sample)

Teaching Experience (Years)	N	M	SD	Min	Max
Control Group	957	2.16	1.48	0	5
Intervention Group	646	1.92	1.45	0	5

Table 13: Teaching as First Career Choice of the Novice Teachers (Overall Sample)

Was teaching your first choice as a career?	Control Group		Intervention Group	
	N	Percent	N	Percent
No	502	52.57	342	53.02
Yes	453	47.43	303	46.98
Total	955	100.00	645	100.00

Table 14: Novice Teachers' Formal Teaching Qualification (Overall Sample)

Do you have a formal teaching qualification?	Control Group		Intervention Group	
	N	Percent	N	Percent
No	72	7.53	49	7.78
Yes	884	92.47	581	92.22
Total	956	100.00	630	100.00

Table 15: Novice Teachers Qualification Type (Overall Sample)

How did you enter the teaching profession?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
I entered the teaching profession via regular teacher education and/or training.	784	81.92	526	81.42
I entered the teaching profession via an alternative pathway (e.g. fast track training).	130	13.58	92	14.24
I entered the teaching profession without any teacher education or teacher training.	43	4.49	28	4.33
Total	957	100.00	646	100.00

A.0.2 Overall Sample Mentors

Table 16: Mentors by Group (Overall Sample)

Group	<i>N</i>	<i>Percent</i>
Control Group	171	48.86
Intervention Group	179	51.14
Total	350	100.00

Table 17: Mentors' Gender Distribution (Overall Sample)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	32	18.82	35	19.55
Female	138	81.18	144	80.45
Other	0	0.00	0	0.00
Total	170	100.00	179	100.00

Table 18: Mentors' Age (Overall Sample)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	171	47.89	7.16	31	63
Intervention Group	179	46.25	8.07	27	64

Table 19: Mentors' Mentoring in the Previous 5 Years (Overall Sample)

At any time during the past five years, did you mentor any novice teachers?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	50	29.24	60	33.52
Yes	121	70.76	119	66.48
Total	171	100.00	179	100.00

Appendix A1 – Austria

A.1.1 Novice Teacher Tables (Austria)

Table 20: Intervention Group Novice Teachers' Gender Distribution (Austria)

Gender	Intervention Group	
	<i>N</i>	<i>Percent</i>
Male	4	25.00
Female	12	75.00
Total	16	100.00

Table 21: Intervention Group Novice Teachers' Teaching Experience (Austria)

Total Number of Year(s) Working as a Teacher	Intervention Group	
	<i>N</i>	<i>Percent</i>
0	2	12.50
1	7	43.75
2	3	18.75
3	3	18.75
5	1	6.25
Total	16	100.00

Table 22: Number of Formal and Informal Mentoring Conversations Reported by Intervention Group Novice Teachers (Austria)

Number of Formal Mentoring Conversations	Intervention Group		Number of Informal Mentoring Conversations	Intervention Group	
	<i>N</i>	<i>Percent</i>		<i>N</i>	<i>Percent</i>
2	1	6.25	0	1	6.25
3	7	43.75	1	4	25.00
4	5	31.25	2	4	25.00
5	1	6.25	3	4	25.00
9	1	6.25	5	1	6.25
10	1	6.25	15	2	12.50
Total	16	100.00	Total	16	100.00

Table 23: Intervention Group Novice Teachers: Preparedness for School Challenges (Austria)

In your studies and / or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties	16	1.75	.68	1	3
Teaching students with language barriers	16	1.56	.51	1	2
Teaching students with emotional and behavioural difficulties	16	1.69	.87	1	4
Involving parents in the learning process of their children	16	1.69	.87	1	4
Managing a diverse classroom effectively	16	1.63	.72	1	3
Engaging hard-to-reach learners	16	1.44	.51	1	2

Table 24: Intervention Group Novice Teachers' Attitudes Towards Being Mentored (Austria)

Items Attitudes Towards Being Mentored	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I think being mentored can have an important impact on my professional development.	16	3.63	.5	3	4
I think being mentored will help me to improve my teaching.	16	3.75	.45	3	4
I expect my mentor(s) to help me discover the causes for professional problems.	16	3.19	.54	2	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	16	3.38	.62	2	4
From my mentor(s) I expect good ideas for my further professional development.	16	3.5	.52	3	4
I think being mentored will help me to develop reflection skills for my own teaching.	16	3.56	.51	3	4

Table 25: Ideal Mentor Behaviour from Perspective of Intervention Group Novice Teachers in Terms of Mentor Practices (Austria)

Items Ideal Mentor Behaviour	N	Intervention Group			
		M	SD	Min	Max
I would like it, if my mentor...					
...starts a conversation with an open question.	16	2.88	.72	2	4
...asks clarifying questions.	16	3.44	.51	3	4
...asks me to elaborate on my intentions and considerations for a lesson.	16	2.81	.75	1	4
...uses active listening skills during our mentoring conversations.	16	2.81	.98	1	4
...confronts me during our mentoring conversations with mistakes I made in my lessons.	16	3.63	.5	3	4
...uses concrete examples from my lessons during our conversations.	16	3.69	.48	3	4
...instructs me on how to structure my teaching.	16	2.69	.95	1	4
...helps me to make my implicit statements explicit.	15	3.4	.51	3	4
...asks for alternatives to the teaching I implemented.	15	2.87	1.06	1	4
...provides me with additional information on instruction.	15	3.4	.63	2	4
...assesses the quality of my teaching skills.	15	2.87	1.13	1	4
...provides direct advice on how to improve my teaching.	15	3.8	.41	3	4
...gives examples of best practice from his/her own experience.	15	3.93	.26	3	4
...lets me discover the principles behind a good lesson on my own.	15	3.13	.83	2	4
...gives me impulses to continuously reflect on my professional development.	15	3.47	.52	3	4
...summarises the discussed content at the end of a mentoring conversation.	15	2.8	.94	1	4
...provides guidance on further professional development opportunities.	15	3.2	.86	2	4
...has concrete ideas about how I should teach the subject matter.	15	2.93	1.1	1	4
...supports me in trying out different teaching methods.	15	3.8	.41	3	4
...gives me the opportunity to draw my own conclusions.	15	3.4	.91	1	4

Table 26: Student Body Composition (Austria)

Which proportion of students at your school approximately fits into the following categories?	N	Intervention Group			
		M Percent	SD Percent	Min Percent	Max Percent
Students whose language spoken at home is different from the language(s) of instruction	15	73.67	26.73	2.00	97.00
Students with special needs	15	22	17.59	3.00	61.00
Students from socio economically disadvantaged homes	14	63.07	29.25	6.00	100.00
Students from ethnic minorities	12	47.92	36.07	4.00	96.00
Students who are refugees	10	30.4	21.91	6.00	78.00
Students from single parent households	10	31	15.03	10.00	52.00
Students facing violence in their daily life	6	22.5	14.49	8.00	41.00
Students without connection to the internet at home	8	5.5	4.66	0.00	12.00
Students whose parents have not finished secondary education	8	61.13	28.53	1.00	83.00

A.1.2 Mentor Tables (Austria)

Table 27: Mentors' Previous Mentoring Experience by Group (Austria)

At any time during the last five years, did you mentor any novice teachers?	Control Group		Intervention Group	
	N	Percent	N	Percent
Yes			6	40.00
No			9	60.00
Total			15	100.00

Table 28: Improvement of Mentoring Practices of Intervention Group Mentors by NEST Mentor Training Programme (Austria)

To what extent did the NEST training help you to improve your mentoring regarding the following skills:	N	Intervention Group			
		M	SD	Min	Max
Giving constructive feedback.	16	2.88	.72	2	4
Using active listening as a strategy.	16	3.44	.51	3	4
Analyzing mentees' professional development needs.	16	2.81	.75	1	4
Using different mentoring approaches for novice teachers with different personalities.	16	2.81	.98	1	4
Prompting mentees to reflect on their teaching.	16	3.63	.5	3	4
Changing my mentoring approach according to the social situation in the classroom.	16	3.69	.48	3	4
Relating to professional teaching standards.	16	2.69	.95	1	4
Dealing with mentees' mistakes in a constructive way.	15	3.4	.51	3	4
Addressing mentees' feelings.	15	2.87	1.06	1	4
Taking the perspective of the mentee (putting myself in their shoes)	15	3.4	.63	2	4
Identify challenges my mentee is facing.	15	2.87	1.13	1	4
Adapting my mentoring approach according to the novice teacher's level of professional development.	15	3.8	.41	3	4

Appendix A2 – Belgium – Flemish Community

A.2.1 Novice Teacher Tables (Flemish Community)

Table 29: Novice Teachers in the Control and Intervention Group by Cohort (Flemish Community)

Cohort	Control Group	Intervention Group	Total
1 (School Year 2021/2022)	12	24	36
2 (School Year 2022/2023)	8	6	14
Total	20	30	50

Table 30: Novice Teachers' Mentor Support by Group (Flemish Community)

Do you currently have an assigned mentor to support you?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	2	10.00	0	0.00
Yes	18	90.00	30	100.00
Total	20	100.00	30	100.00

Table 31: Novice Teachers' Gender Distribution by Group (Flemish Community)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	4	20.00	12	40.00
Female	16	80.00	17	56.67
Other	0	0.00	1	3.33
Total	20	100.00	30	100.00

Table 32: Novice Teachers' Age by Group (Flemish Community)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	20	31.7	9.11	22	50
Intervention Group	30	32.23	9.44	22	56

Table 33: Novice Teachers' Teaching Experience by Group (Flemish Community)

Teaching Experience (Years)	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	20	.95	.94	0	3
Intervention Group	30	1.53	1.53	0	5

Table 34: Teaching as First Career Choice of the Novice Teachers by Group (Flemish Community)

Was teaching your first choice as a career?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	13	65.00	18	60.00
Yes	7	35.00	12	40.00
Total	20	100.00	30	100.00

Table 35: Teaching Qualification of the Novice Teachers by Group (Flemish Community)

Do you have a formal teaching qualification?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Yes	18	90.00	28	93.33
No	2	10.00	2	6.67
Total	20	100.00	30	100.00

Table 36: Novice Teachers' Entrance into Teaching Profession by Group (Flemish Community)

How did you enter the teaching profession?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
I entered the teaching profession via regular teacher education and/or training.	13	65.00	21	70.00
I entered the teaching profession via an alternative pathway (e.g. fast track training).	3	15.00	5	16.67
I entered the teaching profession without any teacher education or teacher training.	4	20.00	4	13.33
Total	20	100.00	30	100.00

Table 37: Control Group: General Acceptance of Mentoring (Flemish Community)

To what extent do you agree with the following statements on mentoring in your education system?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	20	3.25	.64	2	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	20	2.95	.69	2	4
In my environment, people highly respect mentors who support novice teachers.	20	2.95	.6	2	4
I think that mentoring novice teachers is valued in society.	20	2.85	.93	1	4

Table 38: Intervention Group: General Acceptance of Mentoring (Flemish Community)

To what extent do you agree with the following statements on mentoring in your education system?	N	Intervention Group			
		M	SD	Min	Max
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	30	3.33	.61	2	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	30	2.77	.77	1	4
In my environment, people highly respect mentors who support novice teachers.	30	2.9	.76	1	4
I think that mentoring novice teachers is valued in society.	30	2.73	.94	1	4

Table 39: Control Group: Important Mentor Attributes (Flemish Community)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Control Group			
		M	SD	Min	Max
Empathy	20	.65	.49	0	1
Openness	20	.65	.49	0	1
Respectfulness	20	.25	.44	0	1
Trustfulness	20	.75	.44	0	1
Curiousness	20	.15	.37	0	1
Courage	20	.1	.31	0	1
Flexibility	20	.15	.37	0	1

Table 40: Intervention Group: Important Mentor Attributes (Flemish Community)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Intervention Group			
		M	SD	Min	Max
Empathy	30	.63	.49	0	1
Openness	30	.7	.47	0	1
Respectfulness	30	.47	.51	0	1
Trustfulness	30	.8	.41	0	1
Curiousness	30	.13	.35	0	1
Courage	30	.07	.25	0	1
Flexibility	30	.13	.35	0	1

Table 41: Control Group: Attitudes Towards Being Mentored (Flemish Community)

Items Attitudes Towards Being Mentored	N	Control Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	20	3.55	.6	2	4
I think being mentored will help me to improve my teaching.	20	3.45	.69	2	4
I expect my mentor(s) to help me discover the causes for professional problems.	20	3.35	.49	3	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	20	3.35	.75	2	4
From my mentor(s) I expect good ideas for my further professional development.	20	3.1	.72	2	4
I think being mentored will help me to develop reflection skills for my own teaching.	20	3.45	.51	3	4

Table 42: Intervention Group: Attitudes Towards Being Mentored (Flemish Community)

Items Attitudes Towards Being Mentored	N	Intervention Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	30	3.47	.57	2	4
I think being mentored will help me to improve my teaching.	30	3.17	.53	2	4
I expect my mentor(s) to help me discover the causes for professional problems.	30	3.17	.7	1	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	30	3.2	.55	2	4
From my mentor(s) I expect good ideas for my further professional development.	30	2.97	.61	2	4
I think being mentored will help me to develop reflection skills for my own teaching.	30	3.17	.59	2	4

Table 43: Control Group: Preparedness for School Challenges (Flemish Community)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	18	1.78	.65	1	3
Teaching students with language barriers.	18	1.56	.51	1	2
Teaching students with emotional and behavioural difficulties.	18	1.67	.69	1	3
Involving parents in the learning process of their children.	18	1.94	.8	1	4
Managing a diverse classroom effectively.	18	2.33	.97	1	4
Engaging hard-to-reach learners.	18	1.89	.68	1	3

Table 44: Intervention Group: Preparedness for School Challenges (Flemish Community)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	29	2.14	.69	1	3
Teaching students with language barriers.	29	1.79	.73	1	4
Teaching students with emotional and behavioural difficulties.	29	1.83	.66	1	3
Involving parents in the learning process of their children.	29	1.76	.64	1	3
Managing a diverse classroom effectively.	29	2.31	.93	1	4
Engaging hard-to-reach learners.	29	2.1	.67	1	3

Table 45: Participation in Induction Activities by Group (Flemish Community)

(Apart from NEST), are you currently taking part or did you take part in any induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	5	25.00	7	23.33
Yes	15	75.00	23	76.67
Total	20	100.00	30	100.00

Table 46: Participation in Formal Induction Activities by Group (Flemish Community)

(Apart from NEST), are you currently taking part or did you take part in any formal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	6	30.00	10	33.33
Yes	14	70.00	20	66.67
Total	20	100.00	30	100.00

Table 47: Participation in Informal Induction Activities by Group (Flemish Community)

(Apart from NEST), are you currently taking part or did you take part in any informal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	8	40.00	11	36.67
Yes	12	60.00	19	63.33
Total	20	100.00	30	100.00

Table 48: Control Group: Hindrances on Quality of Instruction (Flemish Community)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	20	2.3	.86	1	4
Shortage of teachers with competence in teaching students with special needs.	18	2.39	.7	1	3
Shortage or inadequacy of instructional materials (e.g. textbooks).	19	1.79	.63	1	3
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	20	1.65	.81	1	4
Insufficient internet access.	20	1.45	.6	1	3
Shortage or inadequacy of library materials.	19	1.53	.61	1	3
Shortage of support personnel.	19	2.63	.68	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	20	1.95	.83	1	3
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	20	1.85	.75	1	3
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	19	2.37	.76	1	3
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	19	2.11	.74	1	3
Shortage or inadequacy of necessary materials to train vocational skills.	20	1.6	.68	1	3
Shortage or inadequacy of time for instructional leadership.	19	2.21	.71	1	3
Shortage or inadequacy of time with students.	19	1.84	.83	1	3

Table 49: Intervention Group: Hindrances on Quality of Instruction (Flemish Community)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	28	2.29	.94	1	4
Shortage of teachers with competence in teaching students with special needs.	28	2.32	.67	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	29	1.83	.85	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	29	1.69	.76	1	3
Insufficient internet access.	29	1.72	.65	1	3
Shortage or inadequacy of library materials.	28	1.96	1.1	1	4
Shortage of support personnel.	28	2.39	.74	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	29	2	.8	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	29	1.86	.92	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	28	2	.67	1	3
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	28	2	.72	1	3
Shortage or inadequacy of necessary materials to train vocational skills.	27	2.11	.7	1	4
Shortage or inadequacy of time for instructional leadership.	28	2.25	.75	1	4
Shortage or inadequacy of time with students.	28	2.04	.79	1	4

Table 50: Number of Formal Mentoring Conversations by Group (Flemish Community)

Formal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	8	5.13	4.26	2	14
Intervention Group	28	4.21	3.32	0	15

Table 51: Number of Informal Mentoring Conversations by Group (Flemish Community)

Informal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	8	12.13	17.71	0	55
Intervention Group	28	10.04	12.72	0	60

Table 52: Control Group: Organization of Mentoring (Flemish Community)

Items Organisation of Mentoring	N	Control Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	18	3.39	.61	2	4
My mentor takes sufficient time to observe my classroom teaching.	18	3.39	.5	3	4
I know well in advance when my mentor will visit me for a classroom observation	18	3.44	.51	3	4

Table 53: Intervention Group: Organisation of Mentoring (Flemish Community)

Items Organisation of Mentoring	N	Intervention Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	27	3.44	.75	1	4
My mentor takes sufficient time to observe my classroom teaching.	26	3	.63	2	4
I know well in advance when my mentor will visit me for a classroom observation	26	3.19	.69	2	4

Table 54: Control Group: Extent of Mentoring Focus (Flemish Community)

To what extent did the mentoring you received focus on supporting you to...	N	Control Group			
		M	SD	Min	Max
...teach students with learning difficulties.	18	1.94	.64	1	3
...teach students with language barriers.	18	2.22	.81	1	4
...teach students with emotional and behavioural difficulties.	18	2.06	.64	1	3
...involve parents in the learning process of their children.	18	1.94	.73	1	3
...manage a diverse classroom effectively.	18	2.83	.71	2	4
...engage hard-to-reach learners.	18	2.67	.69	1	4

Table 55: Intervention Group: Extent of Mentoring Focus (Flemish Community)

To what extent did the mentoring you received focus on supporting you to...	N	Intervention Group			
		M	SD	Min	Max
...teach students with learning difficulties.	27	2	.62	1	3
...teach students with language barriers.	27	1.93	.78	1	4
...teach students with emotional and behavioural difficulties.	27	2.15	.6	1	3
...involve parents in the learning process of their children.	27	1.59	.64	1	3
...manage a diverse classroom effectively.	27	2.3	.72	1	4
...engage hard-to-reach learners.	27	2.41	.75	1	4

Table 56: Intervention Group: Extent of Mentoring Focus by Cohort (Flemish Community)

To what extent did the mentoring you received focus on supporting you to...	Intervention Group Cohort 1			Intervention Group Cohort 2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties.	21	2.1	.62	6	1.67	.52
...teach students with language barriers.	21	2	.84	6	1.67	.52
...teach students with emotional and behavioural difficulties.	21	2.24	.62	6	1.83	.41
...involve parents in the learning process of their children.	21	1.67	.66	6	1.33	.52
...manage a diverse classroom effectively.	21	2.38	.67	6	2	.89
...engage hard-to-reach learners.	21	2.48	.75	6	2.17	.75

Table 57: Control Group: Fit of Mentoring Practices (Flemish Community)

Fit Between Mentoring Practices	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of directive mentoring practices	18	5.44	1.1	2	6
Fit of facilitative mentoring practices	18	2.61	.7	1	3
Overall fit	18	18.06	3.1	9	20

Table 58: Intervention Group: Fit of Mentoring Practices (Flemish Community)

Fit Between Mentoring Practices	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of Directive Mentoring Practices	27	5.19	1.47	1	6
Fit of Facilitative Mentoring Practices	27	2.81	.4	2	3
Overall Fit	27	17.3	4.07	4	20

Table 59: Control Group without Mentor: Emotional Exhaustion Over Time (Flemish Community)

Items Exhaustion	Control Group without Mentor T1			Control Group without Mentor T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	2	3	1.41	2	2.5	.71
Overall, I feel overstrained by my work load.	2	3.5	.71	2	2.5	.71
When I am working, I realise how weary I am.	2	1.5	.71	2	2	0
At the end of a day's work, I sometimes feel really depressed.	2	1.5	.71	2	2	0

Table 60: Control Group with Mentor: Emotional Exhaustion Over Time (Flemish Community)

Items Exhaustion	Control Group with Mentor			Control Group with Mentor		
	<i>N</i>	T1 <i>M</i>	<i>SD</i>	<i>N</i>	T2 <i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	18	2.56	.78	18	2.67	1.03
Overall, I feel overstrained by my work load.	18	2.83	.79	18	2.83	.79
When I am working, I realise how weary I am.	18	1.61	.7	18	1.89	.47
At the end of a day's work, I sometimes feel really depressed.	18	1.56	.78	18	1.83	.86

Table 61: Intervention Group: Emotional Exhaustion Over Time (Flemish Community)

Items Exhaustion	Intervention Group			Intervention Group		
	<i>N</i>	T1 <i>M</i>	<i>SD</i>	<i>N</i>	T2 <i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	30	2.47	.86	29	2.1	.86
Overall, I feel overstrained by my work load.	30	2.77	.94	28	2.54	.79
When I am working, I realise how weary I am.	30	1.8	.71	29	1.83	.71
At the end of a day's work, I sometimes feel really depressed.	30	1.93	.74	29	1.93	.84

Table 62: Control Group without Mentor: Resilience (Flemish Community)

Items Resilience	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	2	2.5	.71	2	3
I think that I can cope well with work pressure.	2	2.5	.71	2	3
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	2	2	0	2	2
I can cope well with setbacks at work (such as poor achievement or negative feedback).	2	2	0	2	2

Table 63: Control Group with Mentor: Resilience (Flemish Community)

Items Resilience	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	18	2.94	.73	2	4
I think that I can cope well with work pressure.	18	2.72	.57	2	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	18	2.72	.83	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	18	2.61	.61	2	4

Table 64: Intervention Group: Resilience (Flemish Community)

Items Resilience	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	29	2.97	.73	1	4
I think that I can cope well with work pressure.	29	2.93	.75	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	29	2.79	.77	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	29	2.72	.7	1	4

Table 65: Control Group without Mentor: Satisfaction with School as a Workplace (Flemish Community)

Items Satisfaction with School as a Workplace	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	2	2.5	.71	2	3
I enjoy working at this school.	2	2.5	.71	2	3
I would recommend this school as a good place to work.	2	2	0	2	2

Table 66: Control Group with Mentor: Satisfaction with School as a Workplace (Flemish Community)

Items Satisfaction with School as a Workplace	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	16	3	.82	1	4
I enjoy working at this school.	16	3.19	.54	2	4
I would recommend this school as a good place to work.	17	3.29	.59	2	4

Table 67: Intervention Group: Satisfaction with School as a Workplace (Flemish Community)

Items Satisfaction with School as a Workplace	N	Intervention Group			
		M	SD	Min	Max
I would like to change to another school if that were possible.	29	3.28	.75	1	4
I enjoy working at this school.	29	3.24	.58	2	4
I would recommend this school as a good place to work.	29	3.03	.63	2	4

Table 68: Control Group without Mentor: Intention to Quit (Flemish Community)

After this year, I'm planning to leave the teacher profession	Control Group without Mentor	
	N	Percent
Strongly Disagree	1	50.00
Disagree	1	50.00
Agree	0	0.00
Strongly Agree	0	0.00
Total	2	100.00

Table 69: Control Group with Mentor: Intention to Quit (Flemish Community)

After this year, I'm planning to leave the teacher profession	Control Group with Mentor	
	N	Percent
Strongly Disagree	12	66.67
Disagree	6	33.33
Agree	0	0.00
Strongly Agree	0	0.00
Total	18	100.00

Table 70: Intervention Group: Intention to Quit (Flemish Community)

After this year, I'm planning to leave the teacher profession	Intervention Group	
	N	Percent
Strongly Disagree	17	60.71
Disagree	11	39.29
Agree	0	0.00
Strongly Agree	0	0.00
Total	28	100.00

Table 71: Control Group without Mentor: Thinking About a Career Change (Flemish Community)

In the long run, I'm thinking about a career change.	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	0	0.00
Disagree	2	100.00
Agree	0	0.00
Strongly Agree	0	0.00
Total	2	100.00

Table 72: Control Group with Mentor: Thinking About a Career Change (Flemish Community)

In the long run, I'm thinking about a career change.	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	2	11.11
Disagree	7	38.89
Agree	9	50.00
Strongly Agree	0	0.00
Total	18	100.00

Table 73: Intervention Group: Thinking About a Career Change (Flemish Community)

In the long run, I'm thinking about a career change.	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	6	21.43
Disagree	13	46.43
Agree	5	17.86
Strongly Agree	4	14.29
Total	28	100.00

Table 74: Willingness to Stay in the Teaching Profession in Years by Group (Flemish Community)

For how many more years do you want to continue to work as a teacher?	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group without Mentor	0	0	0	0	0
Control Group with Mentor	7	15.86	9.04	1	25
Intervention Group	28	19.18	14.06	1	45

Table 75: Control Group with Mentor: Mentoring Competence (Flemish Community)

Items Mentoring Competence	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	18	3.33	.59	2	4
My mentor encourages me to perceive my school as a professional learning environment.	18	3.28	.57	2	4
My mentor helps me to develop professional resilience.	18	3.22	.55	2	4
My mentor advises me on how to structure my teaching.	18	3.33	.59	2	4
My mentor professionally assesses the quality of my teaching skills.	18	3.22	.55	2	4
My mentor addresses my feelings in a professional way.	18	3.33	.49	3	4
My mentor gives me constructive feedback.	18	3.56	.51	3	4
My mentor uses active listening as a strategy.	18	3.28	.57	2	4
My mentor analyses my professional development needs.	18	3.11	.76	2	4
My mentor prompts me to reflect on my teaching.	18	3.33	.59	2	4
My mentor relates to professional teaching standards.	18	3.22	.55	2	4
My mentor deals with my mistakes in a constructive way.	18	3.33	.59	2	4

Table 76: Intervention Group: Mentoring Competence (Flemish Community)

Items Mentoring Competence	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	27	3.33	.62	2	4
My mentor encourages me to perceive my school as a professional learning environment.	27	3.19	.62	2	4
My mentor helps me to develop professional resilience.	26	3.08	.56	2	4
My mentor advises me on how to structure my teaching.	27	3	.55	2	4
My mentor professionally assesses the quality of my teaching skills.	27	3.3	.67	2	4
My mentor addresses my feelings in a professional way.	27	3.56	.51	3	4
My mentor gives me constructive feedback.	27	3.52	.58	2	4
My mentor uses active listening as a strategy.	27	3.52	.51	3	4
My mentor analyses my professional development needs.	26	3.19	.69	2	4
My mentor prompts me to reflect on my teaching.	26	3.35	.49	3	4
My mentor relates to professional teaching standards.	25	3.16	.55	2	4
My mentor deals with my mistakes in a constructive way.	26	3.31	.47	3	4

Table 77: Control Group without Mentor: Teaching Competences – Student Interactions (Flemish Community)

Items Teaching Competences Regarding Student Interactions	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	2	4.5	.71	4	5
Taking on the pupils' perspective when finding solutions for occurring problems.	2	5	0	5	5
Showing an open attitude, so it's easy for students to approach me with their problems.	2	5.5	.71	5	6
Imparting self-confidence even in timid pupils.	2	5	0	5	5
Foster social development (e.g. helping, supporting, taking responsibility).	2	5	0	5	5
Knowing how to react when pupils show aggressive behaviour.	2	4	0	4	4
Approaching struggling students in a supportive way.	2	4.5	.71	4	5
Creating an open classroom climate for students to voice their own ideas.	2	4.5	2.12	3	6
Supporting individual pupils in personal crises.	2	3.5	.71	3	4
Purposefully fostering my pupils' strengths.	2	5	1.41	4	6
Supporting pupils who have experienced failure in class.	2	5	0	5	5

Table 78: Control Group with Mentor: Teaching Competences – Student Interactions (Flemish Community)

Items Teaching Competences Regarding Student Interactions	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	17	4.12	.93	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	17	4.47	.87	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	17	5	.94	3	6
Imparting self-confidence even in timid pupils.	16	4.56	.96	2	6
Foster social development (e.g. helping, supporting, taking responsibility).	17	4.29	.85	2	6
Knowing how to react when pupils show aggressive behaviour.	17	3.65	1.06	1	5
Approaching struggling students in a supportive way.	17	4.29	.99	2	6
Creating an open classroom climate for students to voice their own ideas.	17	4.53	1.12	2	6
Supporting individual pupils in personal crises.	17	4.18	.95	2	6
Purposefully fostering my pupils' strengths.	17	4.35	1	2	6
Supporting pupils who have experienced failure in class.	17	4.24	.97	2	6

Table 79: Intervention Group: Teaching Competences – Student Interactions (Flemish Community)

Items Teaching Competences Regarding Student Interactions	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	29	3.86	.92	2	5
Taking on the pupils' perspective when finding solutions for occurring problems.	29	4.66	.67	3	6
Showing an open attitude, so it's easy for students to approach me with their problems.	29	5.1	.62	4	6
Imparting self-confidence even in timid pupils.	29	4.72	.84	2	6
Foster social development (e.g. helping, supporting, taking responsibility).	29	4.45	.83	2	6
Knowing how to react when pupils show aggressive behaviour.	29	3.55	.91	2	5
Approaching struggling students in a supportive way.	29	4.52	.69	3	6
Creating an open classroom climate for students to voice their own ideas.	29	4.72	.88	2	6
Supporting individual pupils in personal crises.	29	3.93	1.28	1	6
Purposefully fostering my pupils' strengths.	29	4.62	.86	2	6
Supporting pupils who have experienced failure in class.	29	4.28	.8	2	5

Table 80: Control Group without Mentor: Teaching Competences – Parent Support (Flemish Community)

Items Teaching Competences Regarding Parent Support	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	2	4	1.41	3	5
Advising parents how they can influence the learning environment of their child.	2	4	1.41	3	5
Showing parents how they can positively influence the education of their child.	2	3	0	3	3
Dealing with conflict in parent teacher interactions in a professional way.	2	4	0	4	4

Table 81: Control Group with Mentor: Teaching Competences – Parent Support (Flemish Community)

Items Teaching Competences Regarding Parent Support	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	17	3.18	1.01	1	5
Advising parents how they can influence the learning environment of their child.	17	3.47	1.23	1	5
Showing parents how they can positively influence the education of their child.	17	3.35	1.27	1	5
Dealing with conflict in parent teacher interactions in a professional way.	17	3.76	1.56	1	6

Table 82: Intervention Group: Teaching Competences – Parent Support (Flemish Community)

Items Teaching Competences Regarding Parent Support	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	27	2.78	1.28	1	5
Advising parents how they can influence the learning environment of their child.	27	3.22	1.22	1	5
Showing parents how they can positively influence the education of their child.	27	2.81	1.27	1	5
Dealing with conflict in parent teacher interactions in a professional way.	27	3.22	1.05	1	5

A.2.2 Mentor Tables (Flemish Community)

Table 83: Mentors' Gender Distribution by Group (Flemish Community)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	4	33.33	4	50.00
Female	8	66.67	4	50.00
Total	12	100.00	8	100.00

Table 84: Mentors' Age by Group (Flemish Community)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	12	47.33	7.13	36	58
Intervention Group	8	49.88	7.3	41	60

Table 85: Control Group Mentors' Job Experience (Flemish Community)

Teaching Experience (Years)	N	Control Group			
		M	SD	Min	Max
Year(s) working as a teacher in total	11	20.45	12.19	1	38
Year(s) working as a mentor	11	3.36	3.38	1	10
Year(s) working at schools in disadvantaged areas	9	14	11.8	0	38

Table 86: Intervention Group Mentors' Job Experience (Flemish Community)

Teaching Experience (Years)	N	Intervention Group			
		M	SD	Min	Max
Year(s) working as a teacher in total	7	21.86	9.21	6	32
Year(s) working as a mentor	7	3.14	2.27	1	8
Year(s) working at schools in disadvantaged areas	7	22.71	11.03	6	40

Table 87: Mentors' Previous Mentoring Experience by Group (Flemish Community)

At any time during the last five years, did you mentor any novice teachers?	Control Group		Intervention Group	
	N	Percent	N	Percent
Yes	10	83.33	8	100.00
No	2	16.67	0	0.00
Total	12	100.00	8	100.00

Table 88: Mentor Control Group: General Acceptance of Mentoring (Flemish Community)

To what extent do you agree with the following statements on mentoring in your education system?	N	Control Group			
		M	SD	Min	Max
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	12	2.83	.39	2	3
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	12	2.92	.51	2	4
In my environment, people highly respect mentors who support novice teachers.	12	2.17	.39	2	3
I think that mentoring novice teachers is valued in society.	12	2.92	.51	2	4

Table 89: Mentor Intervention Group: General Acceptance of Mentoring (Flemish Community)

To what extent do you agree with the following statements on mentoring in your education system?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	8	2.88	.64	2	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	8	3.38	.74	2	4
In my environment, people highly respect mentors who support novice teachers.	8	2.88	.35	2	3
I think that mentoring novice teachers is valued in society.	8	2.63	.52	2	3

Table 90: Mentor Control Group: Important Mentor Attributes (Flemish Community)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	12	.58	.51	0	1
Openness	12	.58	.51	0	1
Respectfulness	12	.42	.51	0	1
Trustfulness	12	.75	.45	0	1
Curiousness	12	.08	.29	0	1
Courage	12	0	0	0	0
Flexibility	12	.17	.39	0	1

Table 91: Mentor Intervention Group: Important Mentor Attributes (Flemish Community)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	8	.63	.52	0	1
Openness	8	.63	.52	0	1
Respectfulness	8	.38	.52	0	1
Trustfulness	8	.88	.35	0	1
Curiousness	8	.13	.35	0	1
Courage	8	0	0	0	0
Flexibility	8	.25	.46	0	1

Table 92: Mentors' Enthusiasm for Mentoring Over Time by Group (Flemish Community)

Enthusiasm for Mentoring	Control Group				Intervention Group			
	T1		T3		T1		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Mentoring is the most fulfilling part of my job.	2.8	.63	2.92	.51	3	.76	3.38	.74
I enjoy getting novice teachers excited about teaching.	3.6	.52	3.42	.51	3.38	.52	3.75	.46
I find great joy in mentoring novice teachers.	3.6	.52	3.78	.44	3.38	.52	3.75	.46
I enjoy sharing my teaching expertise with novice teachers.	3.8	.42	3.75	.45	3.38	.74	3.75	.46
I feel content when I see progress in my mentees' teaching.	3.8	.42	3.83	.39	3.75	.46	3.75	.46
<i>N</i> _{Min}	10		9		8		8	

Table 93: Mentors' Enthusiasm Over Time by Group – Scale (Flemish Community)

Enthusiasm Scale	T1		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Control Group	3.52	.38	3.53	.36
Intervention Group	3.38	.52	3.68	.45

Table 94: Control Group Mentors' Mentoring Focus (Flemish Community)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.3	.67	-	-	2.42	.67
...teach students with language barriers?	2.4	1.17	-	-	2.58	1
...teach students with emotional and behavioural difficulties?	2.7	.67	-	-	2.08	.79
...involve parents in the learning process of their children?	1.8	.79	-	-	1.58	1
...manage a diverse classroom effectively?	2.7	.82	-	-	2.58	.79
...engage hard-to-reach learners?	2.6	.7	-	-	2.75	.75
<i>N</i> _{Min}	10		-		12	

Table 95: Intervention Group Mentors' Mentoring Focus (Flemish Community)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2	.76	2.88	.83	2	.53
...teach students with language barriers?	2.13	.83	2.75	.71	2.5	1.07
...teach students with emotional and behavioural difficulties?	2.63	.74	2.75	.89	2.5	.76
...involve parents in the learning process of their children?	1.5	.76	1.88	.83	1.5	.53
...manage a diverse classroom effectively?	2.63	.92	2.75	.71	3	.53
...engage hard-to-reach learners?	2.38	.92	2.88	.83	2.88	.64
<i>N</i> _{Min}	8		8		8	

Table 96: Control Group Mentors' Use of Direct Mentoring Practices – Scale (Flemish Community)

How often do you use the following mentoring practices?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	10	3.62	.49	2.83	4.5
Use of Direct Mentoring Practices (T2)	-	-	-	-	-
Use of Direct Mentoring Practices (T3)	12	3.5	.61	2.33	4.33

Table 97: Intervention Group Mentors' Use of Direct Mentoring Practices – Scale (Flemish Community)

How often do you use the following mentoring practices?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	8	3.42	.5	2.67	4.33
Use of Direct Mentoring Practices (T2)	8	3.13	.46	2.33	3.67
Use of Direct Mentoring Practices (T3)	8	3.1	.22	2.67	3.33

Table 98: Control Group Mentor's Use of Facilitative Mentoring Practices – Scale (Flemish Community)

How often do you use the following mentoring practices?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	10	4.7	.37	4	5
Use of Facilitative Mentoring Practices (T2)	-	-	-	-	-
Use of Facilitative Mentoring Practices (T3)	12	4.42	.67	3.33	5.33

Table 99: Intervention Group Mentor's Use of Facilitative Mentoring Practices – Scale (Flemish Community)

How often do you use the following mentoring practices?	N	Intervention Group			
		M	SD	Min	Max
Use of Facilitative Mentoring Practices (T1)	8	4.46	.62	3.67	5.33
Use of Facilitative Mentoring Practices (T2)	8	4.25	.61	3.33	5.33
Use of Facilitative Mentoring Practices (T3)	8	4.58	.81	3.67	6

Table 100: Control Group Mentors' Mentoring Practices (Flemish Community)

Items Mentoring Practices	Control Group						
	T1		T2		T3		
	M	SD	M	SD	M	SD	
I start a conversation with an open question.	4.9	.74	-	-	4.67	1.07	
I ask clarifying questions.	4.7	.48	-	-	4.67	.49	
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	4.5	.53	-	-	3.92	1.08	
I use active listening skills during mentoring conversations.	4.8	.63	-	-	4.67	.98	
I confront novice teachers with mistakes they made during their lessons.	4.3	1.25	-	-	3.25	.75	
I use concrete examples from the novice teachers' lessons during conversations.	5	.82	-	-	5.17	.83	
I instruct novice teachers on how to structure their teaching.	3.7	1.06	-	-	3.75	1.06	
I am able to address feelings which I perceived during the lesson.	3.5	.71	-	-	3.42	.67	
I help mentees to make their implicit statements explicit.	3.6	.84	-	-	3.5	.67	
I ask for alternatives to the teaching implemented by novice teachers.	3.2	.63	-	-	3.5	.67	
I provide additional information on instruction to mentees.	3.3	.48	-	-	3.25	.87	
I assess the quality of novice teachers' teaching skills.	2.3	1.42	-	-	2.33	1.56	
I provide direct advice on how to improve teaching.	3.1	.88	-	-	3.25	.75	
I give examples of best practice from my own experience.	3.4	1.07	-	-	3.33	.98	
I want novice teachers to discover the principles behind a good lesson on their own.	3.8	1.23	-	-	3.67	.49	
I let my novice teachers reflect continuously on their professional development.	3.6	.97	-	-	4	.95	
At the end of a mentoring conversation, I summarise the content that we discussed.	4.1	1.29	-	-	4	1.04	
I provide guidance on further professional development opportunities.	3.1	.99	-	-	3.17	1.19	
N _{Min}			10		-		12

Table 101: Intervention Group Mentors' Mentoring Practices (Flemish Community)

Items Mentoring Practices	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	4.63	.74	4.38	1.19	5	.76
I ask clarifying questions.	4.63	1.06	4.5	.76	4.75	.71
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	4.13	.35	3.88	.99	4	1.69
I use active listening skills during mentoring conversations.	4.5	1.07	4.38	.52	5	.53
I confront novice teachers with mistakes they made during their lessons.	4	.76	2.63	.74	2.88	.35
I use concrete examples from the novice teachers' lessons during conversations.	4.5	1.2	4.75	.89	4.75	.89
I instruct novice teachers on how to structure their teaching.	3.5	.93	3.5	.53	3.13	.83
I am able to address feelings which I perceived during the lesson.	3.5	1.2	3.63	1.19	3.5	.76
I help mentees to make their implicit statements explicit.	2.88	1.25	3.5	1.2	3.13	.83
I ask for alternatives to the teaching implemented by novice teachers.	2.75	.89	3.38	.92	3.13	.64
I provide additional information on instruction to mentees.	3	1.07	3	.53	3.13	.35
I assess the quality of novice teachers' teaching skills.	2.38	1.51	2.13	1.36	2.38	1.3
I provide direct advice on how to improve teaching.	3.13	.83	2.75	.71	2.38	.52
I give examples of best practice from my own experience.	3.38	1.19	2.88	.83	2.88	1.13
I want novice teachers to discover the principles behind a good lesson on their own.	4.25	1.39	4.25	1.04	4.38	.52
I let my novice teachers reflect continuously on their professional development.	4	1.31	3.88	.83	4.38	.92
At the end of a mentoring conversation, I summarise the content that we discussed.	3.63	1.51	4.5	1.31	4.38	1.06
I provide guidance on further professional development opportunities.	3.13	1.36	3.25	.89	3.63	.74
<i>N</i> _{Min}	8		8		8	

Table 102: Usefulness of NEST Mentor Training for Teaching (Flemish Community)

To what extent did the NEST mentor training programme improve your own teaching practice?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Improvement of Own Teaching Practice	7	3	.58	2	4

Table 103: Improvement of Mentoring Practices of Intervention Group Mentors by NEST Mentor Training Programme

To what extent did the NEST training help you to improve your mentoring regarding the following skills:	Intervention Group				
	N	M	SD	Min	Max
Giving constructive feedback.	8	3.63	.52	3	4
Using active listening as a strategy.	7	3.86	.38	3	4
Analyzing mentees' professional development needs.	8	3.13	.64	2	4
Using different mentoring approaches for novice teachers with different personalities.	8	3.5	.53	3	4
Prompting mentees to reflect on their teaching.	8	3.75	.46	3	4
Changing my mentoring approach according to the social situation in the classroom.	8	2.5	.93	1	4
Relating to professional teaching standards.	8	2.5	.93	1	3
Dealing with mentees' mistakes in a constructive way.	6	3.67	.52	3	4
Addressing mentees' feelings.	8	3.5	.53	3	4
Taking the perspective of the mentee (putting myself in their shoes)	5	3.2	1.1	2	4
Identify challenges my mentee is facing	8	3.5	.53	3	4
Adapting my mentoring approach according to the novice teacher's level of professional development.	8	2.88	.99	1	4

Table 104: Control Group Mentors' Self-Assessed Mentoring Competence (Flemish Community)

Items Mentoring Competence	Control Group					
	T1		T2		T3	
	M	SD	M	SD	M	SD
I am able to build supportive relationships with my mentees.	4.9	.74	-	-	5	.43
I am able to encourage my mentees to perceive their school as a professional learning environment.	4.7	.48	-	-	4.67	.65
I am able to contribute to a growing professional resilience among my mentees.	4.5	.53	-	-	4.33	.65
I am able to advise novice teachers on how to structure their teaching.	4.8	.63	-	-	5	.6
I am able to assess the quality of novice teachers' teaching skills.	4.3	1.25	-	-	4.5	.9
I am able to address my mentees' feelings.	5	.82	-	-	4.92	.51
I am able to give my mentees constructive feedback.	4.8	.63	-	-	5	.6
I am able to use active listening as a strategy.	5.1	.32	-	-	5	.6
I am able to analyse mentees' professional development needs.	4.3	.67	-	-	4.5	.52
I am able to prompt mentees to reflect on their teaching.	4.5	.53	-	-	4.67	.65
I am able to relate to professional teaching standards.	4.5	.53	-	-	4.33	.65
I am able to deal with mentees' mistakes in a constructive way.	4.8	.79	-	-	4.92	.51
N _{Min}	10		-		12	

Table 105: Intervention Group Mentors' Self-Assessed Mentoring Competence (Flemish Community)

Items Mentoring Competence	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I am able to build supportive relationships with my mentees.	4.63	.74	5	0	5	0
I am able to encourage my mentees to perceive their school as a professional learning environment.	4.63	1.06	4.88	.64	4.75	.46
I am able to contribute to a growing professional resilience among my mentees.	4.13	.35	4.5	.53	4.88	.35
I am able to advise novice teachers on how to structure their teaching.	4.5	1.07	4.88	.64	4.75	.71
I am able to assess the quality of novice teachers' teaching skills.	4	.76	4.5	.76	5	.53
I am able to address my mentees' feelings.	4.5	1.2	5	.76	5	.53
I am able to give my mentees constructive feedback.	4.5	.76	5.13	.64	5	.53
I am able to use active listening as a strategy.	4.5	1.2	5.13	.83	5.13	.64
I am able to analyse mentees' professional development needs.	3.75	1.16	4.38	.92	4.5	.53
I am able to prompt mentees to reflect on their teaching.	4.38	.52	4.63	.52	5	.53
I am able to relate to professional teaching standards.	3	1.41	4.25	.46	4.38	.74
I am able to deal with mentees' mistakes in a constructive way.	4.63	.74	5	.58	5	.53
<i>N</i> _{Min}	8		7		8	

Table 106: Control Group Mentors' Self-Assessed Mentoring Competence – Scale (Flemish Community)

Mentoring Competence	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	10	4.68	.29	4.17	5.17
Mentoring Competence (T2)	-	-	-	-	-
Mentoring Competence (T3)	12	4.74	.41	4.17	5.5

Table 107: Intervention Group Mentors' Self-Assessed Mentoring Competence – Scale (Flemish Community)

Mentoring Competence	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	8	4.26	.64	3.25	5.08
Mentoring Competence (T2)	8	4.77	.34	4.42	5.25
Mentoring Competence (T3)	8	4.86	.31	4.5	5.33

Appendix A3 – Belgium – Wallonia-Brussels Federation

A.3.1 Novice Teacher Tables (Wallonia-Brussels Federation)

Table 108: Novice Teachers in the Control and Intervention Group by Cohort (Wallonia-Brussels Federation)

Cohort	Control Group	Intervention Group	Total
1 (School Year 2021/2022)	79	37	116
2 (School Year 2022/2023)	23	6	29
Total	102	43	145

Table 109: Novice Teachers' Mentor Support by Group (Wallonia-Brussels Federation)

Do you currently have an assigned mentor to support you?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	40	39.22	0	0.00
Yes	62	60.78	43	100.00
Total	102	100.00	43	100.00

Table 110: Novice Teachers' Gender Distribution by Group (Wallonia-Brussels Federation)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	34	33.33	12	27.91
Female	68	66.67	31	72.09
Other	0	0.00	0	0.00
Total	102	100.00	43	100.00

Table 111: Novice Teachers' Age by Group (Wallonia-Brussels Federation)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	102	29.64	8.08	21	55
Intervention Group	43	32.02	10.22	21	52

Table 112: Novice Teachers' Teaching Experience by Group (Wallonia-Brussels Federation)

Teaching Experience (Years)	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	102	1.37	1.44	0	5
Intervention Group	43	1.79	1.46	0	5

Table 113: Teaching as First Career Choice of the Novice Teachers by Group (Wallonia-Brussels Federation)

Was teaching your first choice as a career?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	57	55.88	27	64.29
Yes	45	44.12	15	35.71
Total	102	100.00	42	100.00

Table 114: Teaching Qualification of the Novice Teachers by Group (Wallonia-Brussels Federation)

Do you have a formal teaching qualification?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Yes	90	88.24	36	83.72
No	12	11.76	7	16.28
Total	102	100.00	43	100.00

Table 115: Novice Teachers' Entrance into Teaching Profession by Group (Wallonia-Brussels Federation)

How did you enter the teaching profession?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
I entered the teaching profession via regular teacher education and/or training.	87	85.29	35	81.40
I entered the teaching profession via an alternative pathway (e.g. fast track training).	5	4.90	4	9.30
I entered the teaching profession without any teacher education or teacher training.	10	9.80	4	9.30
Total	102	100.00	43	100.00

Table 116: Control Group: General Acceptance of Mentoring (Wallonia-Brussels Federation)

To what extent do you agree with the following statements on mentoring in your education system?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	102	2.86	.95	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	100	2.48	.97	1	4
In my environment, people highly respect mentors who support novice teachers.	101	2.87	.86	1	4
I think that mentoring novice teachers is valued in society.	101	2.18	.92	1	4

Table 117: Intervention Group: General Acceptance of Mentoring (Wallonia-Brussels Federation)

To what extent do you agree with the following statements on mentoring in your education system?	N	Intervention Group			
		M	SD	Min	Max
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	40	3.02	.8	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	41	2.68	.85	1	4
In my environment, people highly respect mentors who support novice teachers.	41	2.83	.8	1	4
I think that mentoring novice teachers is valued in society.	41	2.37	.94	1	4

Table 118: Control Group: Important Mentor Attributes (Wallonia-Brussels Federation)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Control Group			
		M	SD	Min	Max
Empathy	102	.7	.46	0	1
Openness	102	.61	.49	0	1
Respectfulness	102	.59	.49	0	1
Trustfulness	102	.72	.45	0	1
Curiousness	102	.11	.31	0	1
Courage	102	.01	.1	0	1
Flexibility	102	.16	.37	0	1

Table 119: Intervention Group: Important Mentor Attributes (Wallonia-Brussels Federation)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Intervention Group			
		M	SD	Min	Max
Empathy	43	.72	.45	0	1
Openness	43	.6	.49	0	1
Respectfulness	43	.26	.44	0	1
Trustfulness	43	.79	.41	0	1
Curiousness	43	.05	.21	0	1
Courage	43	.07	.26	0	1
Flexibility	43	.3	.46	0	1

Table 120: Control Group: Attitudes Towards Being Mentored (Wallonia-Brussels Federation)

Items Attitudes Towards Being Mentored	N	Control Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	102	3.5	.5	3	4
I think being mentored will help me to improve my teaching.	102	3.34	.57	1	4
I expect my mentor(s) to help me discover the causes for professional problems.	101	3.05	.67	1	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	101	3.15	.62	1	4
From my mentor(s) I expect good ideas for my further professional development.	101	3.05	.59	1	4
I think being mentored will help me to develop reflection skills for my own teaching.	101	3.26	.56	2	4

Table 121: Intervention Group: Attitudes Towards Being Mentored (Wallonia-Brussels Federation)

Items Attitudes Towards Being Mentored	N	Intervention Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	41	3.46	.64	1	4
I think being mentored will help me to improve my teaching.	41	3.39	.67	1	4
I expect my mentor(s) to help me discover the causes for professional problems.	40	3.25	.59	2	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	41	3.05	.59	2	4
From my mentor(s) I expect good ideas for my further professional development.	41	3.2	.51	2	4
I think being mentored will help me to develop reflection skills for my own teaching.	41	3.27	.59	2	4

Table 122: Control Group: Preparedness for School Challenges (Wallonia-Brussels Federation)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	100	2.11	.76	1	4
Teaching students with language barriers.	100	1.65	.82	1	4
Teaching students with emotional and behavioural difficulties.	100	1.81	.72	1	4
Involving parents in the learning process of their children.	100	1.71	.76	1	3
Managing a diverse classroom effectively.	100	2.2	.84	1	4
Engaging hard-to-reach learners.	100	1.96	.78	1	3

Table 123: Intervention Group: Preparedness for School Challenges (Wallonia-Brussels Federation)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	42	2.1	.79	1	4
Teaching students with language barriers.	42	1.57	.7	1	3
Teaching students with emotional and behavioural difficulties.	42	1.74	.73	1	3
Involving parents in the learning process of their children.	41	1.63	.7	1	3
Managing a diverse classroom effectively.	42	2.17	.85	1	4
Engaging hard-to-reach learners.	42	1.83	.79	1	3

Table 124: Participation in Induction Activities by Group (Wallonia-Brussels Federation)

(Apart from NEST), are you currently taking part or did you take part in any induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	49	48.04	19	44.19
Yes	53	51.96	24	55.81
Total	102	100.00	43	100.00

Table 125: Participation in Formal Induction Activities by Group (Wallonia-Brussels Federation)

(Apart from NEST), are you currently taking part or did you take part in any induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	65	63.73	25	58.14
Yes	37	36.27	18	41.86
Total	102	100.00	43	100.00

Table 126: Participation in Informal Induction Activities by Group (Wallonia-Brussels Federation)

(Apart from NEST), are you currently taking part or did you take part in any induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	54	52.94	27	62.79
Yes	48	47.06	16	37.21
Total	102	100.00	43	100.00

Table 127: Control Group: Hindrances on Quality of Instruction (Wallonia-Brussels Federation)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	98	2.17	.69	1	4
Shortage of teachers with competence in teaching students with special needs.	97	2.26	.85	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	99	1.81	.77	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	99	1.96	.95	1	4
Insufficient internet access.	98	1.87	1.02	1	4
Shortage or inadequacy of library materials.	97	1.82	.95	1	4
Shortage of support personnel.	97	1.94	.77	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	99	1.81	.8	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	98	1.69	.82	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	96	2.07	.77	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	96	1.85	.71	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	96	1.77	.73	1	4
Shortage or inadequacy of time for instructional leadership.	95	1.96	.85	1	4
Shortage or inadequacy of time with students.	98	2.12	.89	1	4

Table 128: Intervention Group: Hindrances on Quality of Instruction (Wallonia-Brussels Federation)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	N	Intervention Group			
		M	SD	Min	Max
Shortage of qualified teachers.	39	2.21	.86	1	4
Shortage of teachers with competence in teaching students with special needs.	39	2.33	.87	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	40	1.88	.88	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	40	2.02	.89	1	4
Insufficient internet access.	39	2.26	.97	1	4
Shortage or inadequacy of library materials.	38	1.97	1.03	1	4
Shortage of support personnel.	39	2.21	1.06	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	40	2.1	.98	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	40	1.9	.84	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	40	2.38	.98	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	40	1.93	.8	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	40	1.95	.78	1	4
Shortage or inadequacy of time for instructional leadership.	40	2.3	.94	1	4
Shortage or inadequacy of time with students.	40	2.13	.88	1	4

Table 129: Number of Formal Mentoring Conversations by Group (Wallonia-Brussels Federation)

Formal Mentoring Conversations	N	M	SD	Min	Max
Control Group	14	4.36	1.98	0	8
Intervention Group	41	3.44	3.07	0	10

Table 130: Number of Informal Mentoring Conversations by Group (Wallonia-Brussels Federation)

Informal Mentoring Conversations	N	M	SD	Min	Max
Control Group	13	12.38	15.16	2	60
Intervention Group	39	8.03	12.14	0	60

Table 131: Control Group: Organisation of Mentoring (Wallonia-Brussels Federation)

Items Organisation of Mentoring	N	Control Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	62	3	.96	1	4
My mentor takes sufficient time to observe my classroom teaching.	60	1.98	1.03	1	4
I know well in advance when my mentor will visit me for a classroom observation	58	2.12	1.14	1	4

Table 132: Intervention Group: Organisation of Mentoring (Wallonia-Brussels Federation)

Items Organisation of Mentoring	N	Intervention Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	40	2.88	.82	1	4
My mentor takes sufficient time to observe my classroom teaching.	39	2.1	.82	1	4
I know well in advance when my mentor will visit me for a classroom observation	40	2.33	.94	1	4

Table 133: Control Group: Extent of Mentoring Focus (Wallonia-Brussels Federation)

To what extent did the mentoring you received focus on supporting you to...	N	Control Group			
		M	SD	Min	Max
...teach students with learning difficulties.	58	2.22	.99	1	4
...teach students with language barriers.	58	1.52	.73	1	3
...teach students with emotional and behavioural difficulties.	58	2.26	.98	1	4
...involve parents in the learning process of their children.	59	1.97	.98	1	4
...manage a diverse classroom effectively.	59	2.44	1.09	1	4
...engage hard-to-reach learners.	59	2.51	1.1	1	4

Table 134: Intervention Group: Extent of Mentoring Focus (Wallonia-Brussels Federation)

To what extent did the mentoring you received focus on supporting you to...	N	Intervention Group			
		M	SD	Min	Max
...teach students with learning difficulties.	40	2.35	1.08	1	4
...teach students with language barriers.	40	1.55	.81	1	4
...teach students with emotional and behavioural difficulties.	40	2.2	.91	1	4
...involve parents in the learning process of their children.	39	1.62	.81	1	4
...manage a diverse classroom effectively.	40	2.15	.98	1	4
...engage hard-to-reach learners.	40	2.02	.97	1	4

Table 135: Intervention Group: Extent of Mentoring Focus by Cohort (Wallonia-Brussels Federation)

To what extent did the mentoring you received focus on supporting you to...	Intervention Group Cohort 1			Intervention Group Cohort 2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties.	34	2.41	1.08	6	2	1.1
...teach students with language barriers.	34	1.56	.82	6	1.5	.84
...teach students with emotional and behavioural difficulties.	34	2.18	.87	6	2.33	1.21
...involve parents in the learning process of their children.	33	1.67	.85	6	1.33	.52
...manage a diverse classroom effectively.	34	2.15	.96	6	2.17	1.17
...engage hard-to-reach learners.	34	2.03	.94	6	2	1.26

Table 136: Control Group: Fit of Mentoring Practices (Wallonia-Brussels Federation)

Fit Between Mentoring Practices	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of directive mentoring practices	60	3.48	2.4	0	6
Fit of facilitative mentoring practices	59	2.05	1.06	0	3
Overall fit	60	12.32	7.36	0	20

Table 137: Intervention Group: Fit of Mentoring Practices (Wallonia-Brussels Federation)

Fit Between Mentoring Practices	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of Directive Mentoring Practices	40	3.88	2.3	0	6
Fit of Facilitative Mentoring Practices	40	2.13	1.09	0	3
Overall Fit	41	13.02	6.99	0	20

Table 138: Control Group without Mentor: Emotional Exhaustion Over Time (Wallonia-Brussels Federation)

Items Exhaustion	Control Group without Mentor T1			Control Group without Mentor T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	40	2.65	.95	40	2.65	.86
Overall, I feel overstrained by my work load.	40	2.58	.98	40	2.42	.9
When I am working, I realise how weary I am.	39	2.54	.91	40	2.4	.96
At the end of a day's work, I sometimes feel really depressed.	40	2.02	.92	40	2.02	1.07

Table 139: Control Group with Mentor: Emotional Exhaustion Over Time (Wallonia-Brussels Federation)

Items Exhaustion	Control Group with Mentor T1			Control Group with Mentor T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	62	2.73	1.07	61	2.56	1.04
Overall, I feel overstrained by my work load.	62	2.66	.94	61	2.56	1.03
When I am working, I realise how weary I am.	62	2.55	.97	61	2.48	.99
At the end of a day's work, I sometimes feel really depressed.	62	2.42	1.03	61	2.31	1.03

Table 140: Intervention Group: Emotional Exhaustion Over Time (Wallonia-Brussels Federation)

Items Exhaustion	Intervention Group T1			Intervention Group T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	41	2.56	.78	41	2.59	.95
Overall, I feel overstrained by my work load.	41	2.39	.74	41	2.46	.67
When I am working, I realise how weary I am.	41	2.49	.81	41	2.51	.87
At the end of a day's work, I sometimes feel really depressed.	41	2.17	.83	41	2.32	.96

Table 141: Control Group without Mentor: Resilience (Wallonia-Brussels Federation)

Items Resilience	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	39	2.64	1.01	1	4
I think that I can cope well with work pressure.	39	2.72	.76	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	39	2.56	.97	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	39	2.46	.79	1	4

Table 142: Control Group with Mentor: Resilience (Wallonia-Brussels Federation)

Items Resilience	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	61	2.39	.99	1	4
I think that I can cope well with work pressure.	61	2.54	.79	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	61	2.36	.88	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	61	2.46	.89	1	4

Table 143: Intervention Group: Resilience (Wallonia-Brussels Federation)

Items Resilience	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	41	2.32	.93	1	4
I think that I can cope well with work pressure.	41	2.71	.81	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	41	2.32	1.01	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	41	2.39	.97	1	4

Table 144: Control Group without Mentor: Satisfaction with School as a Workplace (Wallonia-Brussels Federation)

Items Satisfaction with School as a Workplace	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	38	3.21	.96	1	4
I enjoy working at this school.	38	3.55	.55	2	4
I would recommend this school as a good place to work.	37	3.27	.56	2	4

Table 145: Control Group with Mentor: Satisfaction with School as a Workplace (Wallonia-Brussels Federation)

Items Satisfaction with School as a Workplace	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	62	3.4	.84	1	4
I enjoy working at this school.	62	3.47	.76	1	4
I would recommend this school as a good place to work.	62	3.13	.76	1	4

Table 146: Intervention Group: Satisfaction with School as a Workplace (Wallonia-Brussels Federation)

Items Satisfaction with School as a Workplace	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	40	3.25	.84	1	4
I enjoy working at this school.	40	3.4	.63	2	4
I would recommend this school as a good place to work.	40	3.2	.82	1	4

Table 147: Control Group without Mentor: Intention to Quit (Wallonia-Brussels Federation)

After this year, I'm planning to leave the teacher profession	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	26	68.42
Disagree	7	18.42
Agree	4	10.53
Strongly Agree	1	2.63
Total	38	100.00

Table 148: Control Group with Mentor: Intention to Quit (Wallonia-Brussels Federation)

After this year, I'm planning to leave the teacher profession	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	41	67.21
Disagree	15	24.59
Agree	3	4.92
Strongly Agree	2	3.28
Total	61	100.00

Table 149: Intervention Group: Intention to Quit (Wallonia-Brussels Federation)

After this year, I'm planning to leave the teacher profession	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	25	64.10
Disagree	12	30.77
Agree	2	5.13
Strongly Agree	0	0.00
Total	39	100.00

Table 150: Control Group without Mentor: Thinking About a Career Change (Wallonia-Brussels Federation)

In the long run, I'm thinking about a career change.	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	15	39.47
Disagree	9	23.68
Agree	11	28.95
Strongly Agree	3	7.89
Total	38	100.00

Table 151: Control Group with Mentor: Thinking About a Career Change (Wallonia-Brussels Federation)

In the long run, I'm thinking about a career change.	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	25	40.98
Disagree	17	27.87
Agree	10	16.39
Strongly Agree	9	14.75
Total	61	100.00

Table 152: Intervention Group: Thinking About a Career Change (Wallonia-Brussels Federation)

In the long run, I'm thinking about a career change.	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	14	35.90
Disagree	11	28.21
Agree	11	28.21
Strongly Agree	3	7.69
Total	39	100.00

Table 153: Willingness to Stay in the Teaching Profession in Years by Group (Wallonia-Brussels Federation)

For how many more years do you want to continue to work as a teacher?	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group without Mentor	8	16.63	6.63	10	30
Control Group with Mentor	14	19.57	16.56	0	43
Intervention Group	40	18.27	13.19	0	43

Table 154: Control Group with Mentor: Mentoring Competence (Wallonia-Brussels Federation)

Items Mentoring Competence	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	61	3.28	.76	1	4
My mentor encourages me to perceive my school as a professional learning environment.	61	3.2	.68	1	4
My mentor helps me to develop professional resilience.	60	2.97	.74	1	4
My mentor advises me on how to structure my teaching.	61	2.67	.85	1	4
My mentor professionally assesses the quality of my teaching skills.	61	2.3	.97	1	4
My mentor addresses my feelings in a professional way.	60	3.07	.76	1	4
My mentor gives me constructive feedback.	60	2.98	.89	1	4
My mentor uses active listening as a strategy.	59	3.02	.86	1	4
My mentor analyses my professional development needs.	61	2.8	.83	1	4
My mentor prompts me to reflect on my teaching.	61	2.75	.87	1	4
My mentor relates to professional teaching standards.	60	3.05	.85	1	4
My mentor deals with my mistakes in a constructive way.	61	2.98	.9	1	4

Table 155: Intervention Group: Mentoring Competence (Wallonia-Brussels Federation)

Items Mentoring Competence	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	41	3.07	1.01	1	4
My mentor encourages me to perceive my school as a professional learning environment.	41	3.02	.85	1	4
My mentor helps me to develop professional resilience.	41	2.78	.88	1	4
My mentor advises me on how to structure my teaching.	40	2.5	.85	1	4
My mentor professionally assesses the quality of my teaching skills.	41	1.98	.85	1	4
My mentor addresses my feelings in a professional way.	41	2.83	.74	1	4
My mentor gives me constructive feedback.	39	2.82	.79	1	4
My mentor uses active listening as a strategy.	40	3	.82	1	4
My mentor analyses my professional development needs.	41	2.51	.78	1	4
My mentor prompts me to reflect on my teaching.	40	2.63	.81	1	4
My mentor relates to professional teaching standards.	41	2.83	.77	1	4
My mentor deals with my mistakes in a constructive way.	41	3	.77	1	4

Table 156: Control Group without Mentor: Teaching Competences – Student Interactions (Wallonia-Brussels Federation)

Items Teaching Competences Regarding Student Interactions	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	38	3.92	1.28	1	6
Taking on the pupils' perspective when finding solutions for occurring problems.	39	4.51	1.12	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	39	4.95	.97	3	6
Imparting self-confidence even in timid pupils.	38	4.47	.89	3	6
Foster social development (e.g. helping, supporting, taking responsibility).	38	4.26	1.06	2	6
Knowing how to react when pupils show aggressive behaviour.	38	3.37	1.2	1	6
Approaching struggling students in a supportive way.	37	4.38	1.04	2	6
Creating an open classroom climate for students to voice their own ideas.	38	4.45	1.08	2	6
Supporting individual pupils in personal crises.	38	4.24	1.28	1	6
Purposefully fostering my pupils' strengths.	38	3.87	1.09	2	6
Supporting pupils who have experienced failure in class.	39	4.28	1.15	2	6

Table 157: Control Group with Mentor: Teaching Competences – Student Interactions (Wallonia-Brussels Federation)

Items Teaching Competences Regarding Student Interactions	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	61	4.15	1.01	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	61	4.33	.98	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	61	5.1	.89	3	6
Imparting self-confidence even in timid pupils.	60	4.78	.92	2	6
Foster social development (e.g. helping, supporting, taking responsibility).	60	4.53	.95	2	6
Knowing how to react when pupils show aggressive behaviour.	61	3.54	1.03	2	6
Approaching struggling students in a supportive way.	61	4.7	.78	3	6
Creating an open classroom climate for students to voice their own ideas.	61	4.7	.97	2	6
Supporting individual pupils in personal crises.	61	4.48	1.07	1	6
Purposefully fostering my pupils' strengths.	59	4.14	.9	2	5
Supporting pupils who have experienced failure in class.	59	4.41	.89	2	6

Table 158: Intervention Group: Teaching Competences – Student Interactions (Wallonia-Brussels Federation)

Items Teaching Competences Regarding Student Interactions	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	41	4.02	1.08	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	41	4.2	.87	2	5
Showing an open attitude, so it's easy for students to approach me with their problems.	41	5.02	.99	2	6
Imparting self-confidence even in timid pupils.	40	4.7	.82	3	6
Foster social development (e.g. helping, supporting, taking responsibility).	41	4.37	.86	2	6
Knowing how to react when pupils show aggressive behaviour.	40	3.6	1.24	1	5
Approaching struggling students in a supportive way.	41	4.68	.88	3	6
Creating an open classroom climate for students to voice their own ideas.	41	4.61	.89	3	6
Supporting individual pupils in personal crises.	41	4.34	1.13	2	6
Purposefully fostering my pupils' strengths.	41	4.15	1.01	2	6
Supporting pupils who have experienced failure in class.	41	4.54	1.03	3	6

Table 159: Control Group without Mentor: Teaching Competences – Parent Support (Wallonia-Brussels Federation)

Items Teaching Competences Regarding Parent Support	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	39	2.54	1.21	1	5
Advising parents how they can influence the learning environment of their child.	39	3.05	1.12	1	6
Showing parents how they can positively influence the education of their child.	39	3.03	1.09	1	5
Dealing with conflict in parent teacher interactions in a professional way.	39	2.72	1.05	1	5

Table 160: Control Group with Mentor: Teaching Competences – Parent Support (Wallonia-Brussels Federation)

Items Teaching Competences Regarding Parent Support	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	60	3	1.13	1	6
Advising parents how they can influence the learning environment of their child.	60	3.35	.95	1	5
Showing parents how they can positively influence the education of their child.	60	3.3	.93	1	5
Dealing with conflict in parent teacher interactions in a professional way.	59	2.95	.97	1	5

Table 161: Intervention Group: Teaching Competences – Parent Support (Wallonia-Brussels Federation)

Items Teaching Competences Regarding Parent Support	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	41	2.9	1.39	1	6
Advising parents how they can influence the learning environment of their child.	41	3.02	1.23	1	5
Showing parents how they can positively influence the education of their child.	41	3.12	1.27	1	5
Dealing with conflict in parent teacher interactions in a professional way.	41	2.68	1.39	1	5

A.3.2 Mentor Tables (Wallonia-Brussels Federation)

Table 162: Mentors' Gender Distribution by Group (Wallonia-Brussels Federation)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	7	19.44	4	26.67
Female	29	80.56	11	73.33
Total	36	100.00	15	100.00

Table 163: Mentors' Age by Group (Wallonia-Brussels Federation)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	36	48.64	8.09	31	63
Intervention Group	15	46.33	8.97	29	58

Table 164: Control Group Mentors' Job Experience (Wallonia-Brussels Federation)

Teaching Experience (Years)	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Year(s) working as a teacher in total	36	23.28	7.77	5	36
Year(s) working as a mentor	35	2.91	2.49	0	10
Year(s) working at schools in disadvantaged areas	33	9.3	11.3	0	36

Table 165: Intervention Group Mentors' Job Experience (Wallonia-Brussels Federation)

Teaching Experience (Years)	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Year(s) working as a teacher in total	15	18.07	9.08	4	33
Year(s) working as a mentor	15	4.67	5.8	0	22
Year(s) working at schools in disadvantaged areas	15	10.33	10.44	0	33

Table 166: Mentors' Previous Mentoring Experience by Group (Wallonia-Brussels Federation)

At any time during the last five years, did you mentor any novice teachers?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Yes	28	77.78	10	66.67
No	8	22.22	5	33.33
Total	36	100.00	15	100.00

Table 167: Mentor Control Group: General Acceptance of Mentoring (Wallonia-Brussels Federation)

To what extent do you agree with the following statements on mentoring in your education system?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	35	2.23	.91	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	36	3.11	.62	2	4
In my environment, people highly respect mentors who support novice teachers.	36	2.28	.66	1	3
I think that mentoring novice teachers is valued in society.	36	1.83	.65	1	3

Table 168: Mentor Intervention Group: General Acceptance of Mentoring (Wallonia-Brussels Federation)

To what extent do you agree with the following statements on mentoring in your education system?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	15	2.33	.82	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	15	2.8	.77	1	4
In my environment, people highly respect mentors who support novice teachers.	15	2.47	.99	1	4
I think that mentoring novice teachers is valued in society.	15	2	.65	1	3

Table 169: Mentor Control Group: Important Mentor Attributes (Wallonia-Brussels Federation)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	36	.67	.48	0	1
Openness	36	.42	.5	0	1
Respectfulness	36	.56	.5	0	1
Trustfulness	36	.61	.49	0	1
Curiousness	36	.06	.23	0	1
Courage	36	.03	.17	0	1
Flexibility	36	.36	.49	0	1

Table 170: Mentor Intervention Group: Important Mentor Attributes (Wallonia-Brussels Federation)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	15	.8	.41	0	1
Openness	15	.2	.41	0	1
Respectfulness	15	.53	.52	0	1
Trustfulness	15	.67	.49	0	1
Curiousness	15	0	0	0	0
Courage	15	0	0	0	0
Flexibility	15	.4	.51	0	1

Table 171: Mentors' Enthusiasm for Mentoring Over Time by Group (Wallonia-Brussels Federation)

Enthusiasm for Mentoring	Control Group				Intervention Group			
	T1		T3		T1		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Mentoring is the most fulfilling part of my job.	2.61	.69	2.56	.61	2.9	.88	2.73	.88
I enjoy getting novice teachers excited about teaching.	3.46	.51	3.53	.56	3.3	.48	3.4	.51
I find great joy in mentoring novice teachers.	3.46	.64	3.39	.55	3.6	.52	3.27	.46
I enjoy sharing my teaching expertise with novice teachers.	3.5	.58	3.5	.51	3.4	.52	3.4	.51
I feel content when I see progress in my mentees' teaching.	3.32	.77	3.31	.52	3.4	.7	3.13	.74
<i>N</i> _{Min}	28		36		10		15	

Table 172: Mentors' Enthusiasm Over Time by Group – Scale (Wallonia-Brussels Federation)

Enthusiasm Scale	T1		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Control Group	3.27	.52	3.26	.35
Intervention Group	3.32	.41	3.19	.42

Table 173: Control Group Mentors' Mentoring Focus (Wallonia-Brussels Federation)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.07	.72	-	-	2.44	.91
...teach students with language barriers?	1.46	.79	-	-	1.69	1.01
...teach students with emotional and behavioural difficulties?	2.25	.75	-	-	2.5	.88
...involve parents in the learning process of their children?	1.93	.77	-	-	2	.96
...manage a diverse classroom effectively?	2.36	.87	-	-	3	1.04
...engage hard-to-reach learners?	2	.82	-	-	2.43	1.12
<i>N</i> _{Min}	28		-		35	

Table 174: Intervention Group Mentors' Mentoring Focus (Wallonia-Brussels Federation)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.3	.95	2.4	1.06	2.07	.92
...teach students with language barriers?	1.9	.99	2.2	1.26	1.86	1.1
...teach students with emotional and behavioural difficulties?	2.4	.97	2.33	1.11	2.64	1.08
...involve parents in the learning process of their children?	2	1.05	1.6	.91	1.71	.91
...manage a diverse classroom effectively?	2.3	.48	2.73	1.22	2.71	1.27
...engage hard-to-reach learners?	2.3	.95	2.73	1.03	2.36	1.15
<i>N</i> _{Min}	10		15		14	

Table 175: Control Group Mentors' Use of Direct Mentoring Practices – Scale (Wallonia-Brussels Federation)

How often do you use the following mentoring practices?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	28	3.24	.73	2	4.5
Use of Direct Mentoring Practices (T2)	-	-	-	-	-
Use of Direct Mentoring Practices (T3)	36	2.88	.91	1.5	5.5

Table 176: Intervention Group Mentors' Use of Direct Mentoring Practices – Scale (Wallonia-Brussels Federation)

How often do you use the following mentoring practices?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	10	2.94	.8	2	4.4
Use of Direct Mentoring Practices (T2)	15	2.83	.61	1.67	3.83
Use of Direct Mentoring Practices (T3)	15	2.36	.81	1	3.5

Table 177: Control Group Mentor's Use of Facilitative Mentoring Practices – Scale (Wallonia-Brussels Federation)

How often do you use the following mentoring practices?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	28	4.29	.82	2.67	6
Use of Facilitative Mentoring Practices (T2)	-	-	-	-	-
Use of Facilitative Mentoring Practices (T3)	35	3.85	.69	2	5.33

Table 178: Intervention Group Mentor's Use of Facilitative Mentoring Practices – Scale (Wallonia-Brussels Federation)

How often do you use the following mentoring practices?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	10	4.48	.59	3.33	5.33
Use of Facilitative Mentoring Practices (T2)	15	4.3	.72	3	6
Use of Facilitative Mentoring Practices (T3)	15	3.91	1.19	1	5.67

Table 179: Control Group Mentors' Mentoring Practices (Wallonia-Brussels Federation)

Items Mentoring Practices	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	4.57	.74	-	-	4.49	1.04
I ask clarifying questions.	4.43	.96	-	-	4.09	.85
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	3.86	1.15	-	-	2.97	1.25
I use active listening skills during mentoring conversations.	4.18	.94	-	-	4.43	1.14
I confront novice teachers with mistakes they made during their lessons.	3.43	1.37	-	-	2.69	1.23
I use concrete examples from the novice teachers' lessons during conversations.	4.43	1.29	-	-	3.34	1.66
I instruct novice teachers on how to structure their teaching.	2.77	1.14	-	-	2.83	1.29
I am able to address feelings which I perceived during the lesson.	2.64	1.6	-	-	2.34	1.41
I help mentees to make their implicit statements explicit.	3.31	1.59	-	-	2.85	1.13
I ask for alternatives to the teaching implemented by novice teachers.	3.04	1.08	-	-	3.03	1.15
I provide additional information on instruction to mentees.	3.27	1.12	-	-	3.26	1.44
I assess the quality of novice teachers' teaching skills.	1.77	.95	-	-	1.46	.7
I provide direct advice on how to improve teaching.	3.46	.84	-	-	3.4	1.06
I give examples of best practice from my own experience.	3.86	1.08	-	-	3.77	1.06
I want novice teachers to discover the principles behind a good lesson on their own.	3.89	1.07	-	-	3.83	1.01
I let my novice teachers reflect continuously on their professional development.	3.89	1.13	-	-	3.86	1.31
At the end of a mentoring conversation, I summarise the content that we discussed.	3.5	1.37	-	-	3.38	1.37
I provide guidance on further professional development opportunities.	2.04	1.07	-	-	2.6	1.38
<i>N</i> _{Min}	25		-		34	

Table 180: Intervention Group Mentors' Mentoring Practices (Wallonia-Brussels Federation)

Items Mentoring Practices	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	4.9	.88	4.57	1.34	4.13	1.55
I ask clarifying questions.	4.6	.84	4.67	1.05	4.4	1.3
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	3.89	.78	3.62	1.04	3.2	1.37
I use active listening skills during mentoring conversations.	3.8	1.4	5.07	.8	4.47	1.51
I confront novice teachers with mistakes they made during their lessons.	2.7	1.83	2.09	1.04	2.2	1.37
I use concrete examples from the novice teachers' lessons during conversations.	4.5	.85	3.5	1.51	2.67	1.68
I instruct novice teachers on how to structure their teaching.	2.22	1.09	2.79	1.12	2.6	1.35
I am able to address feelings which I perceived during the lesson.	2.1	1.37	3	1.41	2.67	1.5
I help mentees to make their implicit statements explicit.	3.9	1.29	3.43	1.22	3.53	1.55
I ask for alternatives to the teaching implemented by novice teachers.	3	1.25	3.21	1.42	3.33	1.5
I provide additional information on instruction to mentees.	3.67	1.73	3.46	1.76	3.2	1.42
I assess the quality of novice teachers' teaching skills.	1.4	.84	1.5	1	1.13	.35
I provide direct advice on how to improve teaching.	3	1.76	3.07	.92	2.33	1.5
I give examples of best practice from my own experience.	3.9	1.37	3.79	.97	3.4	1.18
I want novice teachers to discover the principles behind a good lesson on their own.	4.2	1.48	4	1	3.8	1.21
I let my novice teachers reflect continuously on their professional development.	3.8	1.55	3.6	1.12	4.07	1.58
At the end of a mentoring conversation, I summarise the content that we discussed.	4.1	1.79	3.67	1.5	4	1.56
I provide guidance on further professional development opportunities.	2.67	1	2.55	1.57	2.47	1.19
<i>N</i> _{Min}	9		11		15	

Table 181: Usefulness of NEST Mentor Training for Teaching (Wallonia-Brussels Federation)

To what extent did the NEST mentor training programme improve your own teaching practice?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Improvement of Own Teaching Practice	14	3.14	.95	1	4

Table 182: Mentors' Improvement of Mentoring Practices by NEST Mentor Training Programme

To what extent did the NEST training help you to improve your mentoring regarding the following skills:	Intervention Group				
	N	M	SD	Min	Max
Giving constructive feedback.	15	3.27	.8	2	4
Using active listening as a strategy.	14	3.43	.76	2	4
Analyzing mentees' professional development needs.	15	2.8	1.08	1	4
Using different mentoring approaches for novice teachers with different personalities.	15	3.07	.88	1	4
Prompting mentees to reflect on their teaching.	15	3.53	.64	2	4
Changing my mentoring approach according to the social situation in the classroom.	14	2.36	1.01	1	4
Relating to professional teaching standards.	14	2.14	1.1	1	4
Dealing with mentees' mistakes in a constructive way.	15	3.27	.88	2	4
Addressing mentees' feelings.	12	3.67	.49	3	4
Taking the perspective of the mentee (putting myself in their shoes)	14	3.57	.51	3	4
Identify challenges my mentee is facing	15	3.47	.74	2	4
Adapting my mentoring approach according to the novice teacher's level of professional development.	15	2.6	1.18	1	4

Table 183: Control Group Mentors' Self-Assessed Mentoring Competence (Wallonia-Brussels Federation)

Items Mentoring Competence	Control Group					
	T1		T2		T3	
	M	SD	M	SD	M	SD
I am able to build supportive relationships with my mentees.	4.57	.74	-	-	4.58	.94
I am able to encourage my mentees to perceive their school as a professional learning environment.	4.43	.96	-	-	4.37	1.03
I am able to contribute to a growing professional resilience among my mentees.	3.86	1.15	-	-	4	1.03
I am able to advise novice teachers on how to structure their teaching.	4.18	.94	-	-	4.17	1.07
I am able to assess the quality of novice teachers' teaching skills.	3.43	1.37	-	-	3.59	1.33
I am able to address my mentees' feelings.	4.43	1.29	-	-	4.43	1.2
I am able to give my mentees constructive feedback.	4.11	1.26	-	-	4.66	.97
I am able to use active listening as a strategy.	4.61	1.23	-	-	4.53	1.02
I am able to analyse mentees' professional development needs.	3.86	1.21	-	-	3.83	1.2
I am able to prompt mentees to reflect on their teaching.	4	1.05	-	-	4.35	1.1
I am able to relate to professional teaching standards.	3.56	1.5	-	-	3.68	1.49
I am able to deal with mentees' mistakes in a constructive way.	4.57	1.03	-	-	4.54	.92
N _{Min}	27		-		34	

Table 184: Intervention Group Mentors' Self-Assessed Mentoring Competence (Wallonia-Brussels Federation)

Items Mentoring Competence	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I am able to build supportive relationships with my mentees.	4.9	.88	4.67	.98	4.8	.77
I am able to encourage my mentees to perceive their school as a professional learning environment.	4.6	.84	4.27	1.22	4.73	1.22
I am able to contribute to a growing professional resilience among my mentees.	3.89	.78	4.08	1	4.13	.74
I am able to advise novice teachers on how to structure their teaching.	3.8	1.4	4.13	.99	3.8	.94
I am able to assess the quality of novice teachers' teaching skills.	2.7	1.83	3.54	1.27	3.53	1.46
I am able to address my mentees' feelings.	4.5	.85	4.53	1.19	4.73	1.16
I am able to give my mentees constructive feedback.	4.5	1.35	4.79	.97	4.73	.8
I am able to use active listening as a strategy.	4.6	1.51	4.93	.8	5	.76
I am able to analyse mentees' professional development needs.	4.1	1.2	4.07	1	3.93	.88
I am able to prompt mentees to reflect on their teaching.	3.8	1.48	4.07	1.03	4.43	.85
I am able to relate to professional teaching standards.	3.89	1.45	3.62	1.5	3.33	1.5
I am able to deal with mentees' mistakes in a constructive way.	4.4	1.58	4.2	1.15	4.2	1.15
<i>N</i> _{Min}	9		12		15	

Table 185: Control Group Mentors' Self-Assessed Mentoring Competence – Scale (Wallonia-Brussels Federation)

Mentoring Competence	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	28	4.13	.84	2.58	5.5
Mentoring Competence (T2)	-	-	-	-	-
Mentoring Competence (T3)	36	4.23	.82	1.67	5.5

Table 186: Intervention Group Mentors' Self-Assessed Mentoring Competence – Scale (Wallonia-Brussels Federation)

Mentoring Competence	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	10	4.15	.78	2.83	5.67
Mentoring Competence (T2)	15	4.24	.72	2.89	6
Mentoring Competence (T3)	15	4.28	.69	3.08	6

Appendix A4 – Bulgaria

A.4.1 Novice Teacher Tables (Bulgaria)

Table 187: Novice Teachers in the Control and Intervention Group by Cohort (Bulgaria)

Cohort	Control Group	Intervention Group	Total
1 (School Year 2021/2022)	205	117	322
2 (School Year 2022/2023)	206	129	335
Total	411	246	657

Table 188: Novice Teachers' Expert Support by Group (Bulgaria)

Do you currently have an assigned expert to support you?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	345	83.94	0	0.00
Yes	66	16.06	246	100.00
Total	411	100.00	246	100.00

Table 189: Novice Teachers' Gender Distribution by Group (Bulgaria)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	79	19.22	58	23.58
Female	331	80.54	188	76.42
Other	1	0.24	0	0.00
Total	411	100.00	246	100.00

Table 190: Novice Teachers' Age by Group (Bulgaria)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	411	33.59	7.11	22	58
Intervention Group	246	34.62	7.91	21	56

Table 191: Novice Teachers' Teaching Experience by Group (Bulgaria)

Teaching Experience (Years)	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	411	2.25	1.43	0	5
Intervention Group	246	1.74	1.36	0	5

Table 192: Teaching as First Career Choice of the Novice Teachers by Group (Bulgaria)

Was teaching your first choice as a career?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	223	54.52	146	59.35
Yes	186	45.48	100	40.65
Total	409	100.00	246	100.00

Table 193: Teaching Qualification of the Novice Teachers by Group (Bulgaria)

Do you have a formal teaching qualification?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Yes	373	90.75	219	89.02
No	38	9.25	27	10.98
Total	411	100.00	246	100.00

Table 194: Novice Teachers' Entrance into Teaching Profession by Group (Bulgaria)

How did you enter the teaching profession?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
I entered the teaching profession via regular teacher education and/or training.	281	68.37	155	63.01
I entered the teaching profession via an alternative pathway (e.g. fast track training).	109	26.52	78	31.71
I entered the teaching profession without any teacher education or teacher training.	21	5.11	13	5.28
Total	411	100.00	246	100.00

Table 195: Control Group: General Acceptance of Mentoring (Bulgaria)

To what extent do you agree with the following statements on mentoring in your education system?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	410	3.05	.79	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	408	2.96	.79	1	4
In my environment, people highly respect mentors who support novice teachers.	410	3.13	.71	1	4
I think that mentoring novice teachers is valued in society.	409	2.81	.83	1	4

Table 196: Intervention Group: General Acceptance of Mentoring (Bulgaria)

To what extent do you agree with the following statements on mentoring in your education system?	N	Intervention Group			
		M	SD	Min	Max
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	242	3.22	.76	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	242	3.07	.75	1	4
In my environment, people highly respect mentors who support novice teachers.	242	3.17	.75	1	4
I think that mentoring novice teachers is valued in society.	242	2.96	.84	1	4

Table 197: Control Group: Important Mentor Attributes (Bulgaria)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Control Group			
		M	SD	Min	Max
Empathy	411	.34	.47	0	1
Openness	411	.45	.5	0	1
Respectfulness	411	.67	.47	0	1
Trustfulness	411	.61	.49	0	1
Curiousness	411	.08	.27	0	1
Courage	411	.15	.35	0	1
Flexibility	411	.4	.49	0	1

Table 198: Intervention Group: Important Mentor Attributes (Bulgaria)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Intervention Group			
		M	SD	Min	Max
Empathy	246	.38	.49	0	1
Openness	246	.51	.5	0	1
Respectfulness	246	.57	.5	0	1
Trustfulness	246	.6	.49	0	1
Curiousness	246	.07	.25	0	1
Courage	246	.1	.3	0	1
Flexibility	246	.42	.49	0	1

Table 199: Control Group: Attitudes Towards Being Mentored (Bulgaria)

Items Attitudes Towards Being Mentored	N	Control Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	411	3.1	.69	1	4
I think being mentored will help me to improve my teaching.	411	3.06	.71	1	4
I expect my mentor(s) to help me discover the causes for professional problems.	411	2.99	.71	1	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	411	3.14	.63	1	4
From my mentor(s) I expect good ideas for my further professional development.	411	3.1	.62	1	4
I think being mentored will help me to develop reflection skills for my own teaching.	411	3.15	.67	1	4

Table 200: Intervention Group: Attitudes Towards Being Mentored (Bulgaria)

Items Attitudes Towards Being Mentored	N	Intervention Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	244	3.42	.59	1	4
I think being mentored will help me to improve my teaching.	244	3.43	.57	1	4
I expect my mentor(s) to help me discover the causes for professional problems.	244	3.29	.61	1	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	244	3.44	.58	1	4
From my mentor(s) I expect good ideas for my further professional development.	244	3.38	.56	1	4
I think being mentored will help me to develop reflection skills for my own teaching.	244	3.42	.58	1	4

Table 201: Control Group: Preparedness for School Challenges (Bulgaria)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	404	2.42	.87	1	4
Teaching students with language barriers.	403	2.03	.87	1	4
Teaching students with emotional and behavioural difficulties.	403	2.27	.87	1	4
Involving parents in the learning process of their children.	404	2.19	.94	1	4
Managing a diverse classroom effectively.	403	2.4	.96	1	4
Engaging hard-to-reach learners.	404	2.28	.91	1	4

Table 202: Intervention Group: Preparedness for School Challenges (Bulgaria)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	243	2.3	.82	1	4
Teaching students with language barriers.	243	1.96	.83	1	4
Teaching students with emotional and behavioural difficulties.	242	2.16	.81	1	4
Involving parents in the learning process of their children.	242	2.08	.83	1	4
Managing a diverse classroom effectively.	243	2.21	.92	1	4
Engaging hard-to-reach learners.	243	2.15	.86	1	4

Table 203: Participation in Induction Activities by Group (Bulgaria)

(Apart from NEST), are you currently taking part or did you take part in any induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	277	67.40	186	75.61
Yes	134	32.60	60	24.39
Total	411	100.00	246	100.00

Table 204: Participation in Formal Induction Activities by Group (Bulgaria)

(Apart from NEST), are you currently taking part or did you take part in any formal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	308	74.94	197	80.08
Yes	103	25.06	49	19.92
Total	411	100.00	246	100.00

Table 205: Participation in Informal Induction Activities by Group (Bulgaria)

(Apart from NEST), are you currently taking part or did you take part in any informal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	304	73.97	206	83.74
Yes	107	26.03	40	16.26
Total	411	100.00	246	100.00

Table 206: Control Group: Hindrances on Quality of Instruction (Bulgaria)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	407	1.31	.56	1	4
Shortage of teachers with competence in teaching students with special needs.	407	1.56	.76	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	406	1.39	.63	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	407	1.53	.73	1	4
Insufficient internet access.	404	1.31	.6	1	4
Shortage or inadequacy of library materials.	404	1.39	.6	1	4
Shortage of support personnel.	407	1.52	.73	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	407	1.47	.68	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	407	1.48	.69	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	407	1.34	.6	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	407	1.23	.49	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	405	1.38	.59	1	4
Shortage or inadequacy of time for instructional leadership.	406	1.44	.62	1	4
Shortage or inadequacy of time with students.	407	1.53	.66	1	4

Table 207: Intervention Group: Hindrances on Quality of Instruction (Bulgaria)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	239	1.3	.51	1	3
Shortage of teachers with competence in teaching students with special needs.	237	1.6	.73	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	238	1.38	.6	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	239	1.59	.76	1	4
Insufficient internet access.	237	1.36	.59	1	4
Shortage or inadequacy of library materials.	235	1.4	.62	1	4
Shortage of support personnel.	239	1.51	.7	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	237	1.41	.67	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	238	1.42	.69	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	235	1.41	.68	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	237	1.27	.53	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	238	1.4	.63	1	4
Shortage or inadequacy of time for instructional leadership.	237	1.41	.65	1	4
Shortage or inadequacy of time with students.	237	1.49	.67	1	4

Table 208: Number of Formal Mentoring Conversations by Group (Bulgaria)

Formal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	39	7.59	7.16	0	30
Intervention Group	239	3.19	2.29	0	30

Table 209: Number of Informal Mentoring Conversations by Group (Bulgaria)

Informal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	38	22.55	24.72	0	100
Intervention Group	234	4.14	3.52	0	20

Table 210: Control Group: Organisation of Mentoring (Bulgaria)

Items Organisation of Mentoring	N	Control Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	65	3.34	.73	1	4
My mentor takes sufficient time to observe my classroom teaching.	65	3.08	.85	1	4
I know well in advance when my mentor will visit me for a classroom observation	65	2.88	.78	1	4

Table 211: Intervention Group: Organisation of Mentoring (Bulgaria)

Items Organisation of Mentoring	N	Intervention Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	238	3.61	.62	1	4
My mentor takes sufficient time to observe my classroom teaching.	236	3.54	.64	1	4
I know well in advance when my mentor will visit me for a classroom observation	232	3.38	.66	1	4

Table 212: Control Group: Extent of Mentoring Focus (Bulgaria)

To what extent did the mentoring you received focus on supporting you to...	N	Control Group			
		M	SD	Min	Max
...teach students with learning difficulties.	66	2.61	.87	1	4
...teach students with language barriers.	66	2.44	.93	1	4
...teach students with emotional and behavioural difficulties.	66	2.62	.87	1	4
...involve parents in the learning process of their children.	66	2.44	.88	1	4
...manage a diverse classroom effectively.	66	2.62	.89	1	4
...engage hard-to-reach learners.	66	2.64	.85	1	4

Table 213: Intervention Group: Extent of Mentoring Focus (Bulgaria)

To what extent did the mentoring you received focus on supporting you to...	N	Intervention Group			
		M	SD	Min	Max
...teach students with learning difficulties.	238	2.79	.72	1	4
...teach students with language barriers.	237	2.52	.88	1	4
...teach students with emotional and behavioural difficulties.	237	2.57	.82	1	4
...involve parents in the learning process of their children.	237	2.37	.81	1	4
...manage a diverse classroom effectively.	237	2.73	.81	1	4
...engage hard-to-reach learners.	237	2.86	.82	1	4

Table 214: Intervention Group: Extent of Mentoring Focus by Cohort (Bulgaria)

To what extent did the mentoring you received focus on supporting you to...	Intervention Group Cohort 1			Intervention Group Cohort 2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties.	113	2.89	.7	125	2.7	.73
...teach students with language barriers.	112	2.69	.82	125	2.38	.9
...teach students with emotional and behavioural difficulties.	112	2.63	.78	125	2.51	.86
...involve parents in the learning process of their children.	112	2.46	.77	125	2.28	.84
...manage a diverse classroom effectively.	112	2.79	.79	125	2.67	.82
...engage hard-to-reach learners.	112	2.93	.79	125	2.81	.85

Table 215: Control Group: Fit of Mentoring Practices (Bulgaria)

Fit Between Mentoring Practices	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of directive mentoring practices	67	3.85	2.34	0	6
Fit of facilitative mentoring practices	67	2.21	1.07	0	3
Overall fit	67	13	6.83	0	20

Table 216: Intervention Group: Fit of Mentoring Practices (Bulgaria)

Fit Between Mentoring Practices	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of Directive Mentoring Practices	239	4.59	2.02	0	6
Fit of Facilitative Mentoring Practices	238	2.55	.8	0	3
Overall Fit	239	15.83	5.46	0	20

Table 217: Control Group without Expert: Emotional Exhaustion Over Time (Bulgaria)

Items Exhaustion	Control Group without Expert T1			Control Group without Expert T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	341	2.63	.92	340	2.63	.91
Overall, I feel overstrained by my work load.	340	2.68	.87	339	2.64	.87
When I am working, I realise how weary I am.	340	2.5	.86	339	2.46	.85
At the end of a day's work, I sometimes feel really depressed.	340	2.39	1.02	340	2.36	.9

Table 218: Control Group with Expert: Emotional Exhaustion Over Time (Bulgaria)

Items Exhaustion	Control Group with Expert T1			Control Group with Expert T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	64	2.47	.85	66	2.36	.89
Overall, I feel overstrained by my work load.	64	2.47	.82	66	2.53	.81
When I am working, I realise how weary I am.	64	2.42	.83	65	2.37	.72
At the end of a day's work, I sometimes feel really depressed.	64	2.2	1.01	66	2.3	.86

Table 219: Intervention Group: Emotional Exhaustion Over Time (Bulgaria)

Items Exhaustion	Intervention Group T1			Intervention Group T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	243	2.6	.9	239	2.61	.91
Overall, I feel overstrained by my work load.	242	2.6	.8	239	2.6	.83
When I am working, I realise how weary I am.	241	2.44	.78	237	2.45	.84
At the end of a day's work, I sometimes feel really depressed.	244	2.27	.84	239	2.3	.9

Table 220: Control Group without Expert: Resilience (Bulgaria)

Items Resilience	Control Group without Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	341	2.6	.78	1	4
I think that I can cope well with work pressure.	338	2.8	.66	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	341	2.44	.74	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	340	2.7	.71	1	4

Table 221: Control Group with Expert: Resilience (Bulgaria)

Items Resilience	Control Group with Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	66	2.7	.8	1	4
I think that I can cope well with work pressure.	66	2.88	.67	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	66	2.42	.82	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	66	2.74	.66	1	4

Table 222: Intervention Group: Resilience (Bulgaria)

Items Resilience	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	240	2.65	.78	1	4
I think that I can cope well with work pressure.	237	2.77	.69	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	237	2.44	.77	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	237	2.73	.68	1	4

Table 223: Control Group without Expert: Satisfaction with School as a Workplace (Bulgaria)

Items Satisfaction with School as a Workplace	Control Group without Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	344	2.97	.89	1	4
I enjoy working at this school.	341	3.43	.66	1	4
I would recommend this school as a good place to work.	342	3.3	.73	1	4

Table 224: Control Group with Expert: Satisfaction with School as a Workplace (Bulgaria)

Items Satisfaction with School as a Workplace	Control Group with Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	66	2.86	.86	1	4
I enjoy working at this school.	66	3.48	.53	2	4
I would recommend this school as a good place to work.	66	3.48	.61	1	4

Table 225: Intervention Group: Satisfaction with School as a Workplace (Bulgaria)

Items Satisfaction with School as a Workplace	N	Intervention Group			
		M	SD	Min	Max
I would like to change to another school if that were possible.	238	2.89	.85	1	4
I enjoy working at this school.	238	3.31	.63	1	4
I would recommend this school as a good place to work.	238	3.22	.68	1	4

Table 226: Control Group without Expert: Intention to Quit (Bulgaria)

After this year, I'm planning to leave the teacher profession	Control Group without Expert	
	N	Percent
Strongly Disagree	214	62.57
Disagree	113	33.04
Agree	13	3.80
Strongly Agree	2	0.58
Total	342	100.00

Table 227: Control Group with Expert: Intention to Quit (Bulgaria)

After this year, I'm planning to leave the teacher profession	Control Group with Expert	
	N	Percent
Strongly Disagree	43	65.15
Disagree	19	28.79
Agree	3	4.55
Strongly Agree	1	1.52
Total	66	100.00

Table 228: Intervention Group: Intention to Quit (Bulgaria)

After this year, I'm planning to leave the teacher profession	Intervention Group	
	N	Percent
Strongly Disagree	138	57.26
Disagree	95	39.42
Agree	8	3.32
Strongly Agree	0	0.00
Total	241	100.00

Table 229: Control Group without Expert: Thinking About a Career Change (Bulgaria)

In the long run, I'm thinking about a career change.	Control Group without Expert	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	170	49.85
Disagree	119	34.90
Agree	40	11.73
Strongly Agree	12	3.52
Total	341	100.00

Table 230: Control Group with Expert: Thinking About a Career Change (Bulgaria)

In the long run, I'm thinking about a career change.	Control Group with Expert	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	30	46.15
Disagree	31	47.69
Agree	2	3.08
Strongly Agree	2	3.08
Total	65	100.00

Table 231: Intervention Group: Thinking About a Career Change (Bulgaria)

In the long run, I'm thinking about a career change.	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	98	40.66
Disagree	111	46.06
Agree	27	11.20
Strongly Agree	5	2.07
Total	241	100.00

Table 232: Willingness to Stay in the Teaching Profession in Years by Group (Bulgaria)

For how many more years do you want to continue to work as a teacher?	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group without Expert	167	22.07	11.91	0	60
Control Group with Expert	36	23.97	9.14	1	40
Intervention Group	228	23.54	15.89	0	100

Table 233: Control Group with Expert: Mentoring Competence (Bulgaria)

Items Mentoring Competence	Control Group with Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	64	3.53	.64	1	4
My mentor encourages me to perceive my school as a professional learning environment.	65	3.37	.76	1	4
My mentor helps me to develop professional resilience.	66	3.44	.68	1	4
My mentor advises me on how to structure my teaching.	65	3.38	.72	1	4
My mentor professionally assesses the quality of my teaching skills.	66	3.24	.72	1	4
My mentor addresses my feelings in a professional way.	65	3.28	.67	1	4
My mentor gives me constructive feedback.	64	3.48	.64	2	4
My mentor uses active listening as a strategy.	64	3.38	.72	1	4
My mentor analyses my professional development needs.	65	3.2	.77	1	4
My mentor prompts me to reflect on my teaching.	65	3.28	.74	1	4
My mentor relates to professional teaching standards.	65	3.31	.73	1	4
My mentor deals with my mistakes in a constructive way.	65	3.28	.76	1	4

Table 234: Intervention Group: Mentoring Competence (Bulgaria)

Items Mentoring Competence	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	238	3.74	.51	1	4
My mentor encourages me to perceive my school as a professional learning environment.	239	3.64	.58	1	4
My mentor helps me to develop professional resilience.	235	3.67	.56	1	4
My mentor advises me on how to structure my teaching.	238	3.61	.59	1	4
My mentor professionally assesses the quality of my teaching skills.	236	3.62	.57	1	4
My mentor addresses my feelings in a professional way.	237	3.64	.59	1	4
My mentor gives me constructive feedback.	239	3.65	.55	1	4
My mentor uses active listening as a strategy.	237	3.65	.58	1	4
My mentor analyses my professional development needs.	237	3.59	.6	1	4
My mentor prompts me to reflect on my teaching.	238	3.56	.58	1	4
My mentor relates to professional teaching standards.	239	3.5	.65	1	4
My mentor deals with my mistakes in a constructive way.	238	3.58	.59	1	4

Table 235: Control Group without Expert: Teaching Competences – Student Interactions (Bulgaria)

Items Teaching Competences Regarding Student Interactions	Control Group without Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	343	4.42	.89	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	343	4.64	.92	1	6
Showing an open attitude, so it's easy for students to approach me with their problems.	343	4.95	.88	1	6
Imparting self-confidence even in timid pupils.	343	4.67	.86	1	6
Foster social development (e.g. helping, supporting, taking responsibility).	341	4.72	.82	2	6
Knowing how to react when pupils show aggressive behaviour.	340	4.39	.96	1	6
Approaching struggling students in a supportive way.	335	4.65	.8	2	6
Creating an open classroom climate for students to voice their own ideas.	343	4.85	.86	2	6
Supporting individual pupils in personal crises.	342	4.69	.93	1	6
Purposefully fostering my pupils' strengths.	336	4.65	.85	2	6
Supporting pupils who have experienced failure in class.	343	4.55	.89	1	6

Table 236: Control Group with Expert: Teaching Competences – Student Interactions (Bulgaria)

Items Teaching Competences Regarding Student Interactions	Control Group with Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	65	4.66	.78	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	66	4.8	.75	3	6
Showing an open attitude, so it's easy for students to approach me with their problems.	66	4.85	.86	2	6
Imparting self-confidence even in timid pupils.	66	4.79	.87	2	6
Foster social development (e.g. helping, supporting, taking responsibility).	66	4.76	.91	2	6
Knowing how to react when pupils show aggressive behaviour.	66	4.5	.86	2	6
Approaching struggling students in a supportive way.	66	4.7	.88	2	6
Creating an open classroom climate for students to voice their own ideas.	66	4.85	.88	3	6
Supporting individual pupils in personal crises.	66	4.65	1.02	2	6
Purposefully fostering my pupils' strengths.	66	4.82	.78	2	6
Supporting pupils who have experienced failure in class.	66	4.64	1.06	1	6

Table 237: Intervention Group: Teaching Competences – Student Interactions (Bulgaria)

Items Teaching Competences Regarding Student Interactions	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	239	4.42	.82	1	6
Taking on the pupils' perspective when finding solutions for occurring problems.	238	4.56	.79	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	238	4.89	.81	3	6
Imparting self-confidence even in timid pupils.	236	4.58	.86	2	6
Foster social development (e.g. helping, supporting, taking responsibility).	237	4.66	.82	3	6
Knowing how to react when pupils show aggressive behaviour.	238	4.31	.85	1	6
Approaching struggling students in a supportive way.	237	4.57	.8	1	6
Creating an open classroom climate for students to voice their own ideas.	236	4.72	.81	2	6
Supporting individual pupils in personal crises.	236	4.54	.9	2	6
Purposefully fostering my pupils' strengths.	236	4.6	.81	2	6
Supporting pupils who have experienced failure in class.	239	4.52	.79	2	6

Table 238: Control Group without Expert: Teaching Competences – Parent Support (Bulgaria)

Items Teaching Competences Regarding Parent Support	Control Group without Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	341	3.88	1.07	1	6
Advising parents how they can influence the learning environment of their child.	342	4.08	1.05	1	6
Showing parents how they can positively influence the education of their child.	339	4.14	1.02	1	6
Dealing with conflict in parent teacher interactions in a professional way.	342	4.31	1.03	1	6

Table 239: Control Group with Expert: Teaching Competences – Parent Support (Bulgaria)

Items Teaching Competences Regarding Parent Support	Control Group with Expert				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	65	4.08	1.12	1	6
Advising parents how they can influence the learning environment of their child.	65	4.14	1.1	1	6
Showing parents how they can positively influence the education of their child.	65	4.25	1.05	1	6
Dealing with conflict in parent teacher interactions in a professional way.	65	4.2	1.18	1	6

Table 240: Intervention Group: Teaching Competences – Parent Support (Bulgaria)

Items Teaching Competences Regarding Parent Support	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	235	3.87	1.03	1	6
Advising parents how they can influence the learning environment of their child.	235	4.05	.97	1	6
Showing parents how they can positively influence the education of their child.	234	4.09	.97	1	6
Dealing with conflict in parent teacher interactions in a professional way.	234	4.23	.92	2	6

A.4.2 Expert Tables (Bulgaria)

Table 241: Experts' Gender Distribution (Bulgaria)

Gender	<i>N</i>	<i>Percent</i>
Male	8	18.60
Female	35	81.40
Total	411	100.00

Table 242: Experts' Age (Bulgaria)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Intervention Group	43	50.37	7.46	33	64

Table 243: Expert: General Acceptance of Mentoring (Bulgaria)

To what extent do you agree with the following statements on mentoring in your education system?	N	Intervention Group			
		M	SD	Min	Max
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	43	2.77	1	1	4
In my education system, being a mentor is seen as one of the most important parts of professional development for teachers.	43	3.33	.84	1	4
In my environment, people highly respect mentors who support novice teachers.	43	3.44	.77	1	4
I think that mentoring novice teachers is valued in society.	43	3.21	.74	1	4

Table 244: Experts: Important Expert Attributes (Bulgaria)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Intervention Group			
		M	SD	Min	Max
Empathy	43	.4	.49	0	1
Openness	43	.3	.46	0	1
Respectfulness	43	.56	.5	0	1
Trustfulness	43	.7	.46	0	1
Curiousness	43	0	0	0	0
Courage	43	.02	.15	0	1
Flexibility	43	.44	.5	0	1

Table 245: Experts' Enthusiasm for Mentoring (Bulgaria)

Items Enthusiasm for Mentoring	T1		T3	
	M	SD	M	SD
Mentoring is the most fulfilling part of my job.	3.24	0.49	3.69	0.47
I enjoy getting novice teachers excited about teaching.	3.65	0.48	3.86	0.35
I find great joy in mentoring novice teachers.	3.51	0.51	3.81	0.4
I enjoy sharing my teaching expertise with novice teachers.	3.76	0.43	3.9	0.3
I feel content when I see progress in my mentees' teaching.	3.95	0.23	3.95	0.21
N _{Min}	37		41	

Table 246: Experts' Enthusiasm Scale Over Time (Bulgaria)

Enthusiasm Scale	T1		T3	
	M	SD	M	SD
Intervention Group	3.62	.33	3.85	.26

Table 247: Experts' Mentoring Focus (Bulgaria)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.54	0.65	2.86	.71	2.63	.7
...teach students with language barriers?	2.50	0.65	2.6	.89	2.49	.87
...teach students with emotional and behavioural difficulties?	2.38	0.83	2.37	.69	2.27	.72
...involve parents in the learning process of their children?	2.44	0.91	2.33	.82	2.2	.78
...manage a diverse classroom effectively?	2.78	0.64	2.98	.71	2.98	.6
...engage hard-to-reach learners?	2.76	0.80	2.85	.69	2.79	.68
<i>N</i> _{Min}	36		41		41	

Table 248: Experts' Use of Direct Mentoring Practices Over Time – Scale (Bulgaria)

How often do you use the following mentoring practices?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	37	4.73	.73	2.83	5.83
Use of Direct Mentoring Practices (T2)	43	4.24	.78	2.5	6
Use of Direct Mentoring Practices (T3)	43	4.51	.8	3.17	6

Table 249: Expert's Use of Facilitative Mentoring Practices Over Time – Scale (Bulgaria)

How often do you use the following mentoring practices?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	37	4.6	.81	2.33	6
Use of Facilitative Mentoring Practices (T2)	43	4.84	.74	3.33	6
Use of Facilitative Mentoring Practices (T3)	43	4.87	.78	3.33	6

Table 250: Experts' Previous Mentoring Experience (Austria)

At any time during the past five years, did you mentor any novice teachers?	Intervention Group	
	<i>N</i>	<i>Percent</i>
Yes	37	86.05
No	6	13.95
Total	43	100.00

Table 251: Experts' Mentoring Practices (Bulgaria)

Items Mentoring Practices	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	4.78	.67	4.77	.92	4.84	1.15
I ask clarifying questions.	4.51	.9	4.63	.94	4.72	.93
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	4.51	1.04	5.12	.98	5.05	.97
I use active listening skills during mentoring conversations.	4.97	.76	5.14	.86	5.37	.87
I confront novice teachers with mistakes they made during their lessons.	5	.79	3.07	1.32	3.23	1.32
I use concrete examples from the novice teachers' lessons during conversations.	5.03	.83	4.86	1.08	5.3	.83
I instruct novice teachers on how to structure their teaching.	5.05	.94	4.86	1.07	5.14	.93
I am able to address feelings which I perceived during the lesson.	4.7	1.31	5.28	.91	5.49	.7
I help mentees to make their implicit statements explicit.	4.54	1.1	4.7	1.24	4.86	1.19
I ask for alternatives to the teaching implemented by novice teachers.	4.49	1.24	4.67	1	4.5	1.11
I provide additional information on instruction to mentees.	4.58	1.2	4.72	.96	5.14	1.01
I assess the quality of novice teachers' teaching skills.	4.51	.99	4.46	1.52	4.23	1.6
I provide direct advice on how to improve teaching.	4.19	1.22	3.49	1.29	4.02	1.44
I give examples of best practice from my own experience.	4.57	1.07	4.29	1.17	4.81	1.11
I want novice teachers to discover the principles behind a good lesson on their own.	4.27	1.04	4.55	.9	4.73	1.03
I let my novice teachers reflect continuously on their professional development.	4.59	1.26	4.78	.99	5.19	.8
At the end of a mentoring conversation, I summarise the content that we discussed.	4.81	1.13	5.17	.92	5.55	.94
I provide guidance on further professional development opportunities.	4.95	1.1	4.63	.86	4.9	1.19
<i>N</i> _{Min}			36		40	
					41	

Table 252: Experts' Self-Assessed Mentoring Competence – Scale (Bulgaria)

Mentoring Competence	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	37	4.79	0.71	2.67	6
Mentoring Competence (T2)	43	5.02	0.52	3.58	6
Mentoring Competence (T3)	43	5.27	0.5	3.67	6

Table 253: Improvement of Mentoring Practices by NEST Mentor Training Programme (Bulgaria)

To what extent did the NEST training help you to improve your mentoring regarding the following skills:	N	Intervention Group			
		M	SD	Min	Max
Giving constructive feedback.	43	3.35	.57	2	4
Using active listening as a strategy.	41	3.46	.64	2	4
Analyzing mentees' professional development needs.	43	3.33	.64	2	4
Using different mentoring approaches for novice teachers with different personalities.	43	3.44	.67	2	4
Prompting mentees to reflect on their teaching.	43	3.26	.62	2	4
Changing my mentoring approach according to the social situation in the classroom.	43	3.23	.65	2	4
Relating to professional teaching standards.	42	3.26	.73	2	4
Dealing with mentees' mistakes in a constructive way.	42	3.31	.52	2	4
Addressing mentees' feelings.	40	3.27	.68	2	4
Taking the perspective of the mentee (putting myself in their shoes)	38	3.34	.53	2	4
Identify challenges my mentee is facing	42	3.29	.64	2	4
Adapting my mentoring approach according to the novice teacher's level of professional development.	43	3.28	.67	2	4

Table 254: Experts' Self-Assessed Mentoring Competence (Bulgaria)

Items Mentoring Competence	T1		T2		T3	
	M	SD	M	SD	M	SD
I am able to build supportive relationships with my mentees.	4.78	0.67	5.21	0.67	5.37	0.54
I am able to encourage my mentees to perceive their school as a professional learning environment.	4.51	0.9	5.02	0.56	5.21	0.67
I am able to contribute to a growing professional resilience among my mentees.	4.51	1.04	4.86	0.71	5.07	0.7
I am able to advise novice teachers on how to structure their teaching.	4.97	0.76	5.12	0.56	5.3	0.6
I am able to assess the quality of novice teachers' teaching skills.	5	0.79	5.02	0.84	5.24	0.58
I am able to address my mentees' feelings.	5.03	0.83	5.05	0.88	5.28	0.55
I am able to give my mentees constructive feedback.	4.81	0.75	5.05	0.7	5.31	0.68
I am able to use active listening as a strategy.	4.83	0.97	5.02	0.75	5.31	0.68
I am able to analyse mentees' professional development needs.	4.67	1.01	5	0.67	5.32	0.69
I am able to prompt mentees to reflect on their teaching.	4.64	0.9	4.78	0.76	5.24	0.66
I am able to relate to professional teaching standards.	4.81	0.86	4.9	0.66	5.17	0.58
I am able to deal with mentees' mistakes in a constructive way.	4.86	0.83	5.05	0.58	5.33	0.65
N _{Min}	36		41		41	

Appendix A5 – Romania

A.5.1 Novice Teacher Tables (Romania)

Table 255: Novice Teachers in the Control and Intervention Group by Cohort (Romania)

Cohort	Control Group	Intervention Group	Total
1 (School Year 2021/2022)	52	59	111
2 (School Year 2022/2023)	75	51	126
Total	127	110	237

Table 256: Novice Teachers' Mentor Support by Group (Romania)

Do you currently have an assigned mentor to support you?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	94	75.81	0	0.00
Yes	30	24.19	110	100.00
Total	124	100.00	110	100.00

Table 257: Novice Teachers' Gender Distribution by Group (Romania)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	11	8.66	7	6.36
Female	116	91.34	103	93.64
Other	0	0.00	0	0.00
Total	127	100.00	110	100.00

Table 258: Novice Teachers' Age by Group (Romania)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	126	31.86	9.37	20	57
Intervention Group	110	29.19	7.83	20	56

Table 259: Novice Teachers' Teaching Experience by Group (Romania)

Teaching Experience (Years)	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	127	2.07	1.52	0	5
Intervention Group	110	1.78	1.54	0	5

Table 260: Teaching as First Career Choice of the Novice Teachers by Group (Romania)

Was teaching your first choice as a career?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	63	49.61	48	43.64
Yes	64	50.39	62	56.36
Total	127	100.00	110	100.00

Table 261: Teaching Qualification of the Novice Teachers by Group (Romania)

Do you have a formal teaching qualification?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Yes	119	94.44	102	92.73
No	7	5.56	8	7.27
Total	126	100.00	110	100.00

Table 262: Novice Teachers' Entrance into Teaching Profession by Group (Romania)

How did you enter the teaching profession?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
I entered the teaching profession via regular teacher education and/or training.	116	91.34	102	92.73
I entered the teaching profession via an alternative pathway (e.g. fast track training).	8	6.30	4	3.64
I entered the teaching profession without any teacher education or teacher training.	3	2.36	4	3.64
Total	127	100.00	110	100.00

Table 263: Control Group: General Acceptance of Mentoring (Romania)

To what extent do you agree with the following statements on mentoring in your education system?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	126	2.58	.95	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	127	2.63	.88	1	4
In my environment, people highly respect mentors who support novice teachers.	127	2.75	.84	1	4
I think that mentoring novice teachers is valued in society.	127	2.69	.9	1	4

Table 264: Intervention Group: General Acceptance of Mentoring (Romania)

To what extent do you agree with the following statements on mentoring in your education system?	N	Intervention Group			
		M	SD	Min	Max
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	110	2.65	.89	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	110	2.75	.79	1	4
In my environment, people highly respect mentors who support novice teachers.	110	2.91	.78	1	4
I think that mentoring novice teachers is valued in society.	110	3.05	.61	1	4

Table 265: Control Group: Important Mentor Attributes (Romania)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Control Group			
		M	SD	Min	Max
Empathy	127	.63	.48	0	1
Openness	127	.61	.49	0	1
Respectfulness	127	.42	.5	0	1
Trustfulness	127	.5	.5	0	1
Curiousness	127	.03	.18	0	1
Courage	127	.12	.32	0	1
Flexibility	127	.41	.49	0	1

Table 266: Intervention Group: Important Mentor Attributes (Romania)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Intervention Group			
		M	SD	Min	Max
Empathy	110	.75	.43	0	1
Openness	110	.63	.49	0	1
Respectfulness	110	.29	.46	0	1
Trustfulness	110	.55	.5	0	1
Curiousness	110	.01	.1	0	1
Courage	110	.09	.29	0	1
Flexibility	110	.4	.49	0	1

Table 267: Control Group: Attitudes Towards Being Mentored (Romania)

Items Attitudes Towards Being Mentored	N	Control Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	127	3.6	.51	2	4
I think being mentored will help me to improve my teaching.	127	3.61	.51	2	4
I expect my mentor(s) to help me discover the causes for professional problems.	127	3.44	.54	2	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	127	3.48	.52	2	4
From my mentor(s) I expect good ideas for my further professional development.	127	3.46	.53	2	4
I think being mentored will help me to develop reflection skills for my own teaching.	127	3.44	.54	2	4

Table 268: Intervention Group: Attitudes Towards Being Mentored (Romania)

Items Attitudes Towards Being Mentored	N	Intervention Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	110	3.68	.47	3	4
I think being mentored will help me to improve my teaching.	110	3.65	.48	3	4
I expect my mentor(s) to help me discover the causes for professional problems.	108	3.47	.55	1	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	109	3.51	.52	2	4
From my mentor(s) I expect good ideas for my further professional development.	109	3.5	.5	3	4
I think being mentored will help me to develop reflection skills for my own teaching.	109	3.56	.55	1	4

Table 269: Control Group: Preparedness for School Challenges (Romania)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	N	Control Group			
		M	SD	Min	Max
Teaching students with learning difficulties.	127	1.91	.8	1	4
Teaching students with language barriers.	127	1.86	.82	1	4
Teaching students with emotional and behavioural difficulties.	127	2.08	.87	1	4
Involving parents in the learning process of their children.	127	2.14	.93	1	4
Managing a diverse classroom effectively.	127	2.32	.87	1	4
Engaging hard-to-reach learners.	127	2.28	.87	1	4

Table 270: Intervention Group: Preparedness for School Challenges (Romania)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	109	1.87	.75	1	4
Teaching students with language barriers.	110	1.73	.75	1	4
Teaching students with emotional and behavioural difficulties.	110	1.99	.82	1	4
Involving parents in the learning process of their children.	110	2.05	.88	1	4
Managing a diverse classroom effectively.	110	2.24	.87	1	4
Engaging hard-to-reach learners.	110	2.14	.84	1	4

Table 271: Participation in Induction Activities by Group (Romania)

(Apart from NEST), are you currently taking part or did you take part in any induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	70	55.12	77	70.00
Yes	57	44.88	33	30.00
Total	127	100.00	110	100.00

Table 272: Participation in Formal Induction Activities by Group (Romania)

(Apart from NEST), are you currently taking part or did you take part in any formal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	81	63.78	86	78.18
Yes	46	36.22	24	21.82
Total	127	100.00	110	100.00

Table 273: Participation in Informal Induction Activities by Group (Romania)

(Apart from NEST), are you currently taking part or did you take part in any informal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	84	66.14	83	75.45
Yes	43	33.86	27	24.55
Total	127	100.00	110	100.00

Table 274: Control Group: Hindrances on Quality of Instruction (Romania)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	124	1.67	.89	1	4
Shortage of teachers with competence in teaching students with special needs.	124	2.35	1.09	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	126	2.4	1.08	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	125	2.4	1.08	1	4
Insufficient internet access.	124	2.13	1.04	1	4
Shortage or inadequacy of library materials.	125	2.16	1.02	1	4
Shortage of support personnel.	124	2.7	1.15	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	124	2.13	1	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	124	2.09	1	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	124	1.88	.98	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	123	1.98	.95	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	123	2.42	1.05	1	4
Shortage or inadequacy of time for instructional leadership.	121	2.3	.96	1	4
Shortage or inadequacy of time with students.	125	2.29	1.04	1	4

Table 275: Intervention Group: Hindrances on Quality of Instruction (Romania)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	108	1.63	.9	1	4
Shortage of teachers with competence in teaching students with special needs.	107	2.32	1.04	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	107	2.25	1.06	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	110	2.41	1.16	1	4
Insufficient internet access.	107	2.01	1.01	1	4
Shortage or inadequacy of library materials.	107	2.11	1.11	1	4
Shortage of support personnel.	107	2.48	1.2	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	109	1.83	.99	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	109	1.9	1.05	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	108	1.84	.93	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	108	1.94	.93	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	107	2.13	1.05	1	4
Shortage or inadequacy of time for instructional leadership.	108	2.01	1.01	1	4
Shortage or inadequacy of time with students.	109	2.11	.97	1	4

Table 276: Number of Formal Mentoring Conversations by Group (Romania)

Formal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	20	12.9	11.98	0	48
Intervention Group	109	3.92	1.96	1	12

Table 277: Number of Informal Mentoring Conversations by Group (Romania)

Informal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	20	17.05	22.89	0	100
Intervention Group	108	5.22	3.88	0	20

Table 278: Control Group: Organisation of Mentoring (Romania)

Items Organisation of Mentoring	N	Control Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	32	3.19	.64	1	4
My mentor takes sufficient time to observe my classroom teaching.	32	3.06	.76	1	4
I know when I should send the video of my teaching to my mentor.	32	2.94	.76	1	4

Table 279: Intervention Group: Organisation of Mentoring (Romania)

Items Organisation of Mentoring	N	Intervention Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	109	3.6	.6	1	4
My mentor takes sufficient time to observe my classroom teaching.	109	3.61	.56	1	4
I know when I should send the video of my teaching to my mentor.	109	3.58	.6	1	4

Table 280: Control Group: Extent of Mentoring Focus (Romania)

To what extent did the mentoring you received focus on supporting you to...	N	Control Group			
		M	SD	Min	Max
...teach students with learning difficulties.	33	2.55	.71	1	4
...teach students with language barriers.	33	2.3	.85	1	4
...teach students with emotional and behavioural difficulties.	33	2.73	.76	1	4
...involve parents in the learning process of their children.	33	2.48	.71	1	4
...manage a diverse classroom effectively.	33	2.76	.79	1	4
...engage hard-to-reach learners.	33	2.7	.81	1	4

Table 281: Intervention Group: Extent of Mentoring Focus (Romania)

To what extent did the mentoring you received focus on supporting you to...	N	Intervention Group			
		M	SD	Min	Max
...teach students with learning difficulties.	108	2.75	.92	1	4
...teach students with language barriers.	109	2.42	.97	1	4
...teach students with emotional and behavioural difficulties.	109	2.86	.94	1	4
...involve parents in the learning process of their children.	108	2.87	.94	1	4
...manage a diverse classroom effectively.	109	3.16	.81	1	4
...engage hard-to-reach learners.	109	2.98	.92	1	4

Table 282: Intervention Group: Extent of Mentoring Focus by Cohort (Romania)

To what extent did the mentoring you received focus on supporting you to...	Intervention Group Cohort 1			Intervention Group Cohort 2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties.	58	2.81	.98	50	2.68	.84
...teach students with language barriers.	59	2.49	1.02	50	2.34	.89
...teach students with emotional and behavioural difficulties.	59	2.95	.99	50	2.76	.87
...involve parents in the learning process of their children.	58	3.03	.99	50	2.68	.84
...manage a diverse classroom effectively.	59	3.27	.87	50	3.02	.71
...engage hard-to-reach learners.	59	3.05	.97	50	2.9	.86

Table 283: Control Group: Fit of Mentoring Practices (Romania)

Fit Between Mentoring Practices	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of directive mentoring practices	33	4.33	2.29	0	6
Fit of facilitative mentoring practices	33	2.33	.96	0	3
Overall fit	33	14.52	6.61	0	20

Table 284: Intervention Group: Fit of Mentoring Practices (Romania)

Fit Between Mentoring Practices	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of Directive Mentoring Practices	110	3.27	2.51	0	6
Fit of Facilitative Mentoring Practices	110	1.65	1.33	0	3
Overall Fit	110	10.71	8.06	0	20

Table 285: Control Group without Mentor: Emotional Exhaustion Over Time (Romania)

Items Exhaustion	Control Group without Mentor			Control Group without Mentor		
	T1			T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	97	2.6	.82	95	2.54	.9
Overall, I feel overstrained by my work load.	97	2.73	.73	95	2.62	.84
When I am working, I realise how weary I am.	96	2.56	.77	95	2.42	.79
At the end of a day's work, I sometimes feel really depressed.	97	2.3	.84	95	2.21	.86

Table 286: Control Group with Mentor: Emotional Exhaustion Over Time (Romania)

Items Exhaustion	Control Group with Mentor			Control Group with Mentor		
	T1			T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	29	2.38	.9	30	2.5	.94
Overall, I feel overstrained by my work load.	29	2.34	1.01	30	2.43	.86
When I am working, I realise how weary I am.	29	2.41	.87	30	2.37	.76
At the end of a day's work, I sometimes feel really depressed.	29	1.9	.9	30	1.97	.85

Table 287: Intervention Group: Emotional Exhaustion Over Time (Romania)

Items Exhaustion	Intervention Group			Intervention Group		
	T1			T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	109	2.69	.82	109	2.42	.82
Overall, I feel overstrained by my work load.	109	2.64	.79	110	2.55	.82
When I am working, I realise how weary I am.	109	2.46	.88	110	2.34	.8
At the end of a day's work, I sometimes feel really depressed.	109	2.16	.83	110	2.14	.84

Table 288: Control Group without Mentor: Resilience (Romania)

Items Resilience	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	94	2.85	.7	1	4
I think that I can cope well with work pressure.	92	2.95	.65	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	94	3	.64	2	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	94	3.06	.7	1	4

Table 289: Control Group with Mentor: Resilience (Romania)

Items Resilience	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	29	3.14	.69	2	4
I think that I can cope well with work pressure.	29	3.24	.51	2	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	29	3.21	.56	2	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	29	3.28	.59	2	4

Table 290: Intervention Group: Resilience (Romania)

Items Resilience	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	110	3	.72	1	4
I think that I can cope well with work pressure.	109	3.04	.64	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	110	2.99	.6	2	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	110	3.05	.51	2	4

Table 291: Control Group without Mentor: Satisfaction with School as a Workplace (Romania)

Items Satisfaction with School as a Workplace	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	96	2.82	.79	1	4
I enjoy working at this school.	96	3.23	.61	1	4
I would recommend this school as a good place to work.	96	3.05	.73	1	4

Table 292: Control Group with Mentor: Satisfaction with School as a Workplace (Romania)

Items Satisfaction with School as a Workplace	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	30	3	.79	1	4
I enjoy working at this school.	29	3.45	.57	2	4
I would recommend this school as a good place to work.	30	3.27	.78	1	4

Table 293: Intervention Group: Satisfaction with School as a Workplace (Romania)

Items Satisfaction with School as a Workplace	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	108	2.71	.85	1	4
I enjoy working at this school.	110	3.21	.72	1	4
I would recommend this school as a good place to work.	106	3.13	.7	1	4

Table 294: Control Group without Mentor: Intention to Quit (Romania)

After this year, I'm planning to leave the teacher profession	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	58	60.42
Disagree	35	36.46
Agree	3	3.13
Strongly Agree	0	0.00
Total	96	100.00

Table 295: Control Group with Mentor: Intention to Quit (Romania)

After this year, I'm planning to leave the teacher profession	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	22	73.33
Disagree	7	23.33
Agree	1	3.33
Strongly Agree	0	0.00
Total	30	100.00

Table 296: Intervention Group: Intention to Quit (Romania)

After this year, I'm planning to leave the teacher profession	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	71	64.55
Disagree	35	31.82
Agree	4	3.64
Strongly Agree	0	0.00
Total	110	100.00

Table 297: Control Group without Mentor: Thinking About a Career Change (Romania)

In the long run, I'm thinking about a career change.	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	42	43.75
Disagree	33	34.38
Agree	19	19.79
Strongly Agree	2	2.08
Total	96	100.00

Table 298: Control Group with Mentor: Thinking About a Career Change (Romania)

In the long run, I'm thinking about a career change.	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	15	50.00
Disagree	11	36.67
Agree	3	10.00
Strongly Agree	1	3.33
Total	30	100.00

Table 299: Intervention Group: Thinking About a Career Change (Romania)

In the long run, I'm thinking about a career change.	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	61	55.45
Disagree	37	33.64
Agree	11	10.00
Strongly Agree	1	0.91
Total	110	100.00

Table 300: Willingness to Stay in the Teaching Profession in Years by Group (Romania)

For how many more years do you want to continue to work as a teacher?	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group without Mentor	55	23.84	14.46	1	80
Control Group with Mentor	20	23.71	11.1	2	40
Intervention Group	106	29.08	16.4	2	100

Table 301: Control Group with Mentor: Mentoring Competence (Romania)

Items Mentoring Competence	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	30	3.33	.48	3	4
My mentor encourages me to perceive my school as a professional learning environment.	30	3.27	.45	3	4
My mentor helps me to develop professional resilience.	30	3.23	.5	2	4
My mentor advises me on how to structure my teaching.	30	3.03	.85	1	4
My mentor professionally assesses the quality of my teaching skills.	29	3.1	.62	1	4
My mentor addresses my feelings in a professional way.	30	3.13	.73	1	4
My mentor gives me constructive feedback.	30	3.37	.49	3	4
My mentor uses active listening as a strategy.	30	3.2	.41	3	4
My mentor analyses my professional development needs.	29	3.24	.44	3	4
My mentor prompts me to reflect on my teaching.	29	3.14	.64	1	4
My mentor relates to professional teaching standards.	29	3.21	.62	1	4
My mentor deals with my mistakes in a constructive way.	30	3.2	.48	2	4

Table 302: Intervention Group: Mentoring Competence (Romania)

Items Mentoring Competence	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	110	3.64	.52	2	4
My mentor encourages me to perceive my school as a professional learning environment.	109	3.61	.51	2	4
My mentor helps me to develop professional resilience.	110	3.55	.55	2	4
My mentor advises me on how to structure my teaching.	110	3.55	.58	1	4
My mentor professionally assesses the quality of my teaching skills.	110	3.56	.63	1	4
My mentor addresses my feelings in a professional way.	109	3.52	.65	1	4
My mentor gives me constructive feedback.	110	3.7	.48	2	4
My mentor uses active listening as a strategy.	110	3.6	.58	1	4
My mentor analyses my professional development needs.	109	3.57	.6	1	4
My mentor prompts me to reflect on my teaching.	108	3.67	.51	2	4
My mentor relates to professional teaching standards.	110	3.59	.58	1	4
My mentor deals with my mistakes in a constructive way.	110	3.62	.51	2	4

Table 303: Control Group without Mentor: Teaching Competences – Student Interactions (Romania)

Items Teaching Competences Regarding Student Interactions	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	95	4.59	1.05	1	6
Taking on the pupils' perspective when finding solutions for occurring problems.	95	4.63	1	1	6
Showing an open attitude, so it's easy for students to approach me with their problems.	95	4.91	1	2	6
Imparting self-confidence even in timid pupils.	95	4.97	.92	2	6
Foster social development (e.g. helping, supporting, taking responsibility).	95	4.84	.95	2	6
Knowing how to react when pupils show aggressive behaviour.	95	4.46	1.01	2	6
Approaching struggling students in a supportive way.	95	4.48	.91	2	6
Creating an open classroom climate for students to voice their own ideas.	95	4.86	.94	2	6
Supporting individual pupils in personal crises.	95	4.74	.94	2	6
Purposefully fostering my pupils' strengths.	95	4.57	.96	2	6
Supporting pupils who have experienced failure in class.	96	4.6	1.06	2	6

Table 304: Control Group with Mentor: Teaching Competences – Student Interactions (Romania)

Items Teaching Competences Regarding Student Interactions	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	30	4.57	.86	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	30	4.87	.78	3	6
Showing an open attitude, so it's easy for students to approach me with their problems.	30	5.17	.53	4	6
Imparting self-confidence even in timid pupils.	30	5.33	.55	4	6
Foster social development (e.g. helping, supporting, taking responsibility).	30	5.27	.45	5	6
Knowing how to react when pupils show aggressive behaviour.	30	4.53	1.04	2	6
Approaching struggling students in a supportive way.	30	4.57	.82	2	6
Creating an open classroom climate for students to voice their own ideas.	30	5.07	1.01	2	6
Supporting individual pupils in personal crises.	30	5	.83	2	6
Purposefully fostering my pupils' strengths.	30	4.77	.68	3	6
Supporting pupils who have experienced failure in class.	30	4.77	1.04	2	6

Table 305: Intervention Group: Teaching Competences – Student Interactions (Romania)

Items Teaching Competences Regarding Student Interactions	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	109	4.8	.88	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	109	4.8	.89	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	109	5.14	.79	3	6
Imparting self-confidence even in timid pupils.	107	5.15	.79	3	6
Foster social development (e.g. helping, supporting, taking responsibility).	108	4.97	.88	2	6
Knowing how to react when pupils show aggressive behaviour.	108	4.56	1.05	2	6
Approaching struggling students in a supportive way.	109	4.64	.88	2	6
Creating an open classroom climate for students to voice their own ideas.	109	5.06	.92	2	6
Supporting individual pupils in personal crises.	109	4.97	.89	2	6
Purposefully fostering my pupils' strengths.	109	4.83	.85	2	6
Supporting pupils who have experienced failure in class.	110	4.73	.98	1	6

Table 306: Control Group without Mentor: Teaching Competences – Parent Support (Romania)

Items Teaching Competences Regarding Parent Support	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	95	4.04	1.31	1	6
Advising parents how they can influence the learning environment of their child.	94	4.14	1.28	1	6
Showing parents how they can positively influence the education of their child.	94	4.1	1.16	2	6
Dealing with conflict in parent teacher interactions in a professional way.	95	4.01	1.18	1	6

Table 307: Control Group with Mentor: Teaching Competences – Parent Support (Romania)

Items Teaching Competences Regarding Parent Support	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	29	4.21	1.21	1	6
Advising parents how they can influence the learning environment of their child.	29	4.52	1.18	2	6
Showing parents how they can positively influence the education of their child.	29	4.76	.95	2	6
Dealing with conflict in parent teacher interactions in a professional way.	29	4.38	1.32	2	6

Table 308: Intervention Group: Teaching Competences – Parent Support (Romania)

Items Teaching Competences Regarding Parent Support	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	110	4.08	1.24	1	6
Advising parents how they can influence the learning environment of their child.	110	4.28	1.19	1	6
Showing parents how they can positively influence the education of their child.	110	4.28	1.24	1	6
Dealing with conflict in parent teacher interactions in a professional way.	109	4.25	1.15	1	6

A.5.2 Mentor Tables (Romania)

Table 309: Mentors' Gender Distribution by Group (Romania)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	4	5.48	2	5.00
Female	69	94.52	38	95.00
Total	73	100.00	40	100.00

Table 310: Mentors' Age by Group (Romania)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	73	45.79	6.56	33	58
Intervention Group	40	45.42	5.62	32	56

Table 311: Control Group Mentors' Job Experience (Romania)

Teaching Experience (Years)	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Year(s) working as a teacher in total	73	22.42	7.33	10	40
Year(s) working as a mentor	67	5.57	5.77	0	25
Year(s) working at schools in disadvantaged areas	66	7.39	8.25	0	27

Table 312: Intervention Group Mentors' Job Experience (Romania)

Teaching Experience (Years)	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Year(s) working as a teacher in total	40	23.13	6.28	10	36
Year(s) working as a mentor	36	4.47	5.11	0	15
Year(s) working at schools in disadvantaged areas	38	7.87	9.22	0	30

Table 313: Mentors' Previous Mentoring Experience by Group (Romania)

At any time during the last five years, did you mentor any novice teachers?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Yes	59	80.82	34	85.00
No	14	19.18	6	15.00
Total	73	100.00	40	100.00

Table 314: Mentor Control Group: General Acceptance of Mentoring (Romania)

To what extent do you agree with the following statements on mentoring in your education system?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	72	2.94	.82	1	4
In my education system, being a mentor is seen as one of the most important parts of professional development for teachers.	72	2.94	.77	1	4
In my environment, people highly respect mentors who support novice teachers.	72	2.69	.8	1	4
I think that mentoring novice teachers is valued in society.	71	2.85	.73	1	4

Table 315: Mentor Intervention Group: General Acceptance of Mentoring (Romania)

To what extent do you agree with the following statements on mentoring in your education system?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	39	2.97	.58	2	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	39	3.13	.66	1	4
In my environment, people highly respect mentors who support novice teachers.	39	2.36	.78	1	4
I think that mentoring novice teachers is valued in society.	39	2.82	.68	1	4

Table 316: Mentor Control Group: Important Mentor Attributes (Romania)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	73	.81	.4	0	1
Openness	73	.52	.5	0	1
Respectfulness	73	.37	.49	0	1
Trustfulness	73	.42	.5	0	1
Curiousness	73	.05	.23	0	1
Courage	73	0	0	0	0
Flexibility	73	.6	.49	0	1

Table 317: Mentor Intervention Group: Important Mentor Attributes (Romania)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	40	.75	.44	0	1
Openness	40	.53	.51	0	1
Respectfulness	40	.53	.51	0	1
Trustfulness	40	.4	.5	0	1
Curiousness	40	0	0	0	0
Courage	40	.05	.22	0	1
Flexibility	40	.55	.5	0	1

Table 318: Mentors' Enthusiasm for Mentoring Over Time by Group (Romania)

Enthusiasm for Mentoring	Control Group				Intervention Group			
	T1		T3		T1		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Mentoring is the most fulfilling part of my job.	2.89	.59	2.93	.54	2.88	.55	3.05	.56
I enjoy getting novice teachers excited about teaching.	3.7	.46	3.57	.5	3.66	.48	3.58	.5
I find great joy in mentoring novice teachers.	3.48	.54	3.35	.48	3.42	.5	3.61	.5
I enjoy sharing my teaching expertise with novice teachers.	3.67	.48	3.53	.5	3.7	.47	3.74	.44
I feel content when I see progress in my mentees' teaching.	3.77	.42	3.67	.47	3.76	.44	3.85	.37
<i>N</i> _{Min}	56		72		32		38	

Table 319: Mentors' Enthusiasm Over Time by Group – Scale (Romania)

Enthusiasm Scale	T1		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Control Group	3.5	.39	3.41	.38
Intervention Group	3.48	.34	3.56	.34

Table 320: Control Group Mentors' Mentoring Focus (Romania)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.67	.8	-	-	2.81	.68
...teach students with language barriers?	2.17	.8	-	-	2.45	.88
...teach students with emotional and behavioural difficulties?	2.76	.78	-	-	2.99	.76
...involve parents in the learning process of their children?	2.69	.92	-	-	2.81	.74
...manage a diverse classroom effectively?	3.07	.77	-	-	3.12	.64
...engage hard-to-reach learners?	2.88	.84	-	-	2.82	.81
<i>N</i> _{Min}	58		-		72	

Table 321: Intervention Group Mentors' Mentoring Focus (Romania)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.74	.9	3.23	.7	3.17	.75
...teach students with language barriers?	2.29	1.03	2.48	1.01	2.49	.97
...teach students with emotional and behavioural difficulties?	2.97	.8	3.44	.64	3.35	.77
...involve parents in the learning process of their children?	2.94	.89	3	.86	3.08	.83
...manage a diverse classroom effectively?	3.12	.77	3.54	.51	3.52	.51
...engage hard-to-reach learners?	2.91	.83	3.42	.55	3.25	.63
<i>N</i> _{Min}	34		39		39	

Table 322: Control Group Mentors' Use of Direct Mentoring Practices – Scale (Romania)

How often do you use the following mentoring practices?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	58	4.9	.72	2.83	6
Use of Direct Mentoring Practices (T2)	-	-	-	-	-
Use of Direct Mentoring Practices (T3)	73	4.59	.92	2.17	6

Table 323: Intervention Group Mentors' Use of Direct Mentoring Practices – Scale (Romania)

How often do you use the following mentoring practices?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	34	4.54	.62	3.33	5.83
Use of Direct Mentoring Practices (T2)	40	3.93	.72	2.5	5.5
Use of Direct Mentoring Practices (T3)	40	4.09	.79	2.5	5.8

Table 324: Control Group Mentor's Use of Facilitative Mentoring Practices – Scale (Romania)

How often do you use the following mentoring practices?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	58	5.23	.48	3.33	6
Use of Facilitative Mentoring Practices (T2)	-	-	-	-	-
Use of Facilitative Mentoring Practices (T3)	73	4.5	.84	2	6

Table 325: Intervention Group Mentor's Use of Facilitative Mentoring Practices – Scale (Romania)

How often do you use the following mentoring practices?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	34	4.98	.62	3	6
Use of Facilitative Mentoring Practices (T2)	40	4.59	.56	3.67	6
Use of Facilitative Mentoring Practices (T3)	40	4.72	.62	3	6

Table 326: Control Group Mentors' Mentoring Practices (Romania)

Items Mentoring Practices	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	5.24	.47	-	-	4.53	.99
I ask clarifying questions.	5.38	.64	-	-	4.35	1.09
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	5.07	.62	-	-	4.63	.98
I use active listening skills during mentoring conversations.	5.31	.65	-	-	5.11	.91
I confront novice teachers with mistakes they made during their lessons.	5.21	.56	-	-	3.78	1.46
I use concrete examples from the novice teachers' lessons during conversations.	4.97	.75	-	-	4.95	1.08
I instruct novice teachers on how to structure their teaching.	4.61	1.05	-	-	4.68	1.11
I am able to address feelings which I perceived during the lesson.	4.32	1.23	-	-	4.18	1.1
I help mentees to make their implicit statements explicit.	4.32	.93	-	-	4.49	.91
I ask for alternatives to the teaching implemented by novice teachers.	3.91	1.02	-	-	4.14	1.13
I provide additional information on instruction to mentees.	4.79	1.07	-	-	4.78	1.02
I assess the quality of novice teachers' teaching skills.	5.04	1.07	-	-	4.92	1.15
I provide direct advice on how to improve teaching.	4.78	1.11	-	-	4.54	1.19
I give examples of best practice from my own experience.	4.91	1.03	-	-	4.76	1.08
I want novice teachers to discover the principles behind a good lesson on their own.	4.29	.97	-	-	4.36	1.07
I let my novice teachers reflect continuously on their professional development.	4.6	.94	-	-	4.76	1.01
At the end of a mentoring conversation, I summarise the content that we discussed.	4.91	1.01	-	-	4.88	1.02
I provide guidance on further professional development opportunities.	5.1	.95	-	-	5.13	.9
<i>N</i> _{Min}	56		-		71	

Table 327: Intervention Group Mentors' Mentoring Practices (Romania)

Items Mentoring Practices	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	5.12	.59	4.8	.91	4.92	.8
I ask clarifying questions.	5.12	.64	4.42	.64	4.4	.81
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	4.71	.87	4.55	.68	4.83	.81
I use active listening skills during mentoring conversations.	5.09	.71	5.15	.77	5.03	.89
I confront novice teachers with mistakes they made during their lessons.	4.94	.65	3.17	1.28	3.35	1.14
I use concrete examples from the novice teachers' lessons during conversations.	4.71	.84	5.15	.86	5	.93
I instruct novice teachers on how to structure their teaching.	4.15	.97	3.77	1.25	4.05	1.1
I am able to address feelings which I perceived during the lesson.	4.18	1.07	4.33	1.07	4.59	.97
I help mentees to make their implicit statements explicit.	4.06	.9	4.51	.85	4.46	.97
I ask for alternatives to the teaching implemented by novice teachers.	3.7	1.13	4.08	1.05	4.23	1.01
I provide additional information on instruction to mentees.	4.42	1	4.25	1.06	4.29	1.06
I assess the quality of novice teachers' teaching skills.	4.58	.87	3.8	1.32	4.18	1.27
I provide direct advice on how to improve teaching.	4.39	1.12	3.4	1.01	3.5	1.2
I give examples of best practice from my own experience.	4.39	1.2	3.92	1.14	4.03	1
I want novice teachers to discover the principles behind a good lesson on their own.	4.61	1.06	4.72	.99	4.84	1.05
I let my novice teachers reflect continuously on their professional development.	4.73	.91	5.08	.94	5.13	.88
At the end of a mentoring conversation, I summarise the content that we discussed.	4.67	1.24	4.92	1	4.92	.96
I provide guidance on further professional development opportunities.	5.09	.88	4.83	.87	4.87	.83
<i>N</i> _{Min}	33		38		38	

Table 328: Usefulness of NEST Mentor Training for Teaching (Romania)

To what extent did the NEST mentor training programme improve your own teaching practice?	N	Intervention Group			
		M	SD	Min	Max
Improvement of Own Teaching Practice	40	3.4	.74	2	4

Table 329: Mentors' Improvement of Mentoring Practices by NEST Mentor Training Programme

To what extent did the NEST training help you to improve your mentoring regarding the following skills:	N	Intervention Group			
		M	SD	Min	Max
Giving constructive feedback.	39	3.74	.44	3	4
Using active listening as a strategy.	40	3.7	.52	2	4
Analyzing mentees' professional development needs.	40	3.58	.64	2	4
Using different mentoring approaches for novice teachers with different personalities.	40	3.7	.52	2	4
Prompting mentees to reflect on their teaching.	39	3.69	.52	2	4
Changing my mentoring approach according to the social situation in the classroom.	40	3.45	.68	2	4
Relating to professional teaching standards.	40	3.5	.72	1	4
Dealing with mentees' mistakes in a constructive way.	40	3.67	.53	2	4
Addressing mentees' feelings.	40	3.5	.72	2	4
Taking the perspective of the mentee (putting myself in their shoes)	38	3.53	.69	1	4
Identify challenges my mentee is facing	40	3.63	.54	2	4
Adapting my mentoring approach according to the novice teacher's level of professional development.	40	3.48	.64	2	4

Table 330: Control Group Mentors' Self-Assessed Mentoring Competence (Romania)

Items Mentoring Competence	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I am able to build supportive relationships with my mentees.	5.24	.47	-	-	5.16	.67
I am able to encourage my mentees to perceive their school as a professional learning environment.	5.38	.64	-	-	5.32	.64
I am able to contribute to a growing professional resilience among my mentees.	5.07	.62	-	-	5.07	.71
I am able to advise novice teachers on how to structure their teaching.	5.31	.65	-	-	5.38	.62
I am able to assess the quality of novice teachers' teaching skills.	5.21	.56	-	-	5.22	.56
I am able to address my mentees' feelings.	4.97	.75	-	-	4.99	.69
I am able to give my mentees constructive feedback.	5.25	.76	-	-	5.49	.53
I am able to use active listening as a strategy.	5.33	.66	-	-	5.34	.56
I am able to analyse mentees' professional development needs.	5.14	.69	-	-	5.23	.59
I am able to prompt mentees to reflect on their teaching.	5.16	.62	-	-	5.17	.59
I am able to relate to professional teaching standards.	5.28	.7	-	-	5.33	.53
I am able to deal with mentees' mistakes in a constructive way.	5.12	.73	-	-	5.18	.66
<i>N</i> _{Min}	56		-		69	

Table 331: Intervention Group Mentors' Self-Assessed Mentoring Competence (Romania)

Items Mentoring Competence	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I am able to build supportive relationships with my mentees.	5.12	.59	5.17	.5	5.35	.48
I am able to encourage my mentees to perceive their school as a professional learning environment.	5.12	.64	5.17	.45	5.38	.49
I am able to contribute to a growing professional resilience among my mentees.	4.71	.87	5.05	.5	5.2	.56
I am able to advise novice teachers on how to structure their teaching.	5.09	.71	5.17	.59	5.4	.59
I am able to assess the quality of novice teachers' teaching skills.	4.94	.65	5.13	.52	5.3	.52
I am able to address my mentees' feelings.	4.71	.84	5.03	.53	5.17	.81
I am able to give my mentees constructive feedback.	5.15	.56	5.33	.47	5.45	.55
I am able to use active listening as a strategy.	5.29	.58	5.33	.53	5.45	.6
I am able to analyse mentees' professional development needs.	5.03	.58	5.13	.52	5.25	.59
I am able to prompt mentees to reflect on their teaching.	5	.74	5.25	.59	5.4	.5
I am able to relate to professional teaching standards.	5	.74	5.17	.68	5.28	.6
I am able to deal with mentees' mistakes in a constructive way.	4.97	.72	5.22	.53	5.33	.47
<i>N</i> _{Min}	34		39		40	

Table 332: Control Group Mentors' Self-Assessed Mentoring Competence – Scale (Romania)

Mentoring Competence	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	58	5.2	.48	3.25	6
Mentoring Competence (T2)	-	--	-	-	-
Mentoring Competence (T3)	73	5.24	.45	4.17	6

Table 333: Intervention Group Mentors' Self-Assessed Mentoring Competence – Scale (Romania)

Mentoring Competence	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	34	5.01	.48	3.92	6
Mentoring Competence (T2)	40	5.18	.36	4.17	6
Mentoring Competence (T3)	40	5.33	.38	4.83	6

Appendix A6 – Spain – Catalonia

A.6.1 Novice Teacher Tables (Catalonia)

Table 334: Novice Teachers in the Control and Intervention Group by Cohort (Catalonia)

Cohort	Control Group	Intervention Group	Total
1 (School Year 2021/2022)	81	70	151
2 (School Year 2022/2023)	58	24	82
Total	139	94	233

Table 335: Novice Teachers' Mentor Support by Group (Catalonia)

Do you currently have an assigned mentor to support you?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	79	56.83	0	0.00
Yes	60	43.17	94	100.00
Total	139	100.00	94	100.00

Table 336: Novice Teachers' Gender Distribution by Group (Catalonia)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	63	45.32	25	26.88
Female	75	53.96	68	73.12
Other	1	0.72	0	0.00
Total	139	100.00	93	100.00

Table 337: Novice Teachers' Age by Group (Catalonia)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	139	33.94	7.87	23	55
Intervention Group	94	31.21	7.35	22	55

Table 338: Novice Teachers' Teaching Experience by Group (Catalonia)

Teaching Experience (Years)	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	139	1.71	1.21	0	5
Intervention Group	94	2.29	1.42	0	5

Table 339: Teaching as First Career Choice of the Novice Teachers by Group (Catalonia)

Was teaching your first choice as a career?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	85	61.15	28	29.79
Yes	54	38.85	66	70.21
Total	139	100.00	94	100.00

Table 340: Teaching Qualification of the Novice Teachers by Group (Catalonia)

Do you have a formal teaching qualification?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Yes	127	91.37	89	94.68
No	12	8.63	5	5.32
Total	139	100.00	94	100.00

Table 341: Novice Teachers' Entrance into Teaching Profession by Group (Catalonia)

How did you enter the teaching profession?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
I entered the teaching profession via regular teacher education and/or training.	131	94.24	93	98.94
I entered the teaching profession via an alternative pathway (e.g. fast track training).	4	2.88	0	0.00
I entered the teaching profession without any teacher education or teacher training.	4	2.88	1	1.06
Total	139	100.00	94	100.00

Table 342: Control Group: General Acceptance of Mentoring (Catalonia)

To what extent do you agree with the following statements on mentoring in your education system?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	139	2.39	.9	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	139	2.14	.8	1	4
In my environment, people highly respect mentors who support novice teachers.	139	2.21	.84	1	4
I think that mentoring novice teachers is valued in society.	138	1.93	.74	1	3

Table 343: Intervention Group: General Acceptance of Mentoring (Catalonia)

To what extent do you agree with the following statements on mentoring in your education system?	N	Intervention Group			
		M	SD	Min	Max
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	91	2.57	.75	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	91	2.31	.78	1	4
In my environment, people highly respect mentors who support novice teachers.	90	2.67	.73	1	4
I think that mentoring novice teachers is valued in society.	91	2.27	.82	1	4

Table 344: Control Group: Important Mentor Attributes (Catalonia)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Control Group			
		M	SD	Min	Max
Empathy	139	.88	.32	0	1
Openness	139	.4	.49	0	1
Respectfulness	139	.5	.5	0	1
Trustfulness	139	.76	.43	0	1
Curiousness	139	.06	.25	0	1
Courage	139	.04	.19	0	1
Flexibility	139	.27	.44	0	1

Table 345: Intervention Group: Important Mentor Attributes (Catalonia)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Intervention Group			
		M	SD	Min	Max
Empathy	94	.84	.37	0	1
Openness	94	.43	.5	0	1
Respectfulness	94	.54	.5	0	1
Trustfulness	94	.72	.45	0	1
Curiousness	94	.14	.35	0	1
Courage	94	.03	.18	0	1
Flexibility	94	.22	.42	0	1

Table 346: Control Group: Attitudes Towards Being Mentored (Catalonia)

Items Attitudes Towards Being Mentored	N	Control Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	139	3.58	.58	1	4
I think being mentored will help me to improve my teaching.	139	3.58	.58	1	4
I expect my mentor(s) to help me discover the causes for professional problems.	139	3.44	.59	2	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	139	3.4	.59	1	4
From my mentor(s) I expect good ideas for my further professional development.	139	3.59	.52	2	4
I think being mentored will help me to develop reflection skills for my own teaching.	139	3.5	.58	1	4

Table 347: Intervention Group: Attitudes Towards Being Mentored (Catalonia)

Items Attitudes Towards Being Mentored	N	Intervention Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	94	3.47	.54	2	4
I think being mentored will help me to improve my teaching.	94	3.54	.5	3	4
I expect my mentor(s) to help me discover the causes for professional problems.	94	3.5	.58	2	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	94	3.48	.52	2	4
From my mentor(s) I expect good ideas for my further professional development.	94	3.61	.49	3	4
I think being mentored will help me to develop reflection skills for my own teaching.	94	3.55	.52	2	4

Table 348: Control Group: Preparedness for School Challenges (Catalonia)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	138	2.01	.76	1	4
Teaching students with language barriers.	138	1.54	.67	1	4
Teaching students with emotional and behavioural difficulties.	138	1.82	.76	1	4
Involving parents in the learning process of their children.	137	1.9	.74	1	4
Managing a diverse classroom effectively.	138	1.87	.76	1	4
Engaging hard-to-reach learners.	138	1.83	.7	1	4

Table 349: Intervention Group: Preparedness for School Challenges (Catalonia)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	93	2.04	.59	1	4
Teaching students with language barriers.	93	1.66	.68	1	3
Teaching students with emotional and behavioural difficulties.	92	1.8	.68	1	3
Involving parents in the learning process of their children.	93	1.95	.76	1	4
Managing a diverse classroom effectively.	92	1.98	.78	1	4
Engaging hard-to-reach learners.	92	1.9	.7	1	4

Table 350: Participation in Induction Activities by Group (Catalonia)

(Apart from NEST), are you currently taking part or did you take part in any induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	86	61.87	63	67.02
Yes	53	38.13	31	32.98
Total	139	100.00	94	100.00

Table 351: Participation in Formal Induction Activities by Group (Catalonia)

(Apart from NEST), are you currently taking part or did you take part in any formal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	95	68.35	74	78.72
Yes	44	31.65	20	21.28
Total	139	100.00	94	100.00

Table 352: Participation in Informal Induction Activities by Group (Catalonia)

(Apart from NEST), are you currently taking part or did you take part in any informal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	118	84.89	73	77.66
Yes	21	15.11	21	22.34
Total	139	100.00	94	100.00

Table 353: Control Group: Hindrances on Quality of Instruction (Catalonia)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	139	1.8	.75	1	4
Shortage of teachers with competence in teaching students with special needs.	139	2.37	.74	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	139	1.9	.89	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	139	1.9	.99	1	4
Insufficient internet access.	139	1.58	.82	1	4
Shortage or inadequacy of library materials.	138	1.95	.95	1	4
Shortage of support personnel.	139	2.77	.86	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	139	2.19	1.01	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	139	2.32	1.03	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	139	2.12	.86	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	139	2.06	.82	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	138	2.12	.81	1	4
Shortage or inadequacy of time for instructional leadership.	139	2.22	.83	1	4
Shortage or inadequacy of time with students.	139	2.24	.86	1	4

Table 354: Intervention Group: Hindrances on Quality of Instruction (Catalonia)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	92	1.45	.69	1	4
Shortage of teachers with competence in teaching students with special needs.	90	2.12	.78	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	92	1.64	.72	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	91	1.71	.81	1	4
Insufficient internet access.	92	1.5	.75	1	4
Shortage or inadequacy of library materials.	89	1.88	.89	1	4
Shortage of support personnel.	92	2.52	.91	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	91	1.82	.91	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	91	2.04	.77	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	90	1.84	.72	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	91	1.67	.65	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	91	1.75	.77	1	4
Shortage or inadequacy of time for instructional leadership.	87	1.98	.91	1	4
Shortage or inadequacy of time with students.	91	2.11	.97	1	4

Table 355: Number of Formal Mentoring Conversations by Group (Catalonia)

Formal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	27	3	2.17	0	10
Intervention Group	93	3.89	2.34	1	20

Table 356: Number of Informal Mentoring Conversations by Group (Catalonia)

Informal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	27	14.81	21.16	0	100
Intervention Group	94	10.07	12.09	0	50

Table 357: Control Group: Organisation of Mentoring (Catalonia)

Items Organisation of Mentoring	N	Control Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	60	2.97	.84	1	4
My mentor takes sufficient time to observe my classroom teaching.	60	2.88	.87	1	4
I know well in advance when my mentor will visit me for a classroom observation	60	3.2	.84	1	4

Table 358: Intervention Group: Organisation of Mentoring (Catalonia)

Items Organisation of Mentoring	N	Intervention Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	92	3.65	.52	2	4
My mentor takes sufficient time to observe my classroom teaching.	92	3.57	.56	2	4
I know well in advance when my mentor will visit me for a classroom observation	92	3.82	.39	3	4

Table 359: Control Group: Extent of Mentoring Focus (Catalonia)

To what extent did the mentoring you received focus on supporting you to...	N	Control Group			
		M	SD	Min	Max
...teach students with learning difficulties.	60	2.07	.95	1	4
...teach students with language barriers.	60	1.78	.9	1	4
...teach students with emotional and behavioural difficulties.	60	2.12	.94	1	4
...involve parents in the learning process of their children.	60	1.67	.8	1	4
...manage a diverse classroom effectively.	60	2.5	.95	1	4
...engage hard-to-reach learners.	59	2.14	.84	1	4

Table 360: Intervention Group: Extent of Mentoring Focus (Catalonia)

To what extent did the mentoring you received focus on supporting you to...	N	Intervention Group			
		M	SD	Min	Max
...teach students with learning difficulties.	90	2.42	.86	1	4
...teach students with language barriers.	91	2.16	.96	1	4
...teach students with emotional and behavioural difficulties.	91	2.64	1.01	1	4
...involve parents in the learning process of their children.	91	2.02	.94	1	4
...manage a diverse classroom effectively.	91	3.07	.81	1	4
...engage hard-to-reach learners.	90	2.9	.84	1	4

Table 361: Intervention Group: Extent of Mentoring Focus by Cohort (Catalonia)

To what extent did the mentoring you received focus on supporting you to...	Intervention Group Cohort 1			Intervention Group Cohort 2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties.	67	2.27	.85	23	2.87	.76
...teach students with language barriers.	68	2.01	.94	23	2.61	.89
...teach students with emotional and behavioural difficulties.	68	2.49	1.01	23	3.09	.85
...involve parents in the learning process of their children.	68	1.88	.89	23	2.43	.99
...manage a diverse classroom effectively.	68	3.01	.84	23	3.22	.74
...engage hard-to-reach learners.	67	2.85	.87	23	3.04	.71

Table 362: Control Group: Fit of Mentoring Practices (Catalonia)

Fit Between Mentoring Practices	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of directive mentoring practices	60	4.27	1.74	0	6
Fit of facilitative mentoring practices	60	2.07	1.07	0	3
Overall fit	60	13.5	5.02	1	20

Table 363: Intervention Group: Fit of Mentoring Practices (Catalonia)

Fit Between Mentoring Practices	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of Directive Mentoring Practices	92	5.3	1.19	1	6
Fit of Facilitative Mentoring Practices	92	2.87	.45	0	3
Overall Fit	92	18.03	3.03	9	20

Table 364: Control Group without Mentor: Emotional Exhaustion Over Time (Catalonia)

Items Exhaustion	Control Group without Mentor T1			Control Group without Mentor T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	78	2.65	.87	79	2.72	.95
Overall, I feel overstrained by my work load.	78	2.82	.88	79	2.99	.85
When I am working, I realise how weary I am.	78	2.41	.81	79	2.48	.8
At the end of a day's work, I sometimes feel really depressed.	78	2.08	.85	79	2.11	.92

Table 365: Control Group with Mentor: Emotional Exhaustion Over Time (Catalonia)

Items Exhaustion	Control Group with Mentor T1			Control Group with Mentor T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	60	2.42	.77	60	2.47	.81
Overall, I feel overstrained by my work load.	59	2.64	.76	60	2.62	.76
When I am working, I realise how weary I am.	60	2.28	.56	60	2.3	.72
At the end of a day's work, I sometimes feel really depressed.	60	2.2	.84	60	2.18	.87

Table 366: Intervention Group: Emotional Exhaustion Over Time (Catalonia)

Items Exhaustion	Intervention Group T1			Intervention Group T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	92	2.59	.83	93	2.41	.85
Overall, I feel overstrained by my work load.	92	2.77	.85	93	2.78	.85
When I am working, I realise how weary I am.	91	2.33	.79	93	2.28	.83
At the end of a day's work, I sometimes feel really depressed.	92	2	.85	93	1.92	.85

Table 367: Control Group without Mentor: Resilience (Catalonia)

Items Resilience	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	78	2.91	.61	2	4
I think that I can cope well with work pressure.	78	3.04	.55	2	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	79	2.77	.6	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	79	2.73	.63	1	4

Table 368: Control Group with Mentor: Resilience (Catalonia)

Items Resilience	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	60	2.9	.71	1	4
I think that I can cope well with work pressure.	60	3.07	.55	2	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	60	2.83	.62	2	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	60	2.95	.59	1	4

Table 369: Intervention Group: Resilience (Catalonia)

Items Resilience	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	92	2.99	.75	1	4
I think that I can cope well with work pressure.	91	3.12	.57	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	92	3.1	.59	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	92	3.03	.56	1	4

Table 370: Control Group without Mentor: Satisfaction with School as a Workplace (Catalonia)

Items Satisfaction with School as a Workplace	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	79	2.59	.87	1	4
I enjoy working at this school.	78	2.91	.72	1	4
I would recommend this school as a good place to work.	78	2.62	.83	1	4

Table 371: Control Group with Mentor: Satisfaction with School as a Workplace (Catalonia)

Items Satisfaction with School as a Workplace	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	60	2.6	1.03	1	4
I enjoy working at this school.	60	2.9	.93	1	4
I would recommend this school as a good place to work.	60	2.77	1.01	1	4

Table 372: Intervention Group: Satisfaction with School as a Workplace (Catalonia)

Items Satisfaction with School as a Workplace	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	91	3.12	.85	1	4
I enjoy working at this school.	93	3.34	.68	1	4
I would recommend this school as a good place to work.	93	3.25	.7	1	4

Table 373: Control Group without Mentor: Intention to Quit (Catalonia)

After this year, I'm planning to leave the teacher profession	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	59	74.68
Disagree	20	25.32
Agree	0	0.00
Strongly Agree	0	0.00
Total	79	100.00

Table 374: Control Group with Mentor: Intention to Quit (Catalonia)

After this year, I'm planning to leave the teacher profession	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	46	76.67
Disagree	13	21.67
Agree	0	0.00
Strongly Agree	1	1.67
Total	60	100.00

Table 375: Intervention Group: Intention to Quit (Catalonia)

After this year, I'm planning to leave the teacher profession	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	73	77.66
Disagree	17	18.09
Agree	2	2.13
Strongly Agree	2	2.13
Total	94	100.00

Table 376: Control Group without Mentor: Thinking About a Career Change (Catalonia)

In the long run, I'm thinking about a career change.	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	43	54.43
Disagree	21	26.58
Agree	11	13.92
Strongly Agree	4	5.06
Total	79	100.00

Table 377: Control Group with Mentor: Thinking About a Career Change (Catalonia)

In the long run, I'm thinking about a career change.	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	32	53.33
Disagree	15	25.00
Agree	10	16.67
Strongly Agree	3	5.00
Total	60	100.00

Table 378: Intervention Group: Thinking About a Career Change (Catalonia)

In the long run, I'm thinking about a career change.	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	53	56.38
Disagree	27	28.72
Agree	12	12.77
Strongly Agree	2	2.13
Total	94	100.00

Table 379: Willingness to Stay in the Teaching Profession in Years by Group (Catalonia)

For how many more years do you want to continue to work as a teacher?	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group without Mentor	31	20.65	9.87	2	40
Control Group with Mentor	26	23.77	11.2	1	50
Intervention Group	94	27.38	15.96	0	100

Table 380: Control Group with Mentor: Mentoring Competence (Catalonia)

Items Mentoring Competence	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	60	3.17	.72	1	4
My mentor encourages me to perceive my school as a professional learning environment.	60	3.18	.68	1	4
My mentor helps me to develop professional resilience.	60	3.1	.77	1	4
My mentor advises me on how to structure my teaching.	60	3	.8	1	4
My mentor professionally assesses the quality of my teaching skills.	60	3.08	.79	1	4
My mentor addresses my feelings in a professional way.	60	2.88	.83	1	4
My mentor gives me constructive feedback.	60	3.35	.66	1	4
My mentor uses active listening as a strategy.	60	3.25	.63	2	4
My mentor analyses my professional development needs.	60	2.92	.72	1	4
My mentor prompts me to reflect on my teaching.	60	2.97	.78	1	4
My mentor relates to professional teaching standards.	60	3.27	.58	2	4
My mentor deals with my mistakes in a constructive way.	60	3.27	.63	2	4

Table 381: Intervention Group: Mentoring Competence (Catalonia)

Items Mentoring Competence	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	92	3.6	.59	1	4
My mentor encourages me to perceive my school as a professional learning environment.	92	3.62	.57	1	4
My mentor helps me to develop professional resilience.	90	3.51	.66	1	4
My mentor advises me on how to structure my teaching.	90	3.43	.65	1	4
My mentor professionally assesses the quality of my teaching skills.	91	3.46	.64	2	4
My mentor addresses my feelings in a professional way.	89	3.55	.58	2	4
My mentor gives me constructive feedback.	90	3.8	.43	2	4
My mentor uses active listening as a strategy.	88	3.68	.49	2	4
My mentor analyses my professional development needs.	92	3.53	.56	2	4
My mentor prompts me to reflect on my teaching.	90	3.64	.55	2	4
My mentor relates to professional teaching standards.	91	3.53	.58	2	4
My mentor deals with my mistakes in a constructive way.	92	3.72	.48	2	4

Table 382: Control Group without Mentor: Teaching Competences – Student Interactions (Catalonia)

Items Teaching Competences Regarding Student Interactions	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	79	4.61	.91	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	79	4.54	.89	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	79	5.1	.84	2	6
Imparting self-confidence even in timid pupils.	79	4.85	.91	3	6
Foster social development (e.g. helping, supporting, taking responsibility).	79	4.43	1.08	1	6
Knowing how to react when pupils show aggressive behaviour.	79	3.86	1	1	6
Approaching struggling students in a supportive way.	77	4.49	.94	2	6
Creating an open classroom climate for students to voice their own ideas.	79	4.7	.91	2	6
Supporting individual pupils in personal crises.	79	4.61	.93	2	6
Purposefully fostering my pupils' strengths.	79	4.23	.95	2	6
Supporting pupils who have experienced failure in class.	79	4.06	1.09	1	6

Table 383: Control Group with Mentor: Teaching Competences – Student Interactions (Catalonia)

Items Teaching Competences Regarding Student Interactions	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	60	4.47	.98	3	6
Taking on the pupils' perspective when finding solutions for occurring problems.	60	4.53	.81	3	6
Showing an open attitude, so it's easy for students to approach me with their problems.	59	5.07	.93	2	6
Imparting self-confidence even in timid pupils.	60	4.93	.8	3	6
Foster social development (e.g. helping, supporting, taking responsibility).	59	4.39	1.02	1	6
Knowing how to react when pupils show aggressive behaviour.	60	3.88	1.12	1	6
Approaching struggling students in a supportive way.	60	4.55	.95	2	6
Creating an open classroom climate for students to voice their own ideas.	60	4.83	.83	3	6
Supporting individual pupils in personal crises.	60	4.43	.96	2	6
Purposefully fostering my pupils' strengths.	60	4.12	1.01	1	6
Supporting pupils who have experienced failure in class.	60	3.9	1.07	1	6

Table 384: Intervention Group: Teaching Competences – Student Interactions (Catalonia)

Items Teaching Competences Regarding Student Interactions	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	92	4.82	.77	3	6
Taking on the pupils' perspective when finding solutions for occurring problems.	92	4.75	.91	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	91	5.12	.77	3	6
Imparting self-confidence even in timid pupils.	92	5.01	.79	3	6
Foster social development (e.g. helping, supporting, taking responsibility).	92	4.74	.81	3	6
Knowing how to react when pupils show aggressive behaviour.	92	4.16	.88	1	6
Approaching struggling students in a supportive way.	92	4.82	.75	3	6
Creating an open classroom climate for students to voice their own ideas.	92	5.09	.79	3	6
Supporting individual pupils in personal crises.	92	4.76	.93	2	6
Purposefully fostering my pupils' strengths.	93	4.54	.94	1	6
Supporting pupils who have experienced failure in class.	93	4.47	1	1	6

Table 385: Control Group without Mentor: Teaching Competences – Parent Support (Catalonia)

Items Teaching Competences Regarding Parent Support	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	78	3.24	1.32	1	6
Advising parents how they can influence the learning environment of their child.	78	3.33	1.31	1	6
Showing parents how they can positively influence the education of their child.	78	3.45	1.34	1	6
Dealing with conflict in parent teacher interactions in a professional way.	78	3.4	1.32	1	5

Table 386: Control Group with Mentor: Teaching Competences – Parent Support (Catalonia)

Items Teaching Competences Regarding Parent Support	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	60	2.98	1.37	1	6
Advising parents how they can influence the learning environment of their child.	60	3.15	1.29	1	5
Showing parents how they can positively influence the education of their child.	60	3.28	1.24	1	5
Dealing with conflict in parent teacher interactions in a professional way.	60	3.13	1.19	1	5

Table 387: Intervention Group: Teaching Competences – Parent Support (Catalonia)

Items Teaching Competences Regarding Parent Support	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	92	3.67	1.14	1	6
Advising parents how they can influence the learning environment of their child.	92	3.91	1.14	1	6
Showing parents how they can positively influence the education of their child.	92	3.91	1.11	1	6
Dealing with conflict in parent teacher interactions in a professional way.	92	3.79	1.18	1	6

A.6.2 Mentor Tables (Catalonia)

Table 388: Mentors' Gender Distribution by Group (Catalonia)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	6	33.33	6	20.69
Female	12	66.67	23	79.31
Total	18	100.00	29	100.00

Table 389: Mentors' Age by Group (Catalonia)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	18	48.28	7.81	35	60
Intervention Group	29	46.38	8.09	31	61

Table 390: Mentor Control Group: General Acceptance of Mentoring (Catalonia)

To what extent do you agree with the following statements on mentoring in your education system?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	16	2.44	.89	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	16	2.69	.6	2	4
In my environment, people highly respect mentors who support novice teachers.	17	2.24	.66	1	4
I think that mentoring novice teachers is valued in society.	17	2.24	.56	2	4

Table 391: Mentor Intervention Group: General Acceptance of Mentoring (Catalonia)

To what extent do you agree with the following statements on mentoring in your education system?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	28	2.57	.63	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	28	2.64	.87	1	4
In my environment, people highly respect mentors who support novice teachers.	28	2.46	.79	1	4
I think that mentoring novice teachers is valued in society.	28	2.43	.69	1	3

Table 392: Mentor Control Group: Important Mentor Attributes (Catalonia)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	18	.78	.43	0	1
Openness	18	.33	.49	0	1
Respectfulness	18	.56	.51	0	1
Trustfulness	18	.61	.5	0	1
Curiousness	18	0	0	0	0
Courage	18	0	0	0	0
Flexibility	18	.22	.43	0	1

Table 393: Mentor Intervention Group: Important Mentor Attributes (Catalonia)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	29	.9	.31	0	1
Openness	29	.59	.5	0	1
Respectfulness	29	.45	.51	0	1
Trustfulness	29	.59	.5	0	1
Curiousness	29	0	0	0	0
Courage	29	0	0	0	0
Flexibility	29	.45	.51	0	1

Table 394: Mentors' Enthusiasm for Mentoring Over Time by Group (Catalonia)

Enthusiasm for Mentoring	Control Group				Intervention Group			
	T1		T3		T1		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Mentoring is the most fulfilling part of my job.	2.4	.55	2.44	.78	2.43	.51	2.69	.71
I enjoy getting novice teachers excited about teaching.	3	0	3.33	.49	3.36	.5	3.59	.68
I find great joy in mentoring novice teachers.	2.8	.45	2.94	.54	3.07	.47	3.17	.66
I enjoy sharing my teaching expertise with novice teachers.	3.2	.45	3.47	.51	3.29	.47	3.41	.73
I feel content when I see progress in my mentees' teaching.	3.4	.55	3.28	.57	3.57	.51	3.66	.55
<i>N</i> _{Min}	5		17		14		29	

Table 395: Mentors' Enthusiasm Over Time by Group – Scale (Catalonia)

Enthusiasm Scale	T1		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Control Group	2.96	.09	3.09	.44
Intervention Group	3.14	.35	3.3	.56

Table 396: Control Group Mentors' Mentoring Focus (Catalonia)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.8	.84	-	-	3.06	.87
...teach students with language barriers?	2.4	.89	-	-	2.33	.91
...teach students with emotional and behavioural difficulties?	3	0	-	-	2.78	.81
...involve parents in the learning process of their children?	2.8	.45	-	-	2.61	.85
...manage a diverse classroom effectively?	3	.71	-	-	3.11	.83
...engage hard-to-reach learners?	3	.71	-	-	2.83	.86
<i>N</i> _{Min}	5		-		18	

Table 397: Intervention Group Mentors' Mentoring Focus (Catalonia)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	3	.58	2.72	.84	2.86	.69
...teach students with language barriers?	2.85	.69	2.03	.87	2.24	.91
...teach students with emotional and behavioural difficulties?	3.08	.76	2.97	.87	3	.8
...involve parents in the learning process of their children?	2.77	.73	2.07	.84	2.28	.75
...manage a diverse classroom effectively?	3.15	.55	3.38	.73	3.34	.61
...engage hard-to-reach learners?	2.92	.76	3	.76	3.07	.7
<i>N</i> _{Min}	13		29		29	

Table 398: Control Group Mentors' Use of Direct Mentoring Practices – Scale (Catalonia)

How often do you use the following mentoring practices?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	5	4.07	.4	3.5	4.5
Use of Direct Mentoring Practices (T2)	-	-	-	-	-
Use of Direct Mentoring Practices (T3)	17	3.75	.74	2.83	5.17

Table 399: Intervention Group Mentors' Use of Direct Mentoring Practices – Scale (Catalonia)

How often do you use the following mentoring practices?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	13	3.71	.81	2.25	5
Use of Direct Mentoring Practices (T2)	29	2.98	.75	1.67	4.33
Use of Direct Mentoring Practices (T3)	29	3.24	.77	2	4.83

Table 400: Control Group Mentor's Use of Facilitative Mentoring Practices – Scale (Catalonia)

How often do you use the following mentoring practices?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	5	4.67	.75	3.33	5
Use of Facilitative Mentoring Practices (T2)	-	-	-	-	-
Use of Facilitative Mentoring Practices (T3)	17	4.04	.74	3	5.67

Table 401: Intervention Group Mentor's Use of Facilitative Mentoring Practices – Scale (Catalonia)

How often do you use the following mentoring practices?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	13	3.85	.59	3	5.33
Use of Facilitative Mentoring Practices (T2)	29	4.31	.57	3	5
Use of Facilitative Mentoring Practices (T3)	29	4.44	.67	3	5.67

Table 402: Control Group Mentors' Mentoring Practices (Catalonia)

Items Mentoring Practices	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	4.6	.89	-	-	4.06	.75
I ask clarifying questions.	4.6	.89	-	-	4	.87
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	4.8	.45	-	-	4.06	1.2
I use active listening skills during mentoring conversations.	4	1	-	-	4.76	.97
I confront novice teachers with mistakes they made during their lessons.	4.6	.55	-	-	3.94	.97
I use concrete examples from the novice teachers' lessons during conversations.	4.8	.84	-	-	3.88	1.22
I instruct novice teachers on how to structure their teaching.	3	.82	-	-	3.53	1.01
I am able to address feelings which I perceived during the lesson.	3.75	.5	-	-	4.06	.9
I help mentees to make their implicit statements explicit.	3.25	.5	-	-	3.82	1.29
I ask for alternatives to the teaching implemented by novice teachers.	3.5	.58	-	-	3.82	.95
I provide additional information on instruction to mentees.	3.75	.5	-	-	3.94	1.09
I assess the quality of novice teachers' teaching skills.	4	0	-	-	3.71	1.36
I provide direct advice on how to improve teaching.	3.5	.58	-	-	3.53	1.07
I give examples of best practice from my own experience.	4.25	.96	-	-	4	.87
I want novice teachers to discover the principles behind a good lesson on their own.	4.5	.58	-	-	4.24	1.09
I let my novice teachers reflect continuously on their professional development.	4	.82	-	-	4.59	.87
At the end of a mentoring conversation, I summarise the content that we discussed.	3.25	.5	-	-	3.94	1.2
I provide guidance on further professional development opportunities.	3.75	.5	-	-	3.76	1.2
<i>N</i> _{Min}	4		-		17	

Table 403: Intervention Group Mentors' Mentoring Practices (Catalonia)

Items Mentoring Practices	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	4	.91	4.24	1.09	4.07	1.1
I ask clarifying questions.	3.77	.6	4.28	.7	4.59	.75
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	3.77	.83	4.43	.69	4.62	.86
I use active listening skills during mentoring conversations.	5	1	5.21	.9	5.28	.96
I confront novice teachers with mistakes they made during their lessons.	3.54	1.33	2.66	1.14	2.76	1.27
I use concrete examples from the novice teachers' lessons during conversations.	4.31	.95	4.34	1.34	4.83	1.31
I instruct novice teachers on how to structure their teaching.	3.23	1.17	2.52	1.18	2.34	1.11
I am able to address feelings which I perceived during the lesson.	4.31	1.03	4.07	1.09	4.14	1.35
I help mentees to make their implicit statements explicit.	4	.91	4.28	.92	4.48	1.09
I ask for alternatives to the teaching implemented by novice teachers.	3.23	.73	3.29	.81	3.45	1.21
I provide additional information on instruction to mentees.	4.08	.64	3.31	.93	3.76	1.18
I assess the quality of novice teachers' teaching skills.	3.69	1.49	2.52	1.57	2.93	1.46
I provide direct advice on how to improve teaching.	3.85	.9	2.55	.95	2.79	.99
I give examples of best practice from my own experience.	4.38	1.12	3.14	.83	3.21	.83
I want novice teachers to discover the principles behind a good lesson on their own.	4.08	1.04	4.41	1.18	4.61	1.13
I let my novice teachers reflect continuously on their professional development.	4.38	1.04	4.72	.92	4.89	1.13
At the end of a mentoring conversation, I summarise the content that we discussed.	3.62	.77	4.86	1.06	5.15	1.13
I provide guidance on further professional development opportunities.	3.08	1.04	2.71	1.27	3.07	1.3
<i>N</i> _{Min}	13		28		27	

Table 404: Usefulness of NEST Mentor Training for Teaching (Catalonia)

To what extent did the NEST mentor training programme improve your own teaching practice?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Improvement of Own Teaching Practice	29	3.41	.82	1	4

Table 405: Mentors' Improvement of Mentoring Practices by NEST Mentor Training Programme

To what extent did the NEST training help you to improve your mentoring regarding the following skills:	Intervention Group				
	N	M	SD	Min	Max
Giving constructive feedback.	27	3.48	.58	2	4
Using active listening as a strategy.	27	3.19	.88	1	4
Analyzing mentees' professional development needs.	29	3.41	.78	2	4
Using different mentoring approaches for novice teachers with different personalities.	29	3.38	.73	2	4
Prompting mentees to reflect on their teaching.	29	3.48	.69	2	4
Changing my mentoring approach according to the social situation in the classroom.	27	3	.78	2	4
Relating to professional teaching standards.	29	2.83	.85	1	4
Dealing with mentees' mistakes in a constructive way.	26	3.31	.68	2	4
Addressing mentees' feelings.	24	2.96	.69	2	4
Taking the perspective of the mentee (putting myself in their shoes)	25	3.16	.9	1	4
Identify challenges my mentee is facing	28	3.07	.77	2	4
Adapting my mentoring approach according to the novice teacher's level of professional development.	28	3.32	.67	2	4

Table 406: Control Group Mentors' Self-Assessed Mentoring Competence (Catalonia)

Items Mentoring Competence	Control Group					
	T1		T2		T3	
	M	SD	M	SD	M	SD
I am able to build supportive relationships with my mentees.	4.6	.89	-	-	4.82	.64
I am able to encourage my mentees to perceive their school as a professional learning environment.	4.6	.89	-	-	4.88	.6
I am able to contribute to a growing professional resilience among my mentees.	4.8	.45	-	-	4.53	.94
I am able to advise novice teachers on how to structure their teaching.	4	1	-	-	4.53	.94
I am able to assess the quality of novice teachers' teaching skills.	4.6	.55	-	-	4.59	.87
I am able to address my mentees' feelings.	4.8	.84	-	-	4.88	.78
I am able to give my mentees constructive feedback.	4.8	.45	-	-	4.65	.49
I am able to use active listening as a strategy.	4.8	.45	-	-	4.94	.66
I am able to analyse mentees' professional development needs.	4.4	.89	-	-	4.35	.7
I am able to prompt mentees to reflect on their teaching.	4.8	1.1	-	-	4.71	.59
I am able to relate to professional teaching standards.	3.8	1.3	-	-	4.76	.66
I am able to deal with mentees' mistakes in a constructive way.	5	0	-	-	4.76	.75
N _{Min}	5		-		17	

Table 407: Intervention Group Mentors' Self-Assessed Mentoring Competence (Catalonia)

Items Mentoring Competence	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I am able to build supportive relationships with my mentees.	5.07	.47	5.1	.49	5.24	.69
I am able to encourage my mentees to perceive their school as a professional learning environment.	5.07	.47	4.93	.65	5.03	.68
I am able to contribute to a growing professional resilience among my mentees.	4.64	.5	4.59	.63	4.83	.66
I am able to advise novice teachers on how to structure their teaching.	4.57	.51	4.48	.83	4.72	.96
I am able to assess the quality of novice teachers' teaching skills.	4.21	.58	4.54	.84	4.61	.96
I am able to address my mentees' feelings.	4.71	.83	5.1	.77	5.1	.67
I am able to give my mentees constructive feedback.	5	.55	5.07	.59	5.38	.68
I am able to use active listening as a strategy.	5.15	.55	5.21	.74	5.37	.69
I am able to analyse mentees' professional development needs.	4.43	.65	4.52	.63	4.78	.75
I am able to prompt mentees to reflect on their teaching.	4.64	.5	4.97	.57	4.97	.5
I am able to relate to professional teaching standards.	4.43	.51	4.79	.73	4.97	.68
I am able to deal with mentees' mistakes in a constructive way.	5.07	.62	4.93	.59	5.1	.72
<i>N</i> _{Min}	14		29		27	

Table 408: Control Group Mentors' Self-Assessed Mentoring Competence – Scale (Catalonia)

Mentoring Competence	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	5	4.58	.56	3.67	5.08
Mentoring Competence (T2)	-	-	-	-	-
Mentoring Competence (T3)	17	4.7	.52	4	5.67

Table 409: Intervention Group Mentors' Self-Assessed Mentoring Competence – Scale (Catalonia)

Mentoring Competence	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	14	4.75	.35	4.17	5.5
Mentoring Competence (T2)	29	4.85	.39	4	5.67
Mentoring Competence (T3)	29	5.01	.51	3.42	6

Appendix A7 – Spain – Community of Madrid

A.7.1 Novice Teacher Tables (Community of Madrid)

Table 410: Novice Teachers in the Control and Intervention Group by Cohort (Community of Madrid)

Cohort	Control Group	Intervention Group	Total
1 (School Year 2021/2022)	90	72	162
2 (School Year 2022/2023)	60	35	95
Total	150	107	257

Table 411: Novice Teachers' Mentor Support by Group (Community of Madrid)

Do you currently have an assigned mentor to support you?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	73	48.67	0	0.00
Yes	77	51.33	107	100.00
Total	150	100.00	107	100.00

Table 412: Novice Teachers' Gender Distribution by Group (Community of Madrid)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	34	22.67	36	33.64
Female	116	77.33	70	65.42
Other	0	0.00	1	0.93
Total	150	100.00	107	100.00

Table 413: Novice Teachers' Age by Group (Community of Madrid)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	150	33.21	6.81	24	56
Intervention Group	107	34.8	8.68	23	56

Table 414: Novice Teachers' Teaching Experience by Group (Community of Madrid)

Teaching Experience (Years)	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	150	3.13	1.37	0	5
Intervention Group	107	2.34	1.45	0	5

Table 415: Teaching as First Career Choice of the Novice Teachers by Group (Community of Madrid)

Was teaching your first choice as a career?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	56	37.33	67	62.62
Yes	94	62.67	40	37.38
Total	150	100.00	107	100.00

Table 416: Teaching Qualification of the Novice Teachers by Group (Community of Madrid)

Do you have a formal teaching qualification?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Yes	150	100.00	107	100.00
No	0	0.00	0	0.00
Total	150	100.00	107	100.00

Table 417: Novice Teachers' Entrance into Teaching Profession by Group (Community of Madrid)

How did you enter the teaching profession?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
I entered the teaching profession via regular teacher education and/or training.	148	98.67	106	99.07
I entered the teaching profession via an alternative pathway (e.g. fast track training).	1	0.67	1	0.93
I entered the teaching profession without any teacher education or teacher training.	1	0.67	0	0.00
Total	150	100.00	107	100.00

Table 418: Control Group: General Acceptance of Mentoring (Community of Madrid)

To what extent do you agree with the following statements on mentoring in your education system?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	150	2.1	.97	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	150	1.86	.84	1	4
In my environment, people highly respect mentors who support novice teachers.	150	2.56	.89	1	4
I think that mentoring novice teachers is valued in society.	150	1.79	.78	1	4

Table 419: Intervention Group: General Acceptance of Mentoring (Community of Madrid)

To what extent do you agree with the following statements on mentoring in your education system?	N	Intervention Group			
		M	SD	Min	Max
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	104	2.22	1	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	104	2.01	.95	1	4
In my environment, people highly respect mentors who support novice teachers.	104	2.94	.8	1	4
I think that mentoring novice teachers is valued in society.	104	2.16	.85	1	4

Table 420: Control Group: Important Mentor Attributes (Community of Madrid)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Control Group			
		M	SD	Min	Max
Empathy	150	.87	.33	0	1
Openness	150	.61	.49	0	1
Respectfulness	150	.39	.49	0	1
Trustfulness	150	.57	.5	0	1
Curiousness	150	.12	.33	0	1
Courage	150	.05	.21	0	1
Flexibility	150	.25	.43	0	1

Table 421: Intervention Group: Important Mentor Attributes (Community of Madrid)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Intervention Group			
		M	SD	Min	Max
Empathy	107	.77	.43	0	1
Openness	107	.64	.48	0	1
Respectfulness	107	.48	.5	0	1
Trustfulness	107	.64	.48	0	1
Curiousness	107	.1	.31	0	1
Courage	107	.05	.21	0	1
Flexibility	107	.13	.34	0	1

Table 422: Control Group: Attitudes Towards Being Mentored (Community of Madrid)

Items Attitudes Towards Being Mentored	N	Control Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	150	3.27	.67	1	4
I think being mentored will help me to improve my teaching.	150	3.45	.65	1	4
I expect my mentor(s) to help me discover the causes for professional problems.	150	3.41	.6	1	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	150	3.35	.61	2	4
From my mentor(s) I expect good ideas for my further professional development.	150	3.48	.55	2	4
I think being mentored will help me to develop reflection skills for my own teaching.	149	3.36	.67	1	4

Table 423: Intervention Group: Attitudes Towards Being Mentored (Community of Madrid)

Items Attitudes Towards Being Mentored	N	Intervention Group			
		M	SD	Min	Max
I think being mentored can have an important impact on my professional development.	106	3.36	.59	2	4
I think being mentored will help me to improve my teaching.	107	3.57	.53	2	4
I expect my mentor(s) to help me discover the causes for professional problems.	107	3.52	.52	2	4
I think being mentored will support the development of more suitable alternatives for my classroom activities.	104	3.49	.54	2	4
From my mentor(s) I expect good ideas for my further professional development.	107	3.61	.49	3	4
I think being mentored will help me to develop reflection skills for my own teaching.	106	3.6	.49	3	4

Table 424: Control Group: Preparedness for School Challenges (Community of Madrid)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	N	Control Group			
		M	SD	Min	Max
Teaching students with learning difficulties.	150	1.98	.76	1	4
Teaching students with language barriers.	150	1.72	.81	1	4
Teaching students with emotional and behavioural difficulties.	150	1.84	.74	1	4
Involving parents in the learning process of their children.	150	1.98	.75	1	4
Managing a diverse classroom effectively.	150	2.01	.82	1	4
Engaging hard-to-reach learners.	150	1.8	.72	1	4

Table 425: Intervention Group: Preparedness for School Challenges (Community of Madrid)

In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Teaching students with learning difficulties.	107	2.04	.85	1	4
Teaching students with language barriers.	107	1.64	.8	1	4
Teaching students with emotional and behavioural difficulties.	107	1.95	.74	1	4
Involving parents in the learning process of their children.	107	1.99	.9	1	4
Managing a diverse classroom effectively.	107	2.08	.8	1	4
Engaging hard-to-reach learners.	107	2.01	.79	1	4

Table 426: Participation in Induction Activities by Group (Community of Madrid)

(Apart from NEST), are you currently taking part or did you take part in any induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	105	70.00	96	89.72
Yes	45	30.00	11	10.28
Total	150	100.00	107	100.00

Table 427: Participation in Formal Induction Activities by Group (Community of Madrid)

(Apart from NEST), are you currently taking part or did you take part in any formal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	113	75.33	103	96.26
Yes	37	24.67	4	3.74
Total	150	100.00	107	100.00

Table 428: Participation in Informal Induction Activities by Group (Community of Madrid)

(Apart from NEST), are you currently taking part or did you take part in any informal induction activities?	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
No	122	81.33	99	92.52
Yes	28	18.67	8	7.48
Total	150	100.00	107	100.00

Table 429: Control Group: Hindrances on Quality of Instruction (Community of Madrid)

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	N	Control Group			
		M	SD	Min	Max
Shortage of qualified teachers.	150	1.72	.81	1	4
Shortage of teachers with competence in teaching students with special needs.	150	2.07	.73	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	150	1.54	.78	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	150	1.77	.84	1	4
Insufficient internet access.	150	1.49	.72	1	4
Shortage or inadequacy of library materials.	150	1.81	.87	1	4
Shortage of support personnel.	150	2.65	.96	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	150	1.73	.8	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	150	1.79	.81	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	150	1.91	.83	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	150	1.83	.8	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	150	1.85	.85	1	4
Shortage or inadequacy of time for instructional leadership.	149	2.21	.93	1	4
Shortage or inadequacy of time with students.	150	2.17	.91	1	4

Table 430: *Intervention Group: Hindrances on Quality of Instruction (Community of Madrid)*

To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Shortage of qualified teachers.	102	1.54	.71	1	4
Shortage of teachers with competence in teaching students with special needs.	100	2.04	.88	1	4
Shortage or inadequacy of instructional materials (e.g. textbooks).	101	1.43	.64	1	4
Shortage or inadequacy of digital technology for instruction (e.g. software, computers, tablets, smart boards)	101	1.63	.74	1	4
Insufficient internet access.	100	1.38	.63	1	4
Shortage or inadequacy of library materials.	102	1.46	.68	1	4
Shortage of support personnel.	101	2.27	.96	1	4
Shortage or inadequacy of instructional space (e.g. classrooms).	102	2.06	1.04	1	4
Shortage or inadequacy of physical infrastructure (e.g. classroom furniture, school buildings, heating/cooling, and lighting).	102	2.03	.96	1	4
Shortage of teachers with competence in teaching students in a multicultural or multilingual setting.	101	1.71	.79	1	4
Shortage of teachers with competence in teaching students from socio economically disadvantaged homes.	100	1.69	.8	1	4
Shortage or inadequacy of necessary materials to train vocational skills.	101	1.62	.76	1	4
Shortage or inadequacy of time for instructional leadership.	100	1.91	.88	1	4
Shortage or inadequacy of time with students.	101	2.04	.94	1	4

Table 431: *Number of Formal Mentoring Conversations by Group (Community of Madrid)*

Formal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	58	8.52	7.46	0	36
Intervention Group	106	4.14	2.93	0	25

Table 432: *Number of Informal Mentoring Conversations by Group (Community of Madrid)*

Informal Mentoring Conversations	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	57	21.23	22.41	0	100
Intervention Group	105	13.7	18.45	0	100

Table 433: Control Group: Organisation of Mentoring (Community of Madrid)

Items Organisation of Mentoring	N	Control Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	77	3.19	.87	1	4
My mentor takes sufficient time to observe my classroom teaching.	77	3.32	.77	1	4
I know well in advance when my mentor will visit me for a classroom observation	77	3.48	.77	1	4

Table 434: Intervention Group: Organisation of Mentoring (Community of Madrid)

Items Organisation of Mentoring	N	Intervention Group			
		M	SD	Min	Max
My mentor takes sufficient time for our mentoring conversations.	104	3.57	.65	1	4
My mentor takes sufficient time to observe my classroom teaching.	104	3.5	.72	1	4
I know well in advance when my mentor will visit me for a classroom observation	104	3.7	.64	1	4

Table 435: Control Group: Extent of Mentoring Focus (Community of Madrid)

To what extent did the mentoring you received focus on supporting you to...	N	Control Group			
		M	SD	Min	Max
...teach students with learning difficulties.	77	2.36	.94	1	4
...teach students with language barriers.	76	2.04	.96	1	4
...teach students with emotional and behavioural difficulties.	77	2.61	.89	1	4
...involve parents in the learning process of their children.	77	2.34	.93	1	4
...manage a diverse classroom effectively.	77	2.6	1	1	4
...engage hard-to-reach learners.	77	2.38	.87	1	4

Table 436: Intervention Group: Extent of Mentoring Focus (Community of Madrid)

To what extent did the mentoring you received focus on supporting you to...	N	Intervention Group			
		M	SD	Min	Max
...teach students with learning difficulties.	106	2.55	.85	1	4
...teach students with language barriers.	105	1.94	.92	1	4
...teach students with emotional and behavioural difficulties.	106	2.65	.93	1	4
...involve parents in the learning process of their children.	105	2.01	.94	1	4
...manage a diverse classroom effectively.	105	3.08	.83	1	4
...engage hard-to-reach learners.	105	2.92	.88	1	4

Table 437: Intervention Group: Extent of Mentoring Focus by Cohort (Community of Madrid)

To what extent did the mentoring you received focus on supporting you to...	Intervention Group Cohort 1			Intervention Group Cohort 2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties.	71	2.62	.92	35	2.4	.69
...teach students with language barriers.	70	2	.9	35	1.83	.95
...teach students with emotional and behavioural difficulties.	71	2.68	.89	35	2.6	1.01
...involve parents in the learning process of their children.	70	1.97	.92	35	2.09	.98
...manage a diverse classroom effectively.	70	3.11	.81	35	3	.87
...engage hard-to-reach learners.	70	2.96	.84	35	2.86	.97

Table 438: Control Group: Fit of Mentoring Practices (Community of Madrid)

Fit Between Mentoring Practices	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of directive mentoring practices	77	4.45	1.96	0	6
Fit of facilitative mentoring practices	77	2.39	.95	0	3
Overall fit	77	14.42	5.62	0	20

Table 439: Intervention Group: Fit of Mentoring Practices (Community of Madrid)

Fit Between Mentoring Practices	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fit of Directive Mentoring Practices	106	5.05	1.55	0	6
Fit of Facilitative Mentoring Practices	106	2.7	.76	0	3
Overall Fit	106	17.27	4.64	0	20

Table 440: Control Group without Mentor: Emotional Exhaustion Over Time (Community of Madrid)

Items Exhaustion	Control Group without Mentor T1			Control Group without Mentor T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	72	2.99	.85	73	2.62	.92
Overall, I feel overstrained by my work load.	73	3.03	.85	73	2.93	.9
When I am working, I realise how weary I am.	73	2.58	.9	73	2.52	.85
At the end of a day's work, I sometimes feel really depressed.	73	2.26	.91	73	2.14	.95

Table 441: Control Group with Mentor: Emotional Exhaustion Over Time (Community of Madrid)

Items Exhaustion	Control Group with Mentor T1			Control Group with Mentor T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	77	2.86	.84	77	2.71	.9
Overall, I feel overstrained by my work load.	77	3.06	.83	77	2.9	.88
When I am working, I realise how weary I am.	77	2.4	.83	77	2.34	.93
At the end of a day's work, I sometimes feel really depressed.	77	2.04	.9	77	2.12	.92

Table 442: Intervention Group: Emotional Exhaustion Over Time (Community of Madrid)

Items Exhaustion	Intervention Group T1			Intervention Group T2		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
I often feel exhausted while I am working.	106	2.64	.82	101	2.5	.86
Overall, I feel overstrained by my work load.	106	2.85	.87	101	2.63	.9
When I am working, I realise how weary I am.	105	2.34	.89	101	2.28	.85
At the end of a day's work, I sometimes feel really depressed.	106	1.97	.84	101	1.88	.9

Table 443: Control Group without Mentor: Resilience (Community of Madrid)

Items Resilience	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	73	2.86	.85	1	4
I think that I can cope well with work pressure.	72	2.89	.76	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	73	2.85	.79	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	73	2.64	.69	1	4

Table 444: Control Group with Mentor: Resilience (Community of Madrid)

Items Resilience	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	76	2.83	.84	1	4
I think that I can cope well with work pressure.	76	2.96	.68	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	76	2.82	.71	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	76	2.79	.72	1	4

Table 445: Intervention Group: Resilience (Community of Madrid)

Items Resilience	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I do not let stress at work get me down.	102	2.98	.78	1	4
I think that I can cope well with work pressure.	101	3.05	.68	1	4
I will not let my self-confidence be negatively affected by a poor performance or a bad result.	102	2.86	.68	1	4
I can cope well with setbacks at work (such as poor achievement or negative feedback).	102	2.93	.55	1	4

Table 446: Control Group without Mentor: Satisfaction with School as a Workplace (Community of Madrid)

Items Satisfaction with School as a Workplace	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	73	2.64	1.13	1	4
I enjoy working at this school.	72	3	.95	1	4
I would recommend this school as a good place to work.	73	2.79	1.04	1	4

Table 447: Control Group with Mentor: Satisfaction with School as a Workplace (Community of Madrid)

Items Satisfaction with School as a Workplace	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	77	2.74	.99	1	4
I enjoy working at this school.	77	3.14	.77	1	4
I would recommend this school as a good place to work.	77	2.9	.91	1	4

Table 448: Intervention Group: Satisfaction with School as a Workplace (Community of Madrid)

Items Satisfaction with School as a Workplace	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
I would like to change to another school if that were possible.	102	2.98	.92	1	4
I enjoy working at this school.	103	3.32	.74	1	4
I would recommend this school as a good place to work.	102	3.25	.75	1	4

Table 449: Control Group without Mentor: Intention to Quit (Community of Madrid)

After this year, I'm planning to leave the teacher profession	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	60	83.33
Disagree	12	16.67
Agree	0	0.00
Strongly Agree	0	0.00
Total	72	100.00

Table 450: Control Group with Mentor: Intention to Quit (Community of Madrid)

After this year, I'm planning to leave the teacher profession	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	67	87.01
Disagree	10	12.99
Agree	0	0.00
Strongly Agree	0	0.00
Total	77	100.00

Table 451: Intervention Group: Intention to Quit (Community of Madrid)

After this year, I'm planning to leave the teacher profession	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	78	76.47
Disagree	22	21.57
Agree	2	1.96
Strongly Agree	0	0.00
Total	102	100.00

Table 452: Control Group without Mentor: Thinking About a Career Change (Community of Madrid)

In the long run, I'm thinking about a career change.	Control Group without Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	49	68.06
Disagree	13	18.06
Agree	10	13.89
Strongly Agree	0	0.00
Total	72	100.00

Table 453: Control Group with Mentor: Thinking About a Career Change (Community of Madrid)

In the long run, I'm thinking about a career change.	Control Group with Mentor	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	56	72.73
Disagree	15	19.48
Agree	5	6.49
Strongly Agree	1	1.30
Total	77	100.00

Table 454: Intervention Group: Thinking About a Career Change (Community of Madrid)

In the long run, I'm thinking about a career change.	Intervention Group	
	<i>N</i>	<i>Percent</i>
Strongly Disagree	66	64.71
Disagree	25	24.51
Agree	11	10.78
Strongly Agree	0	0.00
Total	102	100.00

Table 455: Willingness to Stay in the Teaching Profession in Years by Group (Community of Madrid)

For how many more years do you want to continue to work as a teacher?	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group without Mentor	2	17.5	10.61	10	25
Control Group with Mentor	58	29.33	8.47	5	60
Intervention Group	102	25.72	11.64	1	50

Table 456: Control Group with Mentor: Mentoring Competence (Community of Madrid)

Items Mentoring Competence	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	77	3.23	.9	1	4
My mentor encourages me to perceive my school as a professional learning environment.	77	3.34	.8	1	4
My mentor helps me to develop professional resilience.	77	3.18	.91	1	4
My mentor advises me on how to structure my teaching.	77	3.1	.94	1	4
My mentor professionally assesses the quality of my teaching skills.	77	3.23	.9	1	4
My mentor addresses my feelings in a professional way.	77	3.14	.87	1	4
My mentor gives me constructive feedback.	76	3.58	.64	1	4
My mentor uses active listening as a strategy.	76	3.38	.75	1	4
My mentor analyses my professional development needs.	75	3.16	.81	1	4
My mentor prompts me to reflect on my teaching.	77	3.16	.84	1	4
My mentor relates to professional teaching standards.	77	3.19	.73	1	4
My mentor deals with my mistakes in a constructive way.	77	3.52	.62	1	4

Table 457: Intervention Group: Mentoring Competence (Community of Madrid)

Items Mentoring Competence	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
My mentor works on building a supportive relationship with me as mentee.	106	3.51	.71	1	4
My mentor encourages me to perceive my school as a professional learning environment.	105	3.54	.67	1	4
My mentor helps me to develop professional resilience.	103	3.46	.7	1	4
My mentor advises me on how to structure my teaching.	106	3.48	.69	1	4
My mentor professionally assesses the quality of my teaching skills.	105	3.53	.64	1	4
My mentor addresses my feelings in a professional way.	106	3.47	.68	1	4
My mentor gives me constructive feedback.	106	3.75	.5	1	4
My mentor uses active listening as a strategy.	104	3.61	.63	1	4
My mentor analyses my professional development needs.	106	3.46	.69	1	4
My mentor prompts me to reflect on my teaching.	105	3.69	.56	1	4
My mentor relates to professional teaching standards.	105	3.58	.57	1	4
My mentor deals with my mistakes in a constructive way.	106	3.74	.5	1	4

Table 458: Control Group without Mentor: Teaching Competences – Student Interactions (Community of Madrid)

Items Teaching Competences Regarding Student Interactions	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	73	4.63	.94	2	6
Taking on the pupils' perspective when finding solutions for occurring problems.	71	4.58	.84	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	73	5.38	.76	3	6
Imparting self-confidence even in timid pupils.	72	4.82	.91	2	6
Foster social development (e.g. helping, supporting, taking responsibility).	73	4.84	.83	3	6
Knowing how to react when pupils show aggressive behaviour.	73	4.25	1.06	2	6
Approaching struggling students in a supportive way.	72	4.86	.88	2	6
Creating an open classroom climate for students to voice their own ideas.	73	5.15	.72	3	6
Supporting individual pupils in personal crises.	73	4.77	.87	3	6
Purposefully fostering my pupils' strengths.	73	4.51	.82	2	6
Supporting pupils who have experienced failure in class.	73	4.53	.88	2	6

Table 459: Control Group with Mentor: Teaching Competences – Student Interactions (Community of Madrid)

Items Teaching Competences Regarding Student Interactions	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	77	4.61	.89	3	6
Taking on the pupils' perspective when finding solutions for occurring problems.	77	4.58	.94	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	77	5.16	.86	3	6
Imparting self-confidence even in timid pupils.	77	4.99	.75	3	6
Foster social development (e.g. helping, supporting, taking responsibility).	77	4.92	.76	3	6
Knowing how to react when pupils show aggressive behaviour.	77	4.19	1.01	1	6
Approaching struggling students in a supportive way.	77	4.73	.88	2	6
Creating an open classroom climate for students to voice their own ideas.	76	4.97	.75	3	6
Supporting individual pupils in personal crises.	77	4.65	1.14	1	6
Purposefully fostering my pupils' strengths.	76	4.61	.91	3	6
Supporting pupils who have experienced failure in class.	77	4.42	1.12	2	6

Table 460: Intervention Group: Teaching Competences – Student Interactions (Community of Madrid)

Items Teaching Competences Regarding Student Interactions	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Supporting pupils so they can solve conflicts constructively.	103	4.44	.99	1	6
Taking on the pupils' perspective when finding solutions for occurring problems.	103	4.49	.79	2	6
Showing an open attitude, so it's easy for students to approach me with their problems.	103	5.05	.81	3	6
Imparting self-confidence even in timid pupils.	103	4.8	.72	3	6
Foster social development (e.g. helping, supporting, taking responsibility).	102	4.64	.83	2	6
Knowing how to react when pupils show aggressive behaviour.	103	4.02	1.01	1	6
Approaching struggling students in a supportive way.	102	4.56	.91	2	6
Creating an open classroom climate for students to voice their own ideas.	103	4.81	.86	2	6
Supporting individual pupils in personal crises.	103	4.51	.97	2	6
Purposefully fostering my pupils' strengths.	102	4.44	.83	2	6
Supporting pupils who have experienced failure in class.	103	4.45	.92	2	6

Table 461: Control Group without Mentor: Teaching Competences – Parent Support (Community of Madrid)

Items Teaching Competences Regarding Parent Support	Control Group without Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	73	3.93	1.16	1	6
Advising parents how they can influence the learning environment of their child.	73	4.14	1.05	1	6
Showing parents how they can positively influence the education of their child.	73	4.03	1.14	1	6
Dealing with conflict in parent teacher interactions in a professional way.	73	3.93	1.06	1	6

Table 462: Control Group with Mentor: Teaching Competences – Parent Support (Community of Madrid)

Items Teaching Competences Regarding Parent Support	Control Group with Mentor				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	77	3.91	1.21	1	6
Advising parents how they can influence the learning environment of their child.	77	4.18	1.11	1	6
Showing parents how they can positively influence the education of their child.	77	4.26	1.14	1	6
Dealing with conflict in parent teacher interactions in a professional way.	77	4.03	1.16	1	6

Table 463: Intervention Group: Teaching Competences – Parent Support (Community of Madrid)

Items Teaching Competences Regarding Parent Support	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Referring parents to specialised professional support, when they struggle with educational problems of their child.	101	3.7	1.04	1	6
Advising parents how they can influence the learning environment of their child.	101	3.73	1.04	1	6
Showing parents how they can positively influence the education of their child.	101	3.73	1.01	1	6
Dealing with conflict in parent teacher interactions in a professional way.	101	3.69	1.08	1	6

A.7.2 Mentor Tables (Community of Madrid)

Table 464: Mentors' Gender Distribution by Group (Community of Madrid)

Gender	Control Group		Intervention Group	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Male	10	43.48	9	31.03
Female	13	56.52	20	68.97
Total	23	100.00	29	100.00

Table 465: Mentors' Age by Group by Group (Community of Madrid)

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Control Group	23	50.52	4.83	41	60
Intervention Group	29	46.93	5.59	37	55

Table 466: Mentor Control Group: General Acceptance of Mentoring (Community of Madrid)

To what extent do you agree with the following statements on mentoring in your education system?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	22	2.36	.58	2	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	23	2.3	.82	1	4
In my environment, people highly respect mentors who support novice teachers.	23	2	.74	1	3
I think that mentoring novice teachers is valued in society.	23	1.96	.77	1	3

Table 467: Mentor Intervention Group: General Acceptance of Mentoring (Community of Madrid)

To what extent do you agree with the following statements on mentoring in your education system?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.	29	2.17	.8	1	4
In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.	29	1.97	.91	1	4
In my environment, people highly respect mentors who support novice teachers.	29	1.66	.55	1	3
I think that mentoring novice teachers is valued in society.	29	1.97	.5	1	3

Table 468: Mentor Control Group: Important Mentor Attributes (Community of Madrid)

If you could choose, which of the following attributes would you like to see in your mentor the most?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Empathy	23	.83	.39	0	1
Openness	23	.43	.51	0	1
Respectfulness	23	.52	.51	0	1
Trustfulness	23	.35	.49	0	1
Curiousness	23	.13	.34	0	1
Courage	23	0	0	0	0
Flexibility	23	.39	.5	0	1

Table 469: Mentor Intervention Group: Important Mentor Attributes (Community of Madrid)

If you could choose, which of the following attributes would you like to see in your mentor the most?	N	Intervention Group			
		M	SD	Min	Max
Empathy	29	.9	.31	0	1
Openness	29	.55	.51	0	1
Respectfulness	29	.45	.51	0	1
Trustfulness	29	.41	.5	0	1
Curiousness	29	.21	.41	0	1
Courage	29	0	0	0	0
Flexibility	29	.34	.48	0	1

Table 470: Mentors' Enthusiasm for Mentoring Over Time by Group (Community of Madrid)

Enthusiasm for Mentoring	Control Group				Intervention Group			
	T1		T3		T1		T3	
	M	SD	M	SD	M	SD	M	SD
Mentoring is the most fulfilling part of my job.	2.2	.42	2.45	.67	2.3	.48	2.72	.7
I enjoy getting novice teachers excited about teaching.	3.3	.48	3.18	.66	3.4	.52	3.41	.73
I find great joy in mentoring novice teachers.	2.9	.32	3	.6	3.4	.7	3.38	.68
I enjoy sharing my teaching expertise with novice teachers.	3.3	.48	3.13	.63	3.7	.48	3.38	.68
I feel content when I see progress in my mentees' teaching.	3.4	.52	3.24	.7	3.5	.53	3.66	.67
N _{Min}	10		21		10		29	

Table 471: Mentors' Enthusiasm Over Time by Group – Scale (Community of Madrid)

Enthusiasm Scale	T1		T3	
	M	SD	M	SD
Control Group	3.02	.3	3	.55
Intervention Group	3.26	.41	3.31	.53

Table 472: Control Group Mentors' Mentoring Focus (Community of Madrid)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.8	.63	-	-	2.41	.8
...teach students with language barriers?	2.1	.57	-	-	1.82	.8
...teach students with emotional and behavioural difficulties?	2.78	1.09	-	-	2.45	.8
...involve parents in the learning process of their children?	2.2	.79	-	-	2.23	.87
...manage a diverse classroom effectively?	3	.82	-	-	2.64	.9
...engage hard-to-reach learners?	2.8	.92	-	-	2.41	.8
<i>N</i> _{Min}	9		-		22	

Table 473: Intervention Group Mentors' Mentoring Focus (Community of Madrid)

In your mentoring so far, to what extent did you focus on supporting novice teachers to...	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
...teach students with learning difficulties?	2.4	.7	2.52	.78	2.21	.63
...teach students with language barriers?	2.1	1.1	1.61	.57	1.52	.63
...teach students with emotional and behavioural difficulties?	2.5	.97	2.83	.93	2.48	.99
...involve parents in the learning process of their children?	2.4	1.07	1.59	.68	1.66	.67
...manage a diverse classroom effectively?	2.7	.95	3.21	.73	3.1	.72
...engage hard-to-reach learners?	2.8	.92	2.72	.84	2.69	1
<i>N</i> _{Min}	10		28		28	

Table 474: Control Group Mentors' Use of Direct Mentoring Practices – Scale (Community of Madrid)

How often do you use the following mentoring practices?	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	10	3.85	.7	2.83	4.83
Use of Direct Mentoring Practices (T2)	-	-	-	-	-
Use of Direct Mentoring Practices (T3)	23	3.63	1.13	1	6

Table 475: Intervention Group Mentors' Use of Direct Mentoring Practices – Scale (Community of Madrid)

How often do you use the following mentoring practices?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Direct Mentoring Practices (T1)	9	3.79	.48	3.2	4.5
Use of Direct Mentoring Practices (T2)	29	3.7	.78	2	5.33
Use of Direct Mentoring Practices (T3)	29	3.84	.73	2.67	5.5

Table 476: Control Group Mentor's Use of Facilitative Mentoring Practices – Scale (Community of Madrid)

How often do you use the following mentoring practices?	Control Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	10	3.9	.79	3	5.33
Use of Facilitative Mentoring Practices (T2)	-	-	-	-	-
Use of Facilitative Mentoring Practices (T3)	22	3.52	1.03	1	5.67

Table 477: Intervention Group Mentor's Use of Facilitative Mentoring Practices – Scale (Community of Madrid)

How often do you use the following mentoring practices?	Intervention Group				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Use of Facilitative Mentoring Practices (T1)	9	3.5	1.23	1.67	5.33
Use of Facilitative Mentoring Practices (T2)	29	4.05	.74	2	5.33
Use of Facilitative Mentoring Practices (T3)	29	4.28	.87	2	6

Table 478: Control Group Mentors' Mentoring Practices (Community of Madrid)

Items Mentoring Practices	Control Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	4	.94	-	-	3.38	1.12
I ask clarifying questions.	3.7	.67	-	-	3.5	1.22
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	4	1	-	-	3.71	1.27
I use active listening skills during mentoring conversations.	4.44	1.01	-	-	4.57	1.36
I confront novice teachers with mistakes they made during their lessons.	3.6	.7	-	-	3.59	1.18
I use concrete examples from the novice teachers' lessons during conversations.	4	.67	-	-	3.95	1.5
I instruct novice teachers on how to structure their teaching.	3.8	1.03	-	-	3.59	1.44
I am able to address feelings which I perceived during the lesson.	4.1	.88	-	-	3.64	1.33
I help mentees to make their implicit statements explicit.	4	.82	-	-	3.5	1.36
I ask for alternatives to the teaching implemented by novice teachers.	3.4	1.07	-	-	3.71	1.19
I provide additional information on instruction to mentees.	4	.94	-	-	3.82	1.22
I assess the quality of novice teachers' teaching skills.	3.9	1.1	-	-	3.36	1.53
I provide direct advice on how to improve teaching.	3.8	.92	-	-	3.65	1.23
I give examples of best practice from my own experience.	4.2	1.03	-	-	3.96	1.22
I want novice teachers to discover the principles behind a good lesson on their own.	3.9	.88	-	-	3.65	1.19
I let my novice teachers reflect continuously on their professional development.	4.2	1.03	-	-	4	1.28
At the end of a mentoring conversation, I summarise the content that we discussed.	3.7	.95	-	-	3.38	1.47
I provide guidance on further professional development opportunities.	3.7	1.06	-	-	3	1.45
<i>N</i> _{Min}	9		-		20	

Table 479: Intervention Group Mentors' Mentoring Practices (Community of Madrid)

Items Mentoring Practices	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I start a conversation with an open question.	3.11	1.96	4.17	1.23	4.45	1.18
I ask clarifying questions.	3.38	1.19	4	.96	4.43	1.03
I ask novice teachers to elaborate on their intentions and considerations for a lesson.	4.11	1.27	3.97	1.3	4	1.28
I use active listening skills during mentoring conversations.	5	1	5.5	.79	5.28	.92
I confront novice teachers with mistakes they made during their lessons.	3.78	1.09	3.41	1.15	3.66	1.14
I use concrete examples from the novice teachers' lessons during conversations.	4.67	.87	4.66	1.11	4.9	.72
I instruct novice teachers on how to structure their teaching.	3.67	.87	3.76	.88	3.66	1.14
I am able to address feelings which I perceived during the lesson.	4.33	1.32	4.08	1.49	4.44	1.28
I help mentees to make their implicit statements explicit.	3.13	1.36	3.96	1	4.1	.86
I ask for alternatives to the teaching implemented by novice teachers.	3.13	1.13	4	.94	4.41	1.02
I provide additional information on instruction to mentees.	3.56	.73	3.88	.91	4.28	.96
I assess the quality of novice teachers' teaching skills.	3.14	.9	3.15	1.38	3.24	1.62
I provide direct advice on how to improve teaching.	3.78	1.09	3.41	1.32	3.34	1.14
I give examples of best practice from my own experience.	4.11	1.17	3.59	1.09	3.76	1.21
I want novice teachers to discover the principles behind a good lesson on their own.	4.25	1.39	4.31	.93	4.83	1
I let my novice teachers reflect continuously on their professional development.	4	1.12	4.76	.83	4.97	.87
At the end of a mentoring conversation, I summarise the content that we discussed.	3.78	1.56	4.83	1.28	5.07	1
I provide guidance on further professional development opportunities.	3.22	1.48	3.45	1.18	3.52	1.27
<i>N</i> _{Min}	7		25		27	

Table 480: Usefulness of NEST Mentor Training for Teaching (Community of Madrid)

To what extent did the NEST mentor training programme improve your own teaching practice?	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Improvement of Own Teaching Practice	29	3.41	.68	2	4

Table 481: Mentors' Improvement of Mentoring Practices by NEST Mentor Training Programme (Community of Madrid)

To what extent did the NEST training help you to improve your mentoring regarding the following skills:	Intervention Group				
	N	M	SD	Min	Max
Giving constructive feedback.	28	3.36	.62	2	4
Using active listening as a strategy.	21	3.38	.74	2	4
Analyzing mentees' professional development needs.	29	3.17	.93	1	4
Using different mentoring approaches for novice teachers with different personalities.	29	3.41	.78	1	4
Prompting mentees to reflect on their teaching.	29	3.55	.51	3	4
Changing my mentoring approach according to the social situation in the classroom.	26	2.96	.87	1	4
Relating to professional teaching standards.	28	2.79	.96	1	4
Dealing with mentees' mistakes in a constructive way.	27	3.33	.62	2	4
Addressing mentees' feelings.	21	2.71	.78	1	4
Taking the perspective of the mentee (putting myself in their shoes)	21	2.81	.81	1	4
Identify challenges my mentee is facing	27	2.96	.85	1	4
Adapting my mentoring approach according to the novice teacher's level of professional development.	29	3.1	.86	1	4

Table 482: Control Group Mentors' Self-Assessed Mentoring Competence (Community of Madrid)

Items Mentoring Competence	Control Group					
	T1		T2		T3	
	M	SD	M	SD	M	SD
I am able to build supportive relationships with my mentees.	4.5	.85	-	-	4.19	1.17
I am able to encourage my mentees to perceive their school as a professional learning environment.	4.6	1.07	-	-	4.14	1.11
I am able to contribute to a growing professional resilience among my mentees.	4.4	.7	-	-	4.1	1.14
I am able to advise novice teachers on how to structure their teaching.	4.4	.84	-	-	4.14	1.13
I am able to assess the quality of novice teachers' teaching skills.	4.1	.88	-	-	4.05	1.32
I am able to address my mentees' feelings.	4.5	.71	-	-	4.05	1.16
I am able to give my mentees constructive feedback.	4.5	.85	-	-	4.32	1.21
I am able to use active listening as a strategy.	4.6	.97	-	-	4.32	1.36
I am able to analyse mentees' professional development needs.	4.1	.99	-	-	4.05	1.12
I am able to prompt mentees to reflect on their teaching.	4.3	.95	-	-	4.18	1.18
I am able to relate to professional teaching standards.	4	.94	-	-	4.14	1.08
I am able to deal with mentees' mistakes in a constructive way.	4.4	.97	-	-	4.27	1.08
N _{Min}	10		-		20	

Table 483: Intervention Group Mentors' Self-Assessed Mentoring Competence (Community of Madrid)

Items Mentoring Competence	Intervention Group					
	T1		T2		T3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I am able to build supportive relationships with my mentees.	4.7	.82	4.9	.77	5	.71
I am able to encourage my mentees to perceive their school as a professional learning environment.	4.6	.97	4.69	.76	4.69	.81
I am able to contribute to a growing professional resilience among my mentees.	3.7	1.16	4.34	.86	4.45	.74
I am able to advise novice teachers on how to structure their teaching.	3.8	1.14	4.48	.74	4.55	.74
I am able to assess the quality of novice teachers' teaching skills.	3.7	1.25	4.41	.95	4.45	.95
I am able to address my mentees' feelings.	4.7	.82	4.83	1	4.9	.86
I am able to give my mentees constructive feedback.	4.2	.92	5	.62	5.03	.68
I am able to use active listening as a strategy.	4.56	1.01	5.21	.74	5.21	.82
I am able to analyse mentees' professional development needs.	4.11	1.17	4.39	.74	4.52	.83
I am able to prompt mentees to reflect on their teaching.	4	1.12	4.86	.59	5.1	.62
I am able to relate to professional teaching standards.	3.44	1.13	4.57	.74	4.69	.54
I am able to deal with mentees' mistakes in a constructive way.	4.5	.71	4.86	.76	4.97	.57
<i>N</i> _{Min}	9		27		29	

Table 484: Control Group Mentors' Self-Assessed Mentoring Competence – Scale (Community of Madrid)

Mentoring Competence	<i>N</i>	Control Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	10	4.37	.76	3	5.67
Mentoring Competence (T2)	-	-	-	-	-
Mentoring Competence (T3)	22	4.14	1.07	1	5.92

Table 485: Intervention Group Mentors' Self-Assessed Mentoring Competence – Scale (Community of Madrid)

Mentoring Competence	<i>N</i>	Intervention Group			
		<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mentoring Competence (T1)	10	4.18	.71	3.33	5.08
Mentoring Competence (T2)	29	4.7	.47	3.75	5.67
Mentoring Competence (T3)	29	4.8	.5	3.25	6

Codebook – Bulgaria

Name: accept_gen				Label: General Acceptance of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 4; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring in your education							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
410	2.99	0.65	0.85	242	3.11	0.64	0.84
Items							
GM05_01	(+)	In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.					
GM05_02	(+)	In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.					
GM05_03	(+)	In my environment, people highly respect mentors who support novice teachers.					
GM05_04	(+)	I think that mentoring novice teachers is valued in society.					
Name: ment_attd				Label: Attitudes Towards Being Mentored			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
411	3.09	0.55	0.90	244	3.40	0.49	0.92
Items							
NT08_01	(+)	I think being mentored can have an important impact on my professional development.					
NT08_02	(+)	I think being mentored will help me to improve my teaching.					
NT08_03	(+)	I expect my mentor(s) to help me discover the causes for professional problems.					
NT08_04	(+)	I think being mentored will support the development of more suitable alternatives for my classroom activities.					
NT08_05	(+)	From my mentor(s) I expect good ideas for my further professional development.					
NT08_06	(+)	I think being mentored will help me to develop reflection skills for my own teaching.					

Name: ment_comp				Label: Mentoring Competence (Novice Teacher Perspective)			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 12; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements about your mentor?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
65	3.34	0.62	0.97	238	3.62	0.51	0.97
Items							
CM06_01_t2	(+) My mentor works on building a supportive relationship with me as mentee.						
CM06_02_t2	(+) My mentor encourages me to perceive my school as a professional learning environment.						
CM06_03_t2	(+) My mentor helps me to develop professional resilience.						
CM06_04_t2	(+) My mentor advises me on how to structure my teaching.						
CM06_05_t2	(+) My mentor professionally assesses the quality of my teaching skills.						
CM06_06_t2	(+) My mentor addresses my feelings in a professional way.						
CM06_07_t2	(+) My mentor gives me constructive feedback.						
CM06_08_t2	(+) My mentor uses active listening as a strategy.						
CM06_09_t2	(+) My mentor analyses my professional development needs.						
CM06_10_t2	(+) My mentor prompts me to reflect on my teaching.						
CM06_11_t2	(+) My mentor relates to professional teaching standards.						
Name: school_satf				Label: Satisfaction with School as a Workplace			
Source: Subscale of Job Satisfaction; TALIS 2018							
Number of Items: 3; Items Excluded: 0; Items Recoded: 1							
Question: We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
410	3.24	0.61	0.72	239	3.14	0.61	0.79
Items							
RE13_03_t2	(-) I would like to change to another school if that were possible.						
RE13_05_t2	(+) I enjoy working at this school.						
RE13_07_t2	(+) I would recommend this school as a good place to work.						

Name: ment_foc				Label: Extent of Mentoring Focus			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent did the mentoring you received focus on supporting you to...							
Answer Format: 4-point Likert scale 1 (<i>not at all</i>), 2 (<i>to some extent</i>), 3 (<i>quite a bit</i>), 4 (<i>a lot</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
N	M	SD	Cronbach's α	N	M	SD	Cronbach's α
66	2.56	0.73	0.91	237	2.64	0.66	0.90
Items							
PM36_01_t2	(+) ...teach students with learning difficulties.						
PM36_02_t2	(+) ...teach students with language barriers.						
PM36_03_t2	(+) ...teach students with emotional and behavioural difficulties.						
PM36_04_t2	(+) ...involve parents in the learning process of their children.						
PM36_05_t2	(+) ...manage a diverse classroom effectively.						
PM36_06_t2	(+) ...engage hard-to-reach learners.						
Name: prep_chlg				Label: Preparedness for School Challenges by Initial Teacher Training			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
N	M	SD	Cronbach's α	N	M	SD	Cronbach's α
404	2.27	0.73	0.89	243	2.14	0.68	0.89
Items							
PF11_01	(+) Teaching students with learning difficulties.						
PF11_02	(+) Teaching students with language barriers.						
PF11_03	(+) Teaching students with emotional and behavioural difficulties.						
PF11_04	(+) Involving parents in the learning process of their children.						
PF11_05	(+) Managing a diverse classroom effectively.						
PF11_06	(+) Engaging hard-to-reach learners.						

Name: resil				Label: Resilience					
Source: Scale on resilience (bouyancy), Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent to you agree or disagree to the following statements about stress and negative experiences in your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		
407	2.64	0.55	0.76	240	2.65	0.59	0.82		
Items									
NT22_01_t2	(+) I do not let stress at work get me down.								
NT22_02_t2	(+) I think that I can cope well with work pressure.								
NT22_03_t2	(+) I will not let my self-confidence be negatively affected by a poor performance or a bad result.								
NT22_04_t2	(+) I can cope well with setbacks at work (such as poor achievement or negative feedback).								
Name: exhaust				Label: Emotional Exhaustion					
Source: Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent do you agree or disagree to the following statements about your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
T1	405	2.53	0.80	0.90	T1	244	2.48	0.70	0.87
T2	406	2.50	0.77	0.90	T2	240	2.49	0.75	0.89
Items									
NT06_01	(+) I often feel exhausted while I am working.								
NT06_02	(+) Overall, I feel overstrained by my work load.								
NT06_03	(+) When I am working, I realise how weary I am.								
NT06_04	(+) At the end of a day's work, I sometimes feel really depressed.								

Teaching Competences									
Name: comp_stud (subscale)					Label: Teaching Competences – Student Interactions				
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)									
Number of Items:11; Items Excluded: 0; Items Recoded: 0									
Question: Please assess as well, how competent you feel in interacting with your students?									
Answer Format: 6-point Likert scale 1 (no ability), 2 (very little ability), 3 (basic ability), 4 (average ability), 5 (high ability), 6 (very high ability)									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α		N	M	SD	Cronbach's α
T1	410	4.81	0.64	0.91	T1	242	4.46	0.73	0.93
T2	409	4.66	0.69	0.94	T2	238	4.58	0.64	0.94
RE06_01	(+ Supporting pupils so they can solve conflicts constructively.								
RE06_02	(+ Taking on the pupils' perspective when finding solutions for occurring problems.								
RE06_03	(+ Showing an open attitude, so it's easy for students to approach me with their problems.								
RE06_04	(+ Imparting self-confidence even in timid pupils.								
RE06_05	(+ Foster social development (e.g. helping, supporting, taking responsibility).								
RE06_06	(+ Knowing how to react when pupils show aggressive behaviour.								
RE06_07	(+ Approaching struggling students in a supportive way.								
RE06_08	(+ Creating an open classroom climate for students to voice their own ideas.								
RE06_09	(+ Supporting individual pupils in personal crises.								
RE05_10	(+ Purposefully fostering my pupils' strengths.								
RE05_11	(+ Supporting pupils who have experienced failure in class.								
Name: comp_parents (subscale)					Label: Teaching Competences – Supporting Parents				
Number of Items:4; Items Excluded: 0; Items Recoded: 0									
Question: In your work at this school, to what extent can you relate to parents?									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α		N	M	SD	Cronbach's α
T1	407	4.17	0.96	0.90	T1	241	3.82	1.04	0.93
T2	407	4.11	0.94	0.91	T2	234	3.47	1.13	0.92
RE07_01	(+ Referring parents to specialised professional support, when they struggle with educational problems of their child.								
RE07_02	(+ Advising parents how they can influence the learning environment of their child.								
RE07_03	(+ Showing parents how they can positively influence the education of their child.								
RE07_04	(+ Dealing with conflict in parent teacher interactions in a professional way.								

Name: ment_time				Label: Time Allocation and Organisation of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 3; Items Excluded: 1; Items Recoded: 0							
Question: In how far do you agree or disagree with the following statements on the organisation of your mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
65	3.10	0.63	0.72	238	3.51	0.54	0.79
Items							
PM35_01_t2	(+)	My mentor takes sufficient time for our mentoring conversations.					
PM35_02_t2	(+)	My mentor takes sufficient time to observe my classroom teaching.					
PM35_03_t2	(+)	I know well in advance when my mentor will visit me for a classroom observation/					
		Excluded Item:					
PM35_04_t2		My mentoring conversations were often rescheduled.					

Codebook – Catalonia

Name: accept_gen				Label: General Acceptance of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 4; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring in your education							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
139	2.17	0.66	0.83	92	2.44	0.62	0.79
Items							
GM05_01	(+) In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.						
GM05_02	(+) In my education system, being a mentor is seen as one of the most important parts of professional development for teachers.						
GM05_03	(+) In my environment, people highly respect mentors who support novice teachers.						
GM05_04	(+) I think that mentoring novice teachers is valued in society.						
Name: ment_attd				Label: Attitudes Towards Being Mentored			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
139	3.51	0.45	0.87	94	3.52	0.44	0.92
Items							
NT08_01	(+) I think being mentored can have an important impact on my professional development.						
NT08_02	(+) I think being mentored will help me to improve my teaching.						
NT08_03	(+) I expect my mentor(s) to help me discover the causes for professional problems.						
NT08_04	(+) I think being mentored will support the development of more suitable alternatives for my classroom activities.						
NT08_05	(+) From my mentor(s) I expect good ideas for my further professional development.						
NT08_06	(+) I think being mentored will help me to develop reflection skills for my own teaching.						

Name: ment_comp				Label: Mentoring Competence (Novice Teacher Perspective)			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 12; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements about your mentor?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
60	3.12	0.55	0.93	92	3.59	0.44	0.93
Items							
CM06_01_t2	(+) My mentor works on building a supportive relationship with me as mentee.						
CM06_02_t2	(+) My mentor encourages me to perceive my school as a professional learning environment.						
CM06_03_t2	(+) My mentor helps me to develop professional resilience.						
CM06_04_t2	(+) My mentor advises me on how to structure my teaching.						
CM06_05_t2	(+) My mentor professionally assesses the quality of my teaching skills.						
CM06_06_t2	(+) My mentor addresses my feelings in a professional way.						
CM06_07_t2	(+) My mentor gives me constructive feedback.						
CM06_08_t2	(+) My mentor uses active listening as a strategy.						
CM06_09_t2	(+) My mentor analyses my professional development needs.						
CM06_10_t2	(+) My mentor prompts me to reflect on my teaching.						
CM06_11_t2	(+) My mentor relates to professional teaching standards.						
Name: school_satf				Label: Satisfaction with School as a Workplace			
Source: Subscale of Job Satisfaction; TALIS 2018							
Number of Items: 3; Items Excluded: 0; Items Recoded: 1							
Question: We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
139	2.73	0.79	0.87	93	3.24	0.67	0.88
Items							
RE13_03_t2	(-) I would like to change to another school if that were possible.						
RE13_05_t2	(+) I enjoy working at this school.						
RE13_07_t2	(+) I would recommend this school as a good place to work.						

Name: ment_foc				Label: Extent of Mentoring Focus			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent did the mentoring you received focus on supporting you to...							
Answer Format: 4-point Likert scale 1 (<i>not at all</i>), 2 (<i>to some extent</i>), 3 (<i>quite a bit</i>), 4 (<i>a lot</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
60	2.05	0.72	0.89	91	2.54	0.71	0.88
Items							
PM36_01_t2	(+) ...teach students with learning difficulties.						
PM36_02_t2	(+) ...teach students with language barriers.						
PM36_03_t2	(+) ...teach students with emotional and behavioural difficulties.						
PM36_04_t2	(+) ...involve parents in the learning process of their children.						
PM36_05_t2	(+) ...manage a diverse classroom effectively.						
PM36_06_t2	(+) ...engage hard-to-reach learners.						

Name: prep_chlg				Label: Preparedness for School Challenges by Initial Teacher Training			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
138	1.83	0.55	0.85	93	1.89	0.55	0.88
Items							
PF11_01	(+) Teaching students with learning difficulties.						
PF11_02	(+) Teaching students with language barriers.						
PF11_03	(+) Teaching students with emotional and behavioural difficulties.						
PF11_04	(+) Involving parents in the learning process of their children.						
PF11_05	(+) Managing a diverse classroom effectively.						
PF11_06	(+) Engaging hard-to-reach learners.						

Name: resil				Label: Resilience					
Source: Scale on resilience (bouyancy), Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent to you agree or disagree to the following statements about stress and negative experiences in your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		
139	2.90	0.44	0.70	92	3.06	0.47	0.72		
Items									
NT22_01_t2	(+) I do not let stress at work get me down.								
NT22_02_t2	(+) I think that I can cope well with work pressure.								
NT22_03_t2	(+) I will not let my self-confidence be negatively affected by a poor performance or a bad result.								
NT22_04_t2	(+) I can cope well with setbacks at work (such as poor achievement or negative feedback).								
Name: exhaust				Label: Emotional Exhaustion					
Source: Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent do you agree or disagree to the following statements about your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
T1	139	2.45	0.63	0.79	T1	93	2.42	0.67	0.82
T2	139	2.50	0.69	0.83	T2	93	2.35	0.69	0.84
Items									
NT06_01	(+) I often feel exhausted while I am working.								
NT06_02	(+) Overall, I feel overstrained by my work load.								
NT06_03	(+) When I am working, I realise how weary I am.								
NT06_04	(+) At the end of a day's work, I sometimes feel really depressed.								

Teaching Competences									
Name: comp_stud (subscale)				Label: Teaching Competences – Student Interactions					
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)									
Number of Items:11; Items Excluded: 0; Items Recoded: 0									
Question: Please assess as well, how competent you feel in interacting with your students?									
Answer Format: 6-point Likert scale 1 (no ability), 2 (very little ability), 3 (basic ability), 4 (average ability), 5 (high ability), 6 (very high ability)									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α	N	M	SD	Cronbach's α	
T1	139	4.54	0.65	0.89	92	4.68	0.59	0.88	
T2	139	4.48	0.62	0.87	92	4.75	0.62	0.91	
RE06_01	(+) Supporting pupils so they can solve conflicts constructively.								
RE06_02	(+) Taking on the pupils' perspective when finding solutions for occurring problems.								
RE06_03	(+) Showing an open attitude, so it's easy for students to approach me with their problems.								
RE06_04	(+) Imparting self-confidence even in timid pupils.								
RE06_05	(+) Foster social development (e.g. helping, supporting, taking responsibility).								
RE06_06	(+) Knowing how to react when pupils show aggressive behaviour.								
RE06_07	(+) Approaching struggling students in a supportive way.								
RE06_08	(+) Creating an open classroom climate for students to voice their own ideas.								
RE06_09	(+) Supporting individual pupils in personal crises.								
RE05_10	(+) Purposefully fostering my pupils' strengths.								
RE05_11	(+) Supporting pupils who have experienced failure in class.								
Name: comp_parents (subscale)				Label: Teaching Competences – Supporting Parents					
Number of Items:4; Items Excluded: 0; Items Recoded: 0									
Question: In your work at this school, to what extent can you relate to parents?									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α		N	M	SD	Cronbach's α
T1	139	3.23	1.19	0.93	T1	92	3.69	1.10	0.94
T2	138	3.26	1.20	0.94	T2	92	3.82	1.06	0.95
RE07_01	(+) Referring parents to specialised professional support, when they struggle with educational problems of their child.								
RE07_02	(+) Advising parents how they can influence the learning environment of their child.								
RE07_03	(+) Showing parents how they can positively influence the education of their child.								
RE07_04	(+) Dealing with conflict in parent teacher interactions in a professional way.								

Name: ment_time				Label: Time Allocation and Organisation of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 3; Items Excluded: 1; Items Recoded: 0							
Question: In how far do you agree or disagree with the following statements on the organisation of your mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
60	3.02	0.67	0.70	92	3.68	0.41	0.77
Items							
PM35_01_t2	(+)	My mentor takes sufficient time for our mentoring conversations.					
PM35_02_t2	(+)	My mentor takes sufficient time to observe my classroom teaching.					
PM35_03_t2	(+)	I know well in advance when my mentor will visit me for a classroom observation/					
		Excluded Item:					
PM35_04_t2		My mentoring conversations were often rescheduled.					

Codebook – Community of Madrid

Name: accept_gen				Label: General Acceptance of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 4; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring in your education							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
150	2.08	0.71	0.83	104	2.33	0.75	0.84
Items							
GM05_01	(+) In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.						
GM05_02	(+) In my education system, being a mentor is seen as one of the most important parts of professional development for teachers.						
GM05_03	(+) In my environment, people highly respect mentors who support novice teachers.						
GM05_04	(+) I think that mentoring novice teachers is valued in society.						
Name: ment_attd				Label: Attitudes Towards Being Mentored			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
150	3.38	0.49	0.87	107	3.53	0.43	0.90
Items							
NT08_01	(+) I think being mentored can have an important impact on my professional development.						
NT08_02	(+) I think being mentored will help me to improve my teaching.						
NT08_03	(+) I expect my mentor(s) to help me discover the causes for professional problems.						
NT08_04	(+) I think being mentored will support the development of more suitable alternatives for my classroom activities.						
NT08_05	(+) From my mentor(s) I expect good ideas for my further professional development.						
NT08_06	(+) I think being mentored will help me to develop reflection skills for my own teaching.						

Name: ment_comp				Label: Mentoring Competence (Novice Teacher Perspective)			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 12; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements about your mentor?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
N	M	SD	Cronbach's α	N	M	SD	Cronbach's α
77	3.27	0.62	0.93	106	3.57	0.51	0.95
Items							
CM06_01_t2	(+) My mentor works on building a supportive relationship with me as mentee.						
CM06_02_t2	(+) My mentor encourages me to perceive my school as a professional learning environment.						
CM06_03_t2	(+) My mentor helps me to develop professional resilience.						
CM06_04_t2	(+) My mentor advises me on how to structure my teaching.						
CM06_05_t2	(+) My mentor professionally assesses the quality of my teaching skills.						
CM06_06_t2	(+) My mentor addresses my feelings in a professional way.						
CM06_07_t2	(+) My mentor gives me constructive feedback.						
CM06_08_t2	(+) My mentor uses active listening as a strategy.						
CM06_09_t2	(+) My mentor analyses my professional development needs.						
CM06_10_t2	(+) My mentor prompts me to reflect on my teaching.						
CM06_11_t2	(+) My mentor relates to professional teaching standards.						
Name: school_satf				Label: Satisfaction with School as a Workplace			
Source: Subscale of Job Satisfaction; TALIS 2018							
Number of Items: 3; Items Excluded: 0; Items Recoded: 1							
Question: We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
N	M	SD	Cronbach's α	N	M	SD	Cronbach's α
150	2.87	0.87	0.88	103	3.18	0.68	0.79
Items							
RE13_03_t2	(-) I would like to change to another school if that were possible.						
RE13_05_t2	(+) I enjoy working at this school.						
RE13_07_t2	(+) I would recommend this school as a good place to work.						

Name: ment_foc				Label: Extent of Mentoring Focus			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent did the mentoring you received focus on supporting you to...							
Answer Format: 4-point Likert scale 1 (<i>not at all</i>), 2 (<i>to some extent</i>), 3 (<i>quite a bit</i>), 4 (<i>a lot</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
77	2.39	0.76	0.89	105	2.53	0.68	0.85
Items							
PM36_01_t2	(+) ...teach students with learning difficulties.						
PM36_02_t2	(+) ...teach students with language barriers.						
PM36_03_t2	(+) ...teach students with emotional and behavioural difficulties.						
PM36_04_t2	(+) ...involve parents in the learning process of their children.						
PM36_05_t2	(+) ...manage a diverse classroom effectively.						
PM36_06_t2	(+) ...engage hard-to-reach learners.						
Name: prep_chlg				Label: Preparedness for School Challenges by Initial Teacher Training			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
150	1.89	0.59	0.86	107	1.95	0.64	0.88
Items							
PF11_01	(+) Teaching students with learning difficulties.						
PF11_02	(+) Teaching students with language barriers.						
PF11_03	(+) Teaching students with emotional and behavioural difficulties.						
PF11_04	(+) Involving parents in the learning process of their children.						
PF11_05	(+) Managing a diverse classroom effectively.						
PF11_06	(+) Engaging hard-to-reach learners.						

Name: resil				Label: Resilience					
Source: Scale on resilience (bouyancy), Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent to you agree or disagree to the following statements about stress and negative experiences in your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		
149	2.83	0.61	0.82	102	2.96	0.52	0.77		
Items									
NT22_01_t2	(+) I do not let stress at work get me down.								
NT22_02_t2	(+) I think that I can cope well with work pressure.								
NT22_03_t2	(+) I will not let my self-confidence be negatively affected by a poor performance or a bad result.								
NT22_04_t2	(+) I can cope well with setbacks at work (such as poor achievement or negative feedback).								
Name: exhaust				Label: Emotional Exhaustion					
Source: Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent do you agree or disagree to the following statements about your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
T1	150	2.65	0.70	0.82	T1	106	2.45	0.71	0.85
T2	150	2.53	0.74	0.83	T2	101	2.32	0.71	0.83
Items									
NT06_01	(+) I often feel exhausted while I am working.								
NT06_02	(+) Overall, I feel overstrained by my work load.								
NT06_03	(+) When I am working, I realise how weary I am.								
NT06_04	(+) At the end of a day's work, I sometimes feel really depressed.								

Teaching Competences									
Name: comp_stud (subscale)				Label: Teaching Competences – Student Interactions					
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)									
Number of Items:11; Items Excluded: 0; Items Recoded: 0									
Question: Please assess as well, how competent you feel in interacting with your students?									
Answer Format: 6-point Likert scale 1 (no ability), 2 (very little ability), 3 (basic ability), 4 (average ability), 5 (high ability), 6 (very high ability)									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α	N	M	SD	Cronbach's α	
T1	150	4.77	0.56	0.86	107	4.44	0.65	0.87	
T2	150	4.73	0.62	0.90	103	4.56	0.60	0.88	
RE06_01	(+)								Supporting pupils so they can solve conflicts constructively.
RE06_02	(+)								Taking on the pupils' perspective when finding solutions for occurring problems.
RE06_03	(+)								Showing an open attitude, so it's easy for students to approach me with their problems.
RE06_04	(+)								Imparting self-confidence even in timid pupils.
RE06_05	(+)								Foster social development (e.g. helping, supporting, taking responsibility).
RE06_06	(+)								Knowing how to react when pupils show aggressive behaviour.
RE06_07	(+)								Approaching struggling students in a supportive way.
RE06_08	(+)								Creating an open classroom climate for students to voice their own ideas.
RE06_09	(+)								Supporting individual pupils in personal crises.
RE05_10	(+)								Purposefully fostering my pupils' strengths.
RE05_11	(+)								Supporting pupils who have experienced failure in class.
Name: comp_parents (subscale)				Label: Teaching Competences – Supporting Parents					
Number of Items:4; Items Excluded: 0; Items Recoded: 0									
Question: In your work at this school, to what extent can you relate to parents?									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α		N	M	SD	Cronbach's α
T1	149	4.05	0.94	0.87	T1	102	3.44	0.97	0.91
T2	150	4.05	0.98	0.89	T2	101	3.72	0.89	0.87
RE07_01	(+)								Referring parents to specialised professional support, when they struggle with educational problems of their child.
RE07_02	(+)								Advising parents how they can influence the learning environment of their child.
RE07_03	(+)								Showing parents how they can positively influence the education of their child.
RE07_04	(+)								Dealing with conflict in parent teacher interactions in a professional way.

Name: ment_time				Label: Time Allocation and Organisation of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 3; Items Excluded: 1; Items Recoded: 0							
Question: In how far do you agree or disagree with the following statements on the organisation of your mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
77	3.33	0.66	0.76	104	3.59	0.57	0.82
Items							
PM35_01_t2	(+)	My mentor takes sufficient time for our mentoring conversations.					
PM35_02_t2	(+)	My mentor takes sufficient time to observe my classroom teaching.					
PM35_03_t2	(+)	I know well in advance when my mentor will visit me for a classroom observation/					
		Excluded Item:					
PM35_04_t2		My mentoring conversations were often rescheduled.					

Codebook – Romania

Name: acept_gen				Label: General Acceptance of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 4; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring in your education							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
127	2.66	0.74	0.85	110	2.84	0.59	0.76
Items							
GM05_01	(+) In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.						
GM05_02	(+) In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.						
GM05_03	(+) In my environment, people highly respect mentors who support novice teachers.						
GM05_04	(+) I think that mentoring novice teachers is valued in society.						
Name: ment_attd				Label: Attitudes Towards Being Mentored			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
127	3.50	0.43	0.90	110	3.57	0.42	0.91
Items							
NT08_01	(+) I think being mentored can have an important impact on my professional development.						
NT08_02	(+) I think being mentored will help me to improve my teaching.						
NT08_03	(+) I expect my mentor(s) to help me discover the causes for professional problems.						
NT08_04	(+) I think being mentored will support the development of more suitable alternatives for my classroom activities.						
NT08_05	(+) From my mentor(s) I expect good ideas for my further professional development.						
NT08_06	(+) I think being mentored will help me to develop reflection skills for my own teaching.						

Name: ment_comp				Label: Mentoring Competence (Novice Teacher Perspective)			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 12; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements about your mentor?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
30	3.20	0.38	0.90	110	3.60	0.45	0.95
Items							
CM06_01_t2	(+)	My mentor works on building a supportive relationship with me as mentee.					
CM06_02_t2	(+)	My mentor encourages me to perceive my school as a professional learning environment.					
CM06_03_t2	(+)	My mentor helps me to develop professional resilience.					
CM06_04_t2	(+)	My mentor advises me on how to structure my teaching.					
CM06_05_t2	(+)	My mentor professionally assesses the quality of my teaching skills.					
CM06_06_t2	(+)	My mentor addresses my feelings in a professional way.					
CM06_07_t2	(+)	My mentor gives me constructive feedback.					
CM06_08_t2	(+)	My mentor uses active listening as a strategy.					
CM06_09_t2	(+)	My mentor analyses my professional development needs.					
CM06_10_t2	(+)	My mentor prompts me to reflect on my teaching.					
CM06_11_t2	(+)	My mentor relates to professional teaching standards.					
Name: school_satf				Label: Satisfaction with School as a Workplace			
Source: Subscale of Job Satisfaction; TALIS 2018							
Number of Items: 3; Items Excluded: 0; Items Recoded: 1							
Question: We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
126	3.08	0.58	0.73	110	3.02	0.67	0.83
Items							
RE13_03_t2	(-)	I would like to change to another school if that were possible.					
RE13_05_t2	(+)	I enjoy working at this school.					
RE13_07_t2	(+)	I would recommend this school as a good place to work.					

Name: ment_foc				Label: Extent of Mentoring Focus			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent did the mentoring you received focus on supporting you to...							
Answer Format: 4-point Likert scale 1 (<i>not at all</i>), 2 (<i>to some extent</i>), 3 (<i>quite a bit</i>), 4 (<i>a lot</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
30	2.54	0.58	0.87	109	2.84	0.80	0.94
Items							
PM36_01_t2	(+) ...teach students with learning difficulties.						
PM36_02_t2	(+) ...teach students with language barriers.						
PM36_03_t2	(+) ...teach students with emotional and behavioural difficulties.						
PM36_04_t2	(+) ...involve parents in the learning process of their children.						
PM36_05_t2	(+) ...manage a diverse classroom effectively.						
PM36_06_t2	(+) ...engage hard-to-reach learners.						
Name: prep_chlg				Label: Preparedness for School Challenges by Initial Teacher Training			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
127	2.10	0.73	0.92	110	2.00	0.69	0.92
Items							
PF11_01	(+) Teaching students with learning difficulties.						
PF11_02	(+) Teaching students with language barriers.						
PF11_03	(+) Teaching students with emotional and behavioural difficulties.						
PF11_04	(+) Involving parents in the learning process of their children.						
PF11_05	(+) Managing a diverse classroom effectively.						
PF11_06	(+) Engaging hard-to-reach learners.						

Name: resil				Label: Resilience					
Source: Scale on resilience (bouyancy), Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent to you agree or disagree to the following statements about stress and negative experiences in your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		
123	3.03	0.56	0.87	110	3.02	0.47	0.74		
Items									
NT22_01_t2	(+) I do not let stress at work get me down.								
NT22_02_t2	(+) I think that I can cope well with work pressure.								
NT22_03_t2	(+) I will not let my self-confidence be negatively affected by a poor performance or a bad result.								
NT22_04_t2	(+) I can cope well with setbacks at work (such as poor achievement or negative feedback).								
Name: exhaust				Label: Emotional Exhaustion					
Source: Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent do you agree or disagree to the following statements about your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
T1	126	2.48	0.69	0.85	T1	109	2.49	0.69	0.85
T2	125	2.42	0.72	0.88	T2	110	2.36	0.71	0.88
Items									
NT06_01	(+) I often feel exhausted while I am working.								
NT06_02	(+) Overall, I feel overstrained by my work load.								
NT06_03	(+) When I am working, I realise how weary I am.								
NT06_04	(+) At the end of a day's work, I sometimes feel really depressed.								

Teaching Competences									
Name: comp_stud (subscale)					Label: Teaching Competences – Student Interactions				
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)									
Number of Items:11; Items Excluded: 0; Items Recoded: 0									
Question: Please assess as well, how competent you feel in interacting with your students?									
Answer Format: 6-point Likert scale 1 (no ability), 2 (very little ability), 3 (basic ability), 4 (average ability), 5 (high ability), 6 (very high ability)									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α		N	M	SD	Cronbach's α
T1	125	4.85	0.73	0.92	T1	110	4.66	0.71	0.92
T2	125	4.75	0.75	0.94	T2	109	4.88	0.66	0.92
RE06_01	(+) Supporting pupils so they can solve conflicts constructively.								
RE06_02	(+) Taking on the pupils' perspective when finding solutions for occurring problems.								
RE06_03	(+) Showing an open attitude, so it's easy for students to approach me with their problems.								
RE06_04	(+) Imparting self-confidence even in timid pupils.								
RE06_05	(+) Foster social development (e.g. helping, supporting, taking responsibility).								
RE06_06	(+) Knowing how to react when pupils show aggressive behaviour.								
RE06_07	(+) Approaching struggling students in a supportive way.								
RE06_08	(+) Creating an open classroom climate for students to voice their own ideas.								
RE06_09	(+) Supporting individual pupils in personal crises.								
RE05_10	(+) Purposefully fostering my pupils' strengths.								
RE05_11	(+) Supporting pupils who have experienced failure in class.								
Name: comp_parents (subscale)					Label: Teaching Competences – Supporting Parents				
Number of Items:4; Items Excluded: 0; Items Recoded: 0									
Question: In your work at this school, to what extent can you relate to parents?									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α		N	M	SD	Cronbach's α
T1	125	4.11	1.23	0.95	T1	109	3.91	1.30	0.95
T2	124	4.17	1.11	0.93	T2	110	4.22	1.12	0.95
RE07_01	(+) Referring parents to specialised professional support, when they struggle with educational problems of their child.								
RE07_02	(+) Advising parents how they can influence the learning environment of their child.								
RE07_03	(+) Showing parents how they can positively influence the education of their child.								
RE07_04	(+) Dealing with conflict in parent teacher interactions in a professional way.								

Name: ment_time				Label: Time Allocation and Organisation of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 3; Items Excluded: 1; Items Recoded: 0							
Question: In how far do you agree or disagree with the following statements on the organisation of your mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
32	3.06	0.60	0.76	109	3.60	0.55	0.94
Items							
PM35_01_t2	(+)	My mentor takes sufficient time for our mentoring conversations.					
PM35_02_t2	(+)	My mentor takes sufficient time to observe my classroom teaching.					
PM35_03_t2	(+)	I know well in advance when my mentor will visit me for a classroom observation/					
		Excluded Item:					
PM35_04_t2		My mentoring conversations were often rescheduled.					

Codebook – Wallonia-Brussels Federation

Name: accept_gen				Label: General Acceptance of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 4; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring in your education							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
102	2.60	0.77	0.85	41	2.72	0.69	0.84
Items							
GM05_01	(+)	In my school district, mentoring novice teachers is seen as a crucial part of starting the teaching career.					
GM05_02	(+)	In my education system, being a mentor is seen as one of the most important parts of professional. development for teachers.					
GM05_03	(+)	In my environment, people highly respect mentors who support novice teachers.					
GM05_04	(+)	I think that mentoring novice teachers is valued in society.					
Name: ment_attd				Label: Attitudes Towards Being Mentored			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements on mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
102	3.22	0.37	0.71	41	3.27	0.40	0.75
Items							
NT08_01	(+)	I think being mentored can have an important impact on my professional development.					
NT08_02	(+)	I think being mentored will help me to improve my teaching.					
NT08_03	(+)	I expect my mentor(s) to help me discover the causes for professional problems.					
NT08_04	(+)	I think being mentored will support the development of more suitable alternatives for my classroom activities.					
NT08_05	(+)	From my mentor(s) I expect good ideas for my further professional development.					
NT08_06	(+)	I think being mentored will help me to develop reflection skills for my own teaching.					

Name: ment_comp				Label: Mentoring Competence (Novice Teacher Perspective)			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 12; Items Excluded: 0; Items Recoded: 0							
Question: To what extent do you agree with the following statements about your mentor?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
61	2.92	0.63	0.92	41	2.74	0.65	0.95
Items							
CM06_01_t2	(+)	My mentor works on building a supportive relationship with me as mentee.					
CM06_02_t2	(+)	My mentor encourages me to perceive my school as a professional learning environment.					
CM06_03_t2	(+)	My mentor helps me to develop professional resilience.					
CM06_04_t2	(+)	My mentor advises me on how to structure my teaching.					
CM06_05_t2	(+)	My mentor professionally assesses the quality of my teaching skills.					
CM06_06_t2	(+)	My mentor addresses my feelings in a professional way.					
CM06_07_t2	(+)	My mentor gives me constructive feedback.					
CM06_08_t2	(+)	My mentor uses active listening as a strategy.					
CM06_09_t2	(+)	My mentor analyses my professional development needs.					
CM06_10_t2	(+)	My mentor prompts me to reflect on my teaching.					
CM06_11_t2	(+)	My mentor relates to professional teaching standards.					
Name: school_satf				Label: Satisfaction with School as a Workplace			
Source: Subscale of Job Satisfaction; TALIS 2018							
Number of Items: 3; Items Excluded: 0; Items Recoded: 1							
Question: We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
100	3.34	0.66	0.84	40	3.28	0.67	0.84
Items							
RE13_03_t2	(-)	I would like to change to another school if that were possible.					
RE13_05_t2	(+)	I enjoy working at this school.					
RE13_07_t2	(+)	I would recommend this school as a good place to work.					

Name: ment_foc				Label: Extent of Mentoring Focus			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: To what extent did the mentoring you received focus on supporting you to...							
Answer Format: 4-point Likert scale 1 (<i>not at all</i>), 2 (<i>to some extent</i>), 3 (<i>quite a bit</i>), 4 (<i>a lot</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
59	2.16	0.74	0.84	40	1.99	0.72	0.86
Items							
PM36_01_t2	(+) ...teach students with learning difficulties.						
PM36_02_t2	(+) ...teach students with language barriers.						
PM36_03_t2	(+) ...teach students with emotional and behavioural difficulties.						
PM36_04_t2	(+) ...involve parents in the learning process of their children.						
PM36_05_t2	(+) ...manage a diverse classroom effectively.						
PM36_06_t2	(+) ...engage hard-to-reach learners.						
Name: prep_chlg				Label: Preparedness for School Challenges by Initial Teacher Training			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 6; Items Excluded: 0; Items Recoded: 0							
Question: In your studies and/or training, to what extent have you been prepared to deal with the following demands of the teacher profession?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
100	1.91	0.54	0.77	42	1.84	0.60	0.87
Items							
PF11_01	(+) Teaching students with learning difficulties.						
PF11_02	(+) Teaching students with language barriers.						
PF11_03	(+) Teaching students with emotional and behavioural difficulties.						
PF11_04	(+) Involving parents in the learning process of their children.						
PF11_05	(+) Managing a diverse classroom effectively.						
PF11_06	(+) Engaging hard-to-reach learners.						

Name: resil				Label: Resilience					
Source: Scale on resilience (bouyancy), Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent to you agree or disagree to the following statements about stress and negative experiences in your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		
100	2.50	0.65	0.71	41	2.43	0.68	0.71		
Items									
NT22_01_t2	(+) I do not let stress at work get me down.								
NT22_02_t2	(+) I think that I can cope well with work pressure.								
NT22_03_t2	(+) I will not let my self-confidence be negatively affected by a poor performance or a bad result.								
NT22_04_t2	(+) I can cope well with setbacks at work (such as poor achievement or negative feedback).								
Name: exhaust				Label: Emotional Exhaustion					
Source: Kunter et al., 2016 (BilWiss)									
Number of Items: 4; Items Excluded: 0; Items Recoded: 0									
Question: To what extent do you agree or disagree to the following statements about your work as a teacher?									
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)									
Scale Parameters									
Novice Teacher Control Group				Novice Teacher Intervention Group					
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>		<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
T1	102	2.53	0.84	0.78	T1	41	2.40	0.64	0.83
T2	101	2.44	0.84	0.87	T2	41	2.47	0.74	0.87
Items									
NT06_01	(+) I often feel exhausted while I am working.								
NT06_02	(+) Overall, I feel overstrained by my work load.								
NT06_03	(+) When I am working, I realize how weary I am.								
NT06_04	(+) At the end of a day's work, I sometimes feel really depressed.								

Teaching Competences									
Name: comp_stud (subscale)				Label: Teaching Competences – Student Interactions					
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)									
Number of Items:11; Items Excluded: 0; Items Recoded: 0									
Question: Please assess as well, how competent you feel in interacting with your students?									
Answer Format: 6-point Likert scale 1 (no ability), 2 (very little ability), 3 (basic ability), 4 (average ability), 5 (high ability), 6 (very high ability)									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α	N	M	SD	Cronbach's α	
T1	101	4.43	0.71	0.85	41	4.51	0.77	0.80	
T2	99	4.36	0.73	0.91	41	4.39	0.71	0.91	
RE06_01	(+) Supporting pupils so they can solve conflicts constructively.								
RE06_02	(+) Taking on the pupils' perspective when finding solutions for occurring problems.								
RE06_03	(+) Showing an open attitude, so it's easy for students to approach me with their problems.								
RE06_04	(+) Imparting self-confidence even in timid pupils.								
RE06_05	(+) Foster social development (e.g. helping, supporting, taking responsibility).								
RE06_06	(+) Knowing how to react when pupils show aggressive behaviour.								
RE06_07	(+) Approaching struggling students in a supportive way.								
RE06_08	(+) Creating an open classroom climate for students to voice their own ideas.								
RE06_09	(+) Supporting individual pupils in personal crises.								
RE05_10	(+) Purposefully fostering my pupils' strengths.								
RE05_11	(+) Supporting pupils who have experienced failure in class.								
Name: comp_parents (subscale)				Label: Teaching Competences – Supporting Parents					
Number of Items:4; Items Excluded: 0; Items Recoded: 0									
Question: In your work at this school, to what extent can you relate to parents?									
Scale Parameters									
Novice Teacher Control Group					Novice Teacher Intervention Group				
	N	M	SD	Cronbach's α	N	M	SD	Cronbach's α	
T1	102	3.05	1.02	0.88	T1	41	2.78	1.22	0.94
T2	99	3.03	0.88	0.86	T2	41	2.93	1.18	0.91
RE07_01	(+) Referring parents to specialized professional support, when they struggle with								
RE07_02	(+) Advising parents how they can influence the learning environment of their child.								
RE07_03	(+) Showing parents how they can positively influence the education of their child.								
RE07_04	(+) Dealing with conflict in parent teacher interactions in a professional way.								

Name: ment_time				Label: Time Allocation and Organisation of Mentoring			
Source: Self-developed by UDE evaluation Team (Abs, H.J.; Anderson-Park, E.; van Veldhuizen, M.)							
Number of Items: 3; Items Excluded: 1; Items Recoded: 0							
Question: In how far do you agree or disagree with the following statements on the organisation of your mentoring?							
Answer Format: 4-point Likert scale 1 (<i>strongly disagree</i>), 2 (<i>disagree</i>), 3 (<i>agree</i>), 4 (<i>strongly agree</i>)							
Scale Parameters							
Novice Teacher Control Group				Novice Teacher Intervention Group			
<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
63	2.39	0.90	0.74	40	2.44	0.73	0.79
Items							
PM35_01_t2	(+)	My mentor takes sufficient time for our mentoring conversations.					
PM35_02_t2	(+)	My mentor takes sufficient time to observe my classroom teaching.					
PM35_03_t2	(+)	I know well in advance when my mentor will visit me for a classroom observation/					
		Excluded Item:					
PM35_04_t2		My mentoring conversations were often rescheduled.					

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DOI: 10.17185/duepublico/81479

URN: urn:nbn:de:hbz:465-20240206-071106-7



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