

## **Now You Read It, Now You Don't**

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# Now You Read It, Now You Don't

## Enhancing the EFL Reading Comprehension of Students with Autism through Poetry

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*Atypical* is the name of a TV series that features Sam, a teenager with autism who wants to find the love of his life. On his journey through high school and a number of failed dates, the audience experiences numerous characteristics that come along with autism syndrome, one of which is displayed in the following scene:

SAM: I need my lunch money.

CASEY: God, I hate that skank!

SAM: Skank? Do you mean she's promiscuous?

CASEY: No, she's just annoying. Why do you make things so literal? God, you suck! Find me if you don't have anyone to eat with, okay.

SAM: Okay. (Jann min. 12:45)

During the conversation with his sister Casey, it becomes evident that Sam does not fully understand his sister's utterances. The misinterpretation at hand, caused by Sam's literal understanding of the swearword, is a very common and representative one for people with high-functioning autism (see Styslinger 41). The inability to infer from context the suitable meaning of words with multiple connotations does not only influence their daily conversations but also – and more importantly – their reading comprehension skills (see Schnorr 36).<sup>2</sup>

According to the *Common European Framework of Reference for Languages* (CEFR), “the language user may read for gist; specific information; detailed understanding; implications, etc.” (79). To achieve these objectives, a reader needs to go beyond the mere decoding of words requiring the capability of inferring. As

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inclusive educational settings become more and more common, it is noteworthy that research in the field of EFL (English as a Foreign Language) education is lacking comprehensible research on L2 reading comprehension of students with special educational needs (SEN). That said, all studies referred to in this paper examine the L1 reading comprehension of students with high functioning autism.<sup>3</sup> Thus, new teaching methods as well as further empirical research are necessary to also help students on the autism spectrum to become proficient EFL readers.

Thus, this paper explores the potential of poetry for fostering the EFL reading comprehension skills of secondary learners with high-functioning autism. First of all, different theoretical frameworks are established to explain the process of constructing meaning while reading as a basis for further discussion. Secondly, recent studies on the development of reading comprehension skills of children with high-functioning autism are sketched out to give an overview of how the autism syndrome impacts on the cognitive processes responsible for decoding and inferring. Based upon these findings, the paper furthermore discusses various support measures to improve the reading comprehension skills of learners with high-functioning autism. An exemplary integration of these supportive methods and strategies into EFL activities for year 8 learners is finally suggested on the basis of Robert Frost's "The Road Not Taken." The paper shows that poetry offers manifold ways to improve the reading comprehension skills of EFL learners with high-functioning autism since it is much more accessible to them than prose, which tends to dominate in EFL reading education.

## **HOW DO WE MAKE MEANING WHILE READING?**

According to Madeline Lutjeharms (see "Leseverstehen" 97-99), a written text is a sequence of structured signs which are part of a complete sign system, such as letters of the alphabet. During the first years of reading, children work out repeatedly occurring patterns of morphemes and grammar which are memorised. This memorisation is carried out by the working memory, a functional unit of the human brain that handles the recognition of incoming stimuli. Depending on the reader's familiarity with perceived information, it conveys the stimuli to long-term memory

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3 For a more detailed review of the research available, see Hsu-Min Chiang and Yueh-Hsien Lin (261-263).

or initiates the generation of new cognitive schemes for future recognition. Processing chunks of signs rather than each and every single letter (word superiority effect), the working memory aims to keep effort as low as possible. This processing of signs is called decoding and is the basic mechanism that allows a reader to read. However, the mere decoding and pronunciation of words is not the only key to textual understanding.

The recognition of a word through reading enables what Lutjeharms coined 'lexical access' to the reader's mental lexicon (see "Leseverstehen" 98). As a part of an individual's linguistic knowledge in the long-term memory, the mental lexicon comprises representations of all the morphemes and words readers encounter throughout their reading biography. The modes of representation can differ depending on the reader's first contact with the word. Some words are represented visually whereas other words are related to the context of an experience. Once a word is recognised and its representation activated, the reader is able to access certain schemes that come along with it. Consisting of an accumulation of abstracted experiences, schemes bring the word to life. It is the combination of word decoding and recognition, contentual representation, and scheme which makes us able to construct meaning while reading. Consequently, the more multifaceted a reader's prior knowledge with the content of a text the easier it is to understand it.

Nonetheless, readers must go beyond the level of mere word decoding and recognition in order to understand a text completely. In this case, the meaning of a text is more than the sum of its words. The capability to infer, the interaction of decoding and prior knowledge, is required to construct textual coherence. Reading comprehension is then defined as the reader's ability "to process a written text to such a degree that its content is understood" (Lutjeharms "Leseverstehen" 98). This is achieved on three different textual levels: due to syntactic rules, words are understood in the context of sentences which build a contentual model of the written text. Having passed these three instances of processing, text information is memorised in long-term memory as lexical representation or scheme bringing the process of reading full circle. To distinguish it from other styles of reading, this paper concentrates on fluent receptive reading, a linear style of reading with the aim of getting to the gist of a text (see Lutjeharms "Processing Levels" 265).

In the context of EFL education, it is important to consider the differences Lutjeharms points out between the development of reading comprehension in the

first and second language (see “Leseverstehen” 97). In contrast to the reading of texts in their first language(s) during which students develop reading comprehension on the basis of proficient language skills, the situation in the EFL classroom is different. Even though students usually start the learning process with a set of basic reading skills, these competences cannot be transferred one-to-one. A lack of linguistic knowledge at the beginning of the target language’s acquisition makes additional reading strategies necessary and has implications for the working memory: the more similar the target language is to the first language of a reader on a structural basis, the more resources can be used to focus on content rather than form.

The working memory can process incoming stimuli automatically or intentionally. “Automatic processing is carried out fast, parallel, without effort and is not limited by any capacity constraints, whereas controlled processing demands effort, is serial, and has capacity limitations” (Lutjeharms, “Processing Levels” 267). The latter is responsible for unfamiliar or not fully mastered information as well as for the correction of inconsistencies. Whenever a language is not fully acquired, attentional resources are often required for processing form-based linguistic information rather than semantic information the cognitive structure is usually responsible for. This is the moment when the processing of a text begins to become a conscious process. To compensate the limited capacity of working memory for attentional processing, avoidance or guessing strategies are frequently used. It is therefore advisable to train the automatic processing of EFL learners in order to avoid capacity shortcomings for attentional processing.

To explain the way the working memory processes incoming information automatically, Lutjeharms (see “Processing Levels” 268) and James R. Booth, Soojin Cho, Douglas D. Burman, and Tali Bitan (see 441-443) contrast two different paradigms emerged in the field of cognitive psychology: modular and connectionist models. In the first case, processing is understood as a linear, modular process. Associated with an autonomously acting device, each area of the brain is responsible for a specific part of the reading process, such as lexical access, word recognition or syntactical analysis. On the contrary, connectionist models explain the non-hierarchical structure of the brain through individual experience. Even though advocates of connectionism acknowledge the fact that certain units in the brain are more specified in their function than others, they depict the human brain as highly interactive. Different units in the neuronal network connect each time the reader’s

experiences activate them simultaneously, which can be understood as a developmental increase in reliance. As a result, students' reading proficiency advances the stronger and more directly interconnected their units are. This paper pursues the connectionist approach since it allows to take autistic people's individual strengths and psychological theories on the cognitivism of autism (see Frith, Happé, Zunshine) into consideration.

## COGNITIVE ABILITIES OF PEOPLE ON THE AUTISM SPECTRUM

In accordance with the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), the *Ministerium für Schule und Weiterbildung des Landes Nordrhein-Westfalen* regards autism as a spectrum disorder and an umbrella term nowadays, functioning as a label for human beings who show “qualitative impairment in reciprocal social interaction and communication as well as limited, stereotypical, repetitive patterns of interests and activities” (Kamp-Becker 79, my translations).<sup>4</sup> This means that the characteristics of people with autism are highly individual with special regard to their strengths and interests or fascinations, as Kelly Chandler-Olcott and Paula Kluth prefer to call it (see 552). Even though medical research proved that autism is genetically determined, diagnostic criteria still refer solely to social behaviour (see Happé 216). Another unpredictable characteristic of people with autism is intelligence with IQ values varying between two standard deviations below and above average, the latter only occurring in the case of high-functioning autism. In the following, the paper focuses on high-functioning autism since people with autism and an IQ value one standard deviation below average or lower are usually unable to read. Yet, whenever autistic people are capable of reading, their ability to decode is in excess of what is expected by their IQ levels suggesting that “they are as skilled as normally-developing children of equivalent reading level at using phonological-based reading strategies” (Nation et al. 912).

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4 The original source of this definition is in German: “[...] qualitative Beeinträchtigungen in der zwischenmenschlichen Interaktion, qualitative Auffälligkeiten in der Kommunikation und ein eingeschränktes, stereotypes, sich wiederholendes Repertoire von Interessen und Aktivitäten” (Kamp-Becker 79).

This paper refuses the term disorder since it takes on Francesca Happé's approach on autism as a cognitive style rather than a cognitive deficit (see 216-217). Claiming that people with autism are characterised by a special way of perceiving the world around them rather than deficient cognitive skills, this understanding of autism grounds its belief in a psychological ability which is known as central coherence nowadays. In her seminal work *Autism: Explaining the Enigma*, Uta Frith coined this term to describe "the everyday tendency to process incoming information in its context – that is, pulling information together for higher-level meaning – often at the expense of memory for detail" (Happé 217). This view has been supported by results of different studies that investigated whether the perception of people with autism is focused on parts or the whole of a visual stimulus. As a result, Happé concludes "that this feature of human information-processing [central coherence] is disturbed in autism, and that people with autism show detail-focused processing in which features are perceived and retained at the expense of global configuration and contextualised meaning" (217). This way, the cognitive style of people with autism is no longer defined by disorders but a weakness in central coherence, a factor that naturally varies throughout population.

The preference of processing parts instead of wholes caused by weak central coherence also has implications for the reading ability. In "Remembering of Words by Psychotic and Subnormal Children" (1967), Beate Hermelin and Neil O'Connor asked two groups of students to memorise a list of given sentences, recalling them after short and long periods of time. All participants of the first group were diagnosed with a spectrum disorder, half of them meeting the DSM criteria for autism. The fact that all of them reached standardised reading comprehension scores significantly lower than their standardised word identification scores makes them comparable to high functioning autists referred to in numerous studies before. The group of students with spectrum disorders was not able to write down all sentences after the first interval of waiting whereas some students of the control group even recalled the whole list of sentences after the second interval. The psychologists assumed that the inability to remember a large amount of information is, again, caused by weak central coherence. In their memory, Hermelin and O'Connor state, people with autism do not use any semantic or grammatical relations (see 217-218). Referring to the same cognitive phenomenon of autistic people, Frith and Maggie Snowling confirm that "reading a sentence might, for

them, be akin to reading a list of unconnected words, and sentence context will not be built up to allow meaning-driven disambiguation” (338).

Besides weak central coherence, Kate Nation, Paula Clarke, Barry Wright, and Christine Williams found that the proficiency of autistic students between reading accuracy and reading comprehension differs significantly with accuracy being exceedingly above average and considerable variability within reading comprehension scores (see 914). However, when these students were asked to read uniquely generated non-words, their decoding skills failed most of the time. This study, Nation et al. argue, proves that autistic people use rote memorisation and visual association strategies rather than phonological decoding (see 917-918). The reason they assessed both competences separately is the importance for reading comprehension of both, decoding and inferring skills (as pointed out in the previous section). To investigate this inconsistency further, Irene M. O'Connor and Perry D. Klein examined in how far students with autism are capable of applying different inferring strategies, some findings of which are discussed more detailed in the following. First of all, on a structural level, the more complex grammatical relations in a sentence are, the more significant are the limits imposed on reading comprehension. For example, inserted subordinate clauses and flexibility in word order make it hard for autistic people to find any coherence in a sentence, such as subject-verb agreement (in fact, this is a factor that can also be found when diagnosing the reading proficiency of students without autism syndrome). Secondly, coherence in a text is, among other textual elements, often achieved through anaphora. Talmy Givón defines anaphoric devices as

pragmatic signals that inform listeners or readers where to search for a referent: zero anaphora signals that the referent is currently the focus of attention; a pronoun signals that the referent was recently discussed and is available in memory, but is not currently in attention. (350)

Especially in longer texts, the inability to recognise anaphoric devices results from an inchoate representation of the text in mind, thus prohibiting the reading proficiency of autistic students. This becomes important with regard to fictional texts, where pronouns are one of the most common anaphoric devices. Thirdly, O'Connor and Klein (see 117-118, 124-125) address the role of prior knowledge for textual understanding. The higher the rate of activated schemes in the mental lexicon, the more probable it is that this general world knowledge is used for

inferences. In the case of autism, however, it is crucial to activate the suitable kind and amount of information in the reader's mind. Otherwise, prior knowledge initiated by pre-reading tasks overexerts the autistic reader, causing confusion instead of providing a basis for reading comprehension.

Likewise, the theory of mind is another cognitive structure people with autism are struggling with albeit especially important for the reading of fictional texts. Grounded in the field of literary theory, this concept understands human beings as mind readers, "a term used by cognitive psychologists to describe our ability to explain people's behaviour in terms of their thoughts, feelings, beliefs, and desires; for example, 'Lucy *reached* for the chocolate because she *wanted* something sweet'" (Zunshine 271; emphasis in the original). The example clarifies that in order to understand a fictional text's storyline, two major processes are required from the reader: first, different characters' perspectives have to be adopted; second, the monitoring of behaviour, set-shifting and holding of information on line in working memory which are all included among executive functions. Since one of the main characteristics of autism is the inability to interact appropriately with others in social contexts, it is hard for autistic people to get the gist of fictional texts. For them, it is nearly impossible to discern why characters act the way they do and how these actions are related to other textual elements. In "An Anthropologist on Mars" (1995), Oliver Sacks illustrates the problems the autistic Temple Grandin encountered in her early years of life:

Something was going on between the other kids, something swift, subtle, constantly changing – an exchange of meanings, a negotiation, a swiftness of understanding so remarkable that sometimes she wondered if they were all telepathic. She is now aware of the existence of those social signals. She can infer them, she says, but she herself cannot perceive them, cannot participate in this magical communication directly, or conceive of the many-leveled, kaleidoscopic states of mind behind it. (Sacks 272)

Hence the genre of prose excludes a considerable number of people with autism completely from the world of literature. In contrast to prose, poetry usually does not confront its readers with complex pragmatic aspects of language, such as communicative intentions. Instead, this genre is a very personal one and often provides insight into the persona's mind. Consequently, a suitable poem meets its autistic reader's fascinations and conveys thoughts and emotions comprehensibly.

## **SUPPORTING STUDENTS ON THE AUTISM SPECTRUM ON MEANINGFUL READING – A REVIEW OF RESEARCH**

Having worked out the characteristics of reading in the second section of this paper, it becomes evident that a lack of strategies to deal with anaphoric devices, non-existent or unavailable prior knowledge, and weak central coherence negatively affect the development of reading comprehension for people with autism. In the early years of the twenty-first century, a number of interdisciplinary studies conducted by researchers in the field of EFL education investigated the effectiveness of different reading and support strategies with focus on the aforementioned areas. This was due to the publication of the Salamanca Declaration, a paper that sounded the bell for inclusive education passed by the UNESCO conference in 1994. In the following, a selection of these teaching strategies is presented and applied to the teaching of poetry in the next section. Since no empirical studies investigating the L2 reading comprehension of EFL learners on the autism spectrum could be identified, the present research review gives an overview of seminal studies which explored L1 reading comprehension. However, their implications for EFL education are limited and thus ought to be considered very carefully.

One of the major studies in the research of reading comprehension strategies for students with autism is the one conducted by O'Connor and Klein in 2004. They investigated the effect of anaphoric cuing, a cloze test as well as pre- and post-reading questions on 20 high functioning autistic students' reading comprehension under direct instruction. Each time a pronoun occurred in a text, the student was interrupted and asked to identify the referent in the sentence before. Afterwards, students were asked to read a second text about a similar topic in which pronouns of each kind had been erased similar to a cloze test. If students were not able to complete the gap, they were offered a list with three possible pronouns by the instructor. Both interventions, anaphoric cuing and the cloze test, had statistically significant effects on the students reading comprehension. The several pauses initiated by anaphoric cuing gave rise to first instances of self-monitoring behaviour

whereas both strategies influenced the students' engagement with post-reading tasks positively.<sup>5</sup>

In contrast to the explication of anaphoric devices, the use of pre- and post-reading questions did not have a significant effect on reading comprehension in general. In fact, O'Connor's and Klein's study showed that the pre-reading questions activated prior knowledge that was either irrelevant or inaccurate with regard to the text (see 124-125). Only a small group of higher ability students with autism benefited from these questions since they were able to focus on a selection of the activated prior knowledge that was relevant for the understanding of the text. Besides a lack of appropriate strategies, another problem that comes along with pre-reading questions are the students' unique fascinations typical for autism. In most cases, these fascinations limit the range of students' interests, reducing them to one special area. As a consequence, fascinations often function as a primer which builds the basis for the person's everyday communication and interpretation. Referring back to the introductory example, Sam is fascinated by penguins and Antarctica which is the reason why he compares everyday human interaction to the behaviour of these animals. Nevertheless, this special knowledge of students with autism can be used to turn them into experts of the EFL classroom. Teachers should endeavour to weave in these fascinations into their lessons as often as possible, also considering them when choosing texts.

What sets O'Connor and Klein's study apart from others in its field is the relatively large number of participants that allows a generalisation of the results to a certain degree. By doing so, the authors laid the groundwork for numerous studies to follow. Building on the findings of O'Connor and Klein, Margaret M. Flores and Jennifer B. Ganz (2007) explored the impact of an oral language skill training on related reading comprehension skills by training four autistic students from fifth and sixth grade in statement inference, use of facts, and analogies. Based on a direct instructional approach similar to O'Connor and Klein, the students were instructed by educated researchers both in group format and individually. Once all students mastered the first strand of developmental skills (i.e. statement inference), the next one was introduced by the instructors. The study investigated the effectiveness of direct instruction on reading comprehension by proving a functional relationship

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5 Even though this study was realised by instructors who assisted the students during the reading process, both strategies can be realised in the EFL classroom with the help of appropriate software.

between both observed variables: All four students were not only able to reach 100% of correctness with regard to each strategy but also maintained their performance even one month after the last training session (see Flores and Ganz 248-250).

The same is true for a study by Suzanne Stringfield, Deanna Luscre, and David L. Gast (2011) which examined the effect of story maps on autistic students' success in post-reading test scores.<sup>6</sup> The idea behind the use of a story map was to relieve the students' working memory by providing a visual organisation of the most important elements of the text, called story grammar (see 218). Placed in a similar setting, the three students from 8 to 11 years of age regularly took part in a quiz about one of the levelled books they were most interested in. At the beginning of the study, the students had to note down the most important details of the short story concerning characters, time, place, beginning, middle, and end while reading (at a later point, they were given the choice to use a story map or not). Stringfield et al. found that all three participants' accuracy in response increased, concluding a positive impact on the efficiency of the students' reading skills (see 225-227).

Additionally, fascinations cause an underdevelopment of vocabulary except in the respective field of interest as Catherine Roux, Eric Dione, and Anne Barrette (2015) point out. Once a week, they taught a group of thirteen students with autism different strategies to identify the main ideas of a text as well as the relations between them. These extra lessons included the introduction of eight new items of vocabulary a week and the intensive reading of a text which was summarised immediately afterwards. The analysis of the pre- and post-test confirms that both interventions had a positive effect on the students' reading comprehension (see Roux et al. 12). Proceeding from these findings, teachers should always provide their students with the necessary vocabulary before dealing with a text in the EFL classroom. Otherwise, students who are not familiar with the topic of the text will be left behind. In her study of vocabulary teaching "Cognitive Development and Reading" (2002), Kelly B. Cartwright presents several different ways how autistic students can be made familiar with ambiguous vocabulary which is typical for prose and poetry. What makes the learning of vocabulary effective for students with autism, she emphasises, is that tasks combine the written representation of a word

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6 In a research review by Farah El Zein, Michael Solis, Sharon Vaughn, and Lisa McCulley (2014), the studies by Flores and Ganz (2007) and Stringfield et al. (2011) were the only ones described as conclusive in contrast to other studies in the field.

with its semantic dimensions in order to create a connection between the word- and discourse-level processing (see 57-58, 61).

## **FOSTERING AUTISTIC STUDENTS' EFL READING COMPREHENSION WITH POETRY**

This section integrates the findings on cognitive abilities and strategies to foster the reading proficiency of students with autism into an EFL lesson on Robert Frost's poem "The Road Not Taken" (see appendix A). The lesson addresses inclusive classes of eighth graders (*Gymnasium*), preferably with SEN students with autism. According to the *Kernlehrplan für den verkürzten Bildungsgang des Gymnasiums – Sekundarstufe I (G8) in Nordrhein-Westfalen im Fach Englisch*, students are expected to be capable of speaking and writing about their way of life, education, and participation in society at the end of eighth grade. Frost's poem offers numerous ways to discuss the students' plans for future life as well as reasons for decisions they have made in the past. The schedule of the EFL lesson (appendix F) provides a brief overview of the teaching approach which will be explained in greater detail in the following with special focus on the individual facilitation of autistic students.

"The Road Not Taken" is all about the importance of making decisions and the consequences that come along with them. To introduce the students to this context, the first lesson starts with letting them make a decision. The teacher presents two boxes to the class, one of them containing sweets and the other one being empty. Students have the chance to choose one of the boxes while they have to share the reasons of their decision to the rest of the class. Afterwards, the teacher uses this demonstration as a starting point to introduce the class to Robert Frost and to contextualise "The Road Not Taken." It is important that students with autism are not directly confronted and left alone with a piece of literature. The game at the beginning of the lesson makes it possible for them to relate to the persona later on and experience the dilemma of decision making at first hand. This is especially important since students on the spectrum might lack of empathy which makes it impossible for them to relive other students' reactions.

Before the class listens to the poem for the first time, the teacher has to make sure that the key vocabulary is known by everyone. For this purpose, the students work together with their partners. Each student gets a stack of cards that show a

word, a suitable picture, and a list of associated words (see appendix B). Students then describe the word at the top of the card to their partner without using the words below. Having figured out the key vocabulary, students are now asked to classify the words according to different categories, such as animate and inanimate objects. Taking on Cartwright's approach, this task makes students aware of two dimensions: the written representation of a word and its semantic relations. Autistic students benefit from tasks like this since they are confronted with ambiguous words that take on different meanings in varying contexts (e. g. wood, either being used as a synonym for forest or describing the raw material). Instead of using a set of pre-reading tasks which probably cause confusion in autistic students' minds (see O'Connor and Klein 124-125), a manageable list of key vocabulary lessens the complexity of the poem. As a consequence, the effort for the working memory of autistic students is reduced which lets them focus on the decoding of semantic relations during reading instead.

In the following group work, students are asked to reflect on their life. Decisions they had to make at that point of time are gathered and placed at the bottom of a poster similar to the one at the front of class. The groups then write down the options they decided for earlier in their lives on cards and glue them on the poster, marking one of the two paths respectively (see appendix C). Even though this part of the lesson is characterised by communication and exchange of experience, autistic students should not be forced to work collaboratively since they often prefer to work on their own to avoid uncomfortable social situations. When the results of this phase are discussed in class, it is important to make sure the students share their experiences and emotions. In the best case, it becomes evident for the class that decisions often result in a feeling of insecurity, leaving the question of *What if I decided the other way?* unanswered. Notwithstanding autistic students' inability to relate to other people, the openness towards and diversity of their peers' thoughts might help students, as Lisa Zunshine calls it, to read each other's minds (see 271-274).

Having established an understanding for the persona, a reading of the poem is played to the students. The presentation of the audio file makes the class familiar with the poem without expecting them to read it on their own. However, if necessary and applicable, it is important to provide two other versions of the poem, a video translating it into sign language and a text in braille, simultaneously for students with auditory and/or visual impairment. While the students are listening

to the poem, a picture at the front of the class illustrates the scenery described by the persona. Aiming at a completely inclusive approach, even autistic students who might never be capable of reading have the chance to imagine what the persona is describing throughout the poem.

The second part of the lesson offers students time to engage with the text individually. At the end, each student should have created a written or drawn summary of the poem. Students who like to work on their own are welcomed to do so; but the teacher should provide a read aloud session for SEN students in front of the class (see Chandler-Olcott and Kluth 551-552). As a participant of the reading circle, each student receives a laminated copy of “The Road Not Taken” that serves as a scratch paper for the read aloud session. Whenever a question arises or context is not understandable, students can take notes on their copy or simply raise their hand to ask the teacher immediately.

Since communicating about a text with others, especially people who have already understood it, makes it easier for students with autism to understand its content (see Chandler-Olcott and Kluth 549-552), students without SEN are highly encouraged to take part in the reading circle as well.<sup>7</sup> In fact, they might also benefit from the vocabulary explanations of autistic students fascinated by the forest. Providing as much visual and oral scaffolding as possible, teachers should only focus on one aspect per reading. To turn students into proficient readers, it is helpful to make the structure, the persona’s decision, and major stylistic devices the subjects of discussion.

The use of digital tools can play a part in contributing to establish differentiation in the classroom (see Windmüller-Jesse and Talarico 88-91), especially when schools are deficient in SEN teachers and staff. If students do not feel ready to take part in the read aloud session, they should be given additional time to prepare themselves for the reading of the poem. To do so, teachers can create online learning applications which help students to focus on different aspects of a text, such as vocabulary, grammatical structures, and stylistic devices. As an example, two applications were created: the first one introducing students to the vocabulary necessary for “The Road Not Taken” (see appendix D), the second one

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7 Based on a social constructivist approach, Lev S. Vygotsky’s zone of proximal development describes “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers” (86).

helping them to revise the lesson at home (see appendix E). Finding pairs is an appropriate game to help students memorise new vocabulary with special emphasis on different forms of representation. In this case, students are asked to find pairs of words and pictures which fit to the new vocabulary. To adjust the difficulty of this application, the number of pairs and the mode of representation is variable. For example, autistic students with a strength in auditory memorisation can listen to an artificial voice reading out the vocabulary to be matched with a suitable picture. The second application allows for (some) teacher-student interaction since it combines self-made teaching sessions with the interface of a text messenger. Single choice questions, pictures, and videos can be embedded into the conversation to initiate a revising discourse on the texts dealt with in class. In the case of “The Road Not Taken”, this application is useful to make students aware of stylistic devices and relationships between different stanzas of the poem. In case teachers are short of time during their lessons, autistic students can train their understanding of anaphoric devices and intertextual semantic relations using applications like these as an additional resource for learning and revising at home (see Roux et al., O’Connor and Klein).

Having confronted the students with “The Road Not Taken” for the first time, it is possible to ask them to write a poem about a future decision they will have to make on their own. In order to do so, students hopefully adopt central elements of Frost’s poem and develop an understanding for the persona’s situation. Such a creative writing task is also an appropriate challenge for students with autism but has to be prepared in detail. To make writing easier for them, it is conceivable to provide a worksheet with a pre-formulated poem where students have to fill in the gaps with their individual decision or a collection of rhyme words in general.

## CONCLUSION

The purpose of this paper was to investigate the potentials of poetry as a genre for fostering the EFL reading comprehension of autistic students. Students with high-functioning autism, despite having decoding skills well above average, often struggle to understand the gist of texts due to weak central coherence as well as a lack of prior knowledge and strategies to deal with anaphoric devices. This is especially true for prose fiction because these texts expect their readers to infer to a

high degree which proves a challenge many people with autism are unable to meet. In contrast, various samples of poetry are less dependent on inferring since the personae depicts their thoughts and emotions in a less elusive way. However, it is essential to recall autism as a spectrum disorder which results in highly individual strengths and weaknesses of autistic people. Consequently, an exemplary way of teaching students with autism does not exist. Thus, the teaching activities suggested in this paper only serve for orientation and examples of how to individually support autistic students' reading proficiency in the EFL classroom. As a cautionary note, the studies discussed in this paper are small-scale studies giving an extremely limited insight into the range of abilities of students with autism. Concerning this, the paper points out a research gap in reference to studies exploring the L2 reading comprehension of autistic students. Further studies are needed to shed more light on the neural structures which characterise autism as a cognitive style. Additionally, inferences of different cognitive structures and abilities, such as weak central coherence and theory of mind, need to be investigated (see Chiang and Lin, El Zein et al., Frith, Happé). More insight into these processes is necessary to make students with autism capable of understanding that "the people whose story the author is telling experience much more than [the author] can ever hope to tell" (Auerbach 549).

## WORKS CITED

- "A Human Female." *Atypical*, written by Michael P. Jann, Weird Brain, Exhibit A, Sony Pictures Entertainment, 2017.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*. 5<sup>th</sup> ed., Washington, DC, American Psychiatric Publication, 2013.
- Auerbach, Erich. *Mimesis*. Princeton University Press, 1991.
- Booth, James R. et al. "Neural Correlates of Mapping from Phonology to Orthography in Children Performing an Auditory Spelling Task." *Developmental Science*, vol. 10, no. 4, 2007, pp. 441-451.
- Cartwright, Kelly B. "Cognitive Development and Reading: The Relation of Multiple Classification Skill to Reading Comprehension in Elementary School Children." *Journal of Educational Psychology*, vol. 94, no. 1, 2002, pp. 56-63.

- Chandler-Olcott, Kerry, and Paula Kluth. "Why Everyone Benefits from Including Students with Autism in Literacy Classrooms." *Reading Teacher*, vol. 62, no. 7, 2009, pp. 548-557.
- Chiang, Hsu-Min, and Yueh-Hsien Lin. "Reading Comprehension Instruction for Students With Autism Spectrum Disorders." *Focus on Autism and Other Developmental Disabilities*, vol. 22, no. 4, 2007, pp. 259-267.
- Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Cambridge University Press, 2001.
- El Zein, Farah, Michael Solis, Sharon Vaughn, and Lisa McCulley. "Reading Comprehension Interventions for Students with Autism Spectrum Disorders: A Synthesis of Research." *Journal of Autism and Developmental Disorders*, vol. 44, no. 6, 2014, pp. 1303-1322.
- Flores, Margaret M., and Jennifer B. Ganz. "Effectiveness of Direct Instruction for Teaching Statement Inference, Use of Facts, and Analogies to Students With Developmental Disabilities and Reading Delays." *Focus on Autism and Other Developmental Disabilities*, vol. 22, no. 4, 2007, pp. 244-251.
- Frith, Uta. *Autism: Explaining the Enigma*. Blackwell Science, 1989.
- Frith, Uta, and Maggie Snowling. "Reading for Meaning and Reading for Sound in Autistic and Dyslexic Children." *Journal of Development Psychology*, vol. 1, no. 4, 1983, pp. 329-342.
- Frost, Robert. "The Road Not Taken". *The Poetry of Robert Frost: The Collected Poems*, edited by Edward Connery Lathem, Holt, 2002, p. 105.
- Givón, Talmy. *Functionalism and Grammar*. Benjamins, 1995.
- Happé, Francesca. "Autism: Cognitive Deficit or Cognitive Style?" *Trends in Cognitive Sciences*, vol. 3, no. 6, 1999, pp. 216-222.
- Hermelin, Beate, and Neil O'Connor. "Remembering of Words by Psychotic and Subnormal Children." *The British Journal of Psychology*, vol. 58, no. 3, 1967, pp. 213-218.
- Kamp-Becker, Inge. "Schülerinnen und Schüler mit Autismus-Spektrum-Störungen." *Sonderpädagogische Förderschwerpunkte in NRW*, edited by Ministerium für Schule Weiterbildung des Landes Nordrhein-Westfalen, 2016, pp. 79-83.
- Lutjeharms, Madeline. "Processing Levels in Foreign-Language Reading." *Receptive Multilingualism: Linguistic Analyses, Language Policies, and Didactic Concepts*, edited by Jan D. ten Thije and Ludger Zeevaert, Benjamins, 2007, pp. 265-284.

- Lutjeharms, Madeline. "Leseverstehen." *Handbuch Fremdsprachenunterricht*, edited by Grit Mehlhorn et al., A. Francke Verlag, 2016, pp. 97-102.
- Ministerium für Schule und Weiterbildung Nordrhein-Westfalen. *Kernlehrplan für den verkürzten Bildungsgang des Gymnasiums - Sekundarstufe I (G8) in Nordrhein-Westfalen im Fach Englisch*. Frechen, Ritterbach, 2007.
- Nation, Kate et al. "Patterns of Reading Ability in Children with Autism Spectrum Disorder." *Journal of Autism and Developmental Disorders*, vol. 36, no. 10, 2006, pp. 911-919.
- O'Connor, Irene M., and Perry D. Klein. "Exploration of Strategies for Facilitating the Reading Comprehension of High-Functioning Students with Autism Spectrum Disorders." *Journal of Autism and Developmental Disorders*, vol. 34, no. 2, 2004, pp. 115-127.
- Roux, Catherine et al. "Enhancing Reading Comprehension among Students with High-Functioning Autism Spectrum Disorder: A Randomized Pilot Study." *Canadian Journal of Education*, vol. 38, no. 1, 2015, pp. 1-19.
- Sacks, Oliver W. "An Anthropologist on Mars." *An Anthropologist on Mars: Seven Paradoxical Tales*. Alfred A. Knopf, 1995.
- Schnorr, Roberta F. "Intensive Reading Instruction For Learners With Developmental Disabilities." *The Reading Teacher*, vol. 65, no. 1, 2011, pp. 35-45.
- Stringfield, Suzanne Griggs., Deanna Luscre, and David L. Gast. "Effects of a Story Map on Accelerated Reader Postreading Test Scores in Students With High-Functioning Autism." *Focus on Autism and Other Developmental Disabilities*, vol. 26, no. 4, 2011, pp. 218-229.
- Styslinger, Mary E. "Making Meaning: Strategies for Literacy Learning." *Phi Delta Kappa*, vol. 94, no. 4, 2012, pp. 40-45.
- "The Salamanca Statement and Framework for Action on Special Needs Education". *The UNESCO publications database*. United Nations Educational, Scientific and Cultural Organization, 1994, [unesdoc.unesco.org/images/0009/000984/098427eo.pdf](https://unesdoc.unesco.org/images/0009/000984/098427eo.pdf). Accessed 26 July 2018.
- Vygotsky, Lev S. *Mind in society: The development of higher psychological processes*. Harvard University Press, 1978.
- Windmüller-Jesse, Vera, and Marco Talarico. "Go digital! Chancen und Möglichkeiten digitaler Mediennutzung im inklusiven Englischunterricht."

*Inklusiver Englischunterricht*, edited by Bianca Roters et al., Waxmann, 2018, pp. 83-100.

Zunshine, Lisa. "Theory of Mind and Experimental Representations of Fictional Consciousness." *Narrative*, vol. 11, no. 3, 2013, pp. 270-291.

**APPENDIX****A. "THE ROAD NOT TAKEN" BY ROBERT FROST (1916)**

Two roads diverged in a yellow wood,  
And sorry I could not travel both  
And be one traveler, long I stood  
And looked down one as far as I could  
5 To where it bent in the undergrowth;

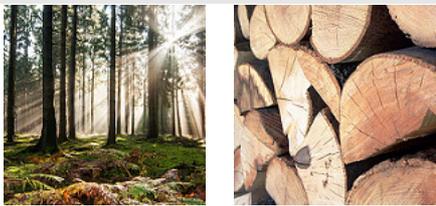
Then took the other, as just as fair,  
And having perhaps the better claim,  
Because it was grassy and wanted wear;  
Though as for that the passing there  
10 Had worn them really about the same,

And both that morning equally lay  
In leaves no step had trodden black.  
Oh, I kept the first for another day!  
Yet knowing how way leads on to way,  
15 I doubted if I should ever come back.

I shall be telling this with a sigh  
Somewhere ages and ages hence:  
Two roads diverged in a wood, and I –  
I took the one less traveled by,  
20 And that has made all the difference.

## B. EXEMPLARY VOCABULARY CARDS

**wood**



© Holger Alts (flickr)<sup>8</sup>      © Sonia Belviso (flickr)<sup>9</sup>

Words you are not allowed to use  
for the description:

- forest
- green
- fire
- walk

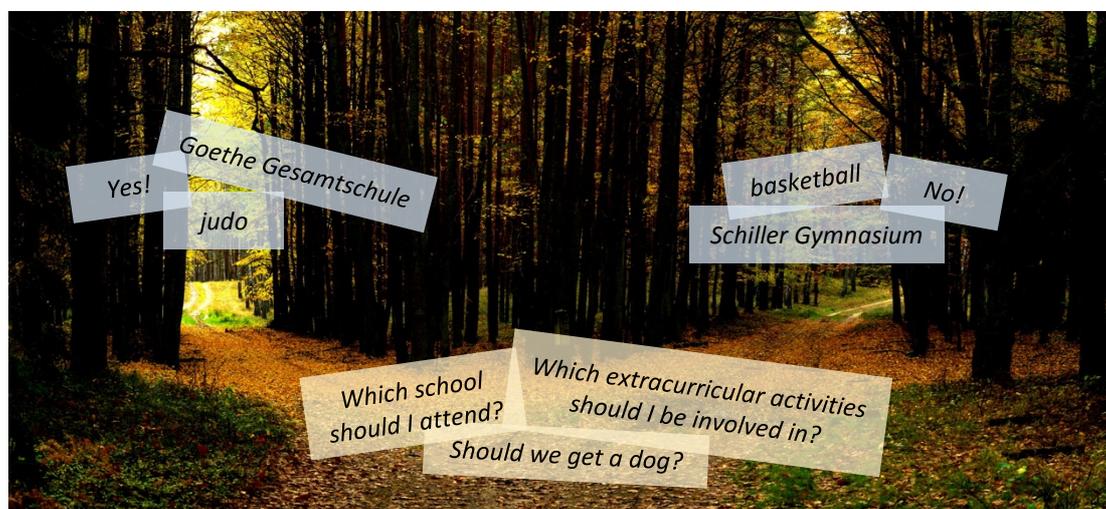
**traveller (BrE),  
traveler (AmE)**



Words you are not allowed to use  
for the description:

- holidays
- plane
- baggage
- tourist

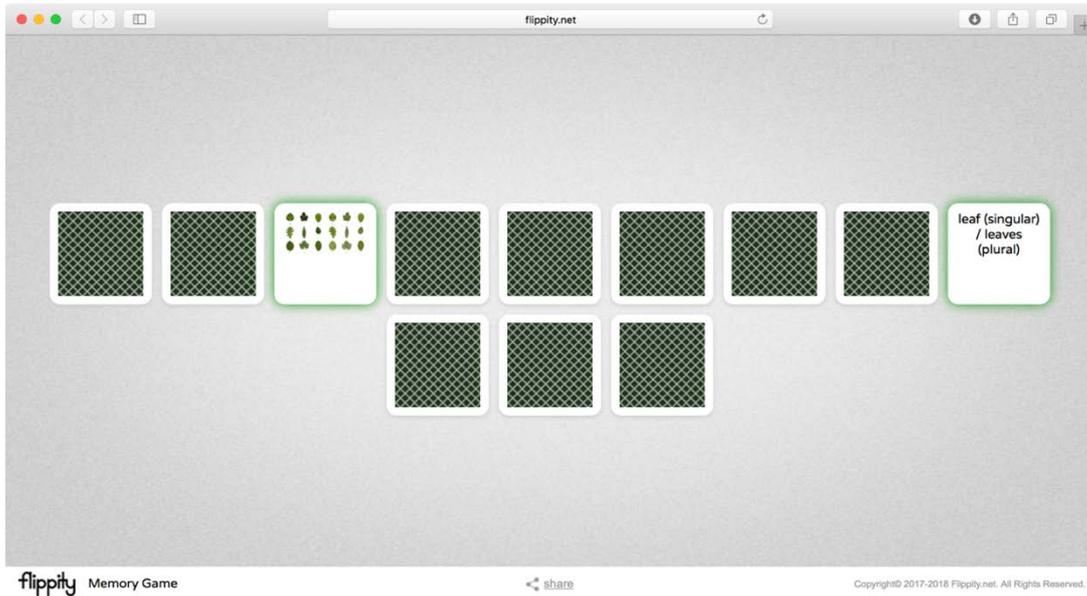
## C. EXEMPLARY GROUP WORK RESULTS



© Szymon Gackowski (deviantart)<sup>10</sup>

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- 8 This work was published by Holger Alts under CC BY 2.0 (<https://flic.kr/p/XyFRJd>). I did not change the work in any way.
  - 9 This work was published by Sonia Belviso under CC BY 2.0 (<https://flic.kr/p/c2icVq>). I did not change the work in any way.
  - 10 This work was published by Szymon Gackowski (<http://fav.me/d1o6crx>). I did not change the work in any way.

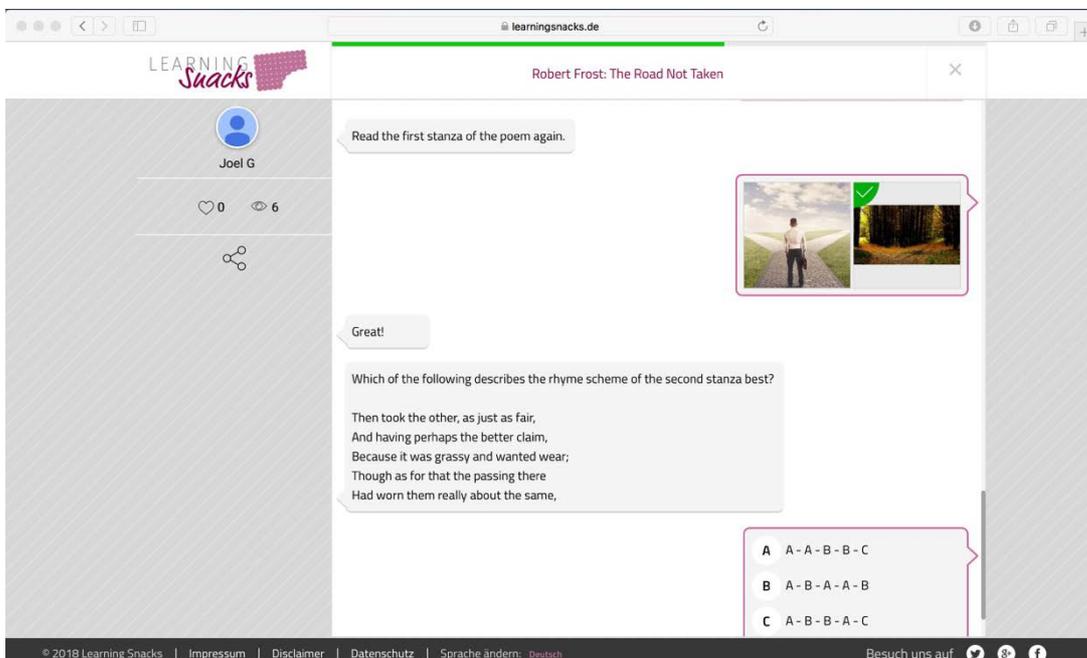
### D. APPLICATION 1: PAIRS



Try it out:

[https://www.flippity.net/me.asp?k=17PdLVxdc\\_qPi02NDWUzSZy3prEpxjUSA1nj0\\_l3JQAo](https://www.flippity.net/me.asp?k=17PdLVxdc_qPi02NDWUzSZy3prEpxjUSA1nj0_l3JQAo)

### E. APPLICATION 2: LEARNING SNACK



Try it out:

<https://www.learningsnacks.de/share/9147/5de5fb2e66577288db330aea49f23ee806cd3692>

## F. EXEMPLARY TEACHING UNIT ON ROBERT FROST'S "THE ROAD NOT TAKEN"

### Abbreviations

CIC: conversation in class	PT: presentation by teacher	PS: presentation by student(s)
IW: individual work	PW: partner work	GW: group work
LC: listening comprehension	RC: reading comprehension	SC: speaking competence
WC: writing competence	MC: methodological competence	IC: intercultural competence

Phase	Introduction (20 min.)
<b>Aim</b>	<ul style="list-style-type: none"> <li>- Introduction of "The Road Not Taken" (TRNT)</li> <li>- Teacher introduces the groundwork for further interpretation</li> </ul>
<b>Content/ Arrangement</b>	<ul style="list-style-type: none"> <li>- Introductory game: Students choose a box and discuss the reasons for their decision</li> <li>- What was happening in your life some time ago? (CIC)</li> <li>- Students discuss options they had each time they had to make a decision in the past (GW)</li> <li>- Students decide on a path, stick their notes on the poster (GW)</li> </ul>
<b>Competences<sup>11</sup> (Students can...)</b>	<ul style="list-style-type: none"> <li>- MC: take complex notes (e. g. mind map, cluster); run a project and present its results; work cooperatively</li> </ul>
<b>Material</b>	<ul style="list-style-type: none"> <li>- two boxes, sweets</li> <li>- picture 1 (present in front of class)</li> <li>- sticky notes</li> <li>- copy of picture 1, one for each group</li> </ul>

11 All competences in this table can be found in the *Gymnasialkernlehrplan für das Fach Englisch in Nordrhein-Westfalen* (2007, pp. 29-36).

<b>Phase</b>	<b>Elaboration (15 min.)</b>
<b>Aim</b>	<ul style="list-style-type: none"> <li>- Vocabulary on forest and poetry is available</li> <li>- Students can classify Robert Frost's poetry</li> </ul>
<b>Content/ Arrangement</b>	<ul style="list-style-type: none"> <li>- Teacher gives basic information on Robert Frost (PT)</li> <li>- Teacher present the poem as an audio file (CIC)</li> </ul>
<b>Competences (Students can...)</b>	<ul style="list-style-type: none"> <li>- LC: understand excerpts from audio files (e. g. radio)</li> </ul>
<b>Material</b>	<ul style="list-style-type: none"> <li>- TRNT audio file</li> <li>- computer</li> <li>- vocabulary cards</li> </ul>

<b>Phase</b>	<b>Results (10 min.)</b>
<b>Aim</b>	<ul style="list-style-type: none"> <li>- Students communicate their experiences</li> <li>- Students get a feeling for the persona in TRNT</li> </ul>
<b>Content/ Arrangement</b>	<ul style="list-style-type: none"> <li>- Students present to the class: What made you choose this option/this path? (CIC)</li> <li>- How did you feel in this moment? (CIC)</li> </ul>
<b>Competences (Students can...)</b>	<ul style="list-style-type: none"> <li>- SC: take part in the classroom discourse; express experiences and emotions; present the results of their work using different forms of notes</li> </ul>
<b>Material</b>	

Phase	Consolidation (45 min.)					
<b>Aim</b>	<ul style="list-style-type: none"> <li>- Students have read the complete poem at least one time</li> <li>- Students can summarise the poem</li> </ul>					
<b>Content/ Arrangement</b>	<ul style="list-style-type: none"> <li>- In this phase, the students have a choice what they would like to work on:</li> </ul> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; border-right: 1px dashed black; padding: 5px; vertical-align: top;">           (1) Students participate in the read aloud session provided by the teacher in front of the class (CIC)         </td> <td style="width: 33%; border-right: 1px dashed black; padding: 5px; vertical-align: top;">           (2) Students draw or write a short summary of TRNT (maximum of five sentences/pictures) (IW or PW)         </td> <td style="width: 33%; padding: 5px; vertical-align: top;">           (3) Students use digital applications to work individually on different aspects of TRNT         </td> </tr> </table> <ul style="list-style-type: none"> <li>- Homework: Students write a poem about a decision they had to make referring to a decision on the posters they created before</li> </ul>			(1) Students participate in the read aloud session provided by the teacher in front of the class (CIC)	(2) Students draw or write a short summary of TRNT (maximum of five sentences/pictures) (IW or PW)	(3) Students use digital applications to work individually on different aspects of TRNT
(1) Students participate in the read aloud session provided by the teacher in front of the class (CIC)	(2) Students draw or write a short summary of TRNT (maximum of five sentences/pictures) (IW or PW)	(3) Students use digital applications to work individually on different aspects of TRNT				
<b>Competences (Students can...)</b>	<ul style="list-style-type: none"> <li>- IC: notice the relevance of canonical texts for today</li> <li>- RC: understand poems with focus on characters, plot, emotions, and attitude</li> </ul> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; border-right: 1px dashed black; padding: 5px; vertical-align: top;"> <ul style="list-style-type: none"> <li>- SC: read out long texts aloud appropriately</li> </ul> </td> <td style="width: 33%; border-right: 1px dashed black; padding: 5px; vertical-align: top;"> <ul style="list-style-type: none"> <li>- MC: structure long, complex texts</li> </ul> </td> <td style="width: 33%; padding: 5px; vertical-align: top;"> <ul style="list-style-type: none"> <li>- MC: work subject-specifically on texts and other media</li> </ul> </td> </tr> </table> <ul style="list-style-type: none"> <li>- WC: adopt different text types for their own writing</li> </ul>			<ul style="list-style-type: none"> <li>- SC: read out long texts aloud appropriately</li> </ul>	<ul style="list-style-type: none"> <li>- MC: structure long, complex texts</li> </ul>	<ul style="list-style-type: none"> <li>- MC: work subject-specifically on texts and other media</li> </ul>
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<b>Material</b>	<ul style="list-style-type: none"> <li>- copy of TRNT (special copy for SEN students)</li> </ul> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; border-right: 1px dashed black; padding: 5px;"></td> <td style="width: 33%; border-right: 1px dashed black; padding: 5px;"></td> <td style="width: 33%; padding: 5px;"> <ul style="list-style-type: none"> <li>- computer</li> </ul> </td> </tr> </table> <ul style="list-style-type: none"> <li>- posters created in the introductory phase</li> </ul>					<ul style="list-style-type: none"> <li>- computer</li> </ul>
		<ul style="list-style-type: none"> <li>- computer</li> </ul>				