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Neurodivergent Learners in Primary EFL Classrooms: Teachers' Perceptions of Scaffolding Strategies

Neurodivergenta elever i engelskundervisning i grundskolan: Lärares uppfattningar om scaffolding-strategier

Aurelia Adio

Fatema Ali

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Examiner: Björn Sundmark

Supervisor: Malin Reljanovic Glimäng

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Abstract

Primary EFL learners with a neurodevelopmental disorder (NDD) often encounter challenges in the classroom due to cognitive norms that do not fully reflect students' varying needs. Moreover, research on scaffolding strategies often focuses on neurotypical learning profiles and lacks differentiation for neurodivergent students. Thus, this study aims to explore factors that influence language learning for neurodivergent learners according to some primary EFL teachers in Sweden. Additionally, this research also aims to highlight the scaffolding strategies they perceive as beneficial in a neurodiverse EFL classroom. We used qualitative research and conducted semi-structured interviews with five teachers. Thereafter, the data was thematically analyzed. Three themes emerged: Relational competence, Executive functions, and Scaffolding strategies for neurodivergent EFL learners. Teachers recognize whole-class scaffolding as beneficial in the neurodiverse classroom because it provides structure and clarity for everyone. However, chosen theories suggest that individualized support is more critical when meeting different needs in the neurodiverse classroom, as it helps teachers to tailor scaffolding strategies for each learner. Therefore, we propose a hybrid scaffolding model, which balances whole-class scaffolding and individualized support to better meet the needs of neurodivergent learners. Teachers also highlight that students with NDD often experience challenges, such as difficulties with sensory regulation and transitioning between tasks. In response, task breakdowns, visual aids, and peer learning are three strategies observed as beneficial. Lastly, our research highlights further development in teacher training, one that is more attuned to neurodivergent learners, and recognizes the limitations of cognitive norms in the EFL classroom.

Keywords: *Primary School, EFL, Neurodiversity, Neurodevelopmental Disorders (NDD), Relational Competence, Executive Functions, Scaffolding Strategies, Inclusive Education*

Individual contributions

We hereby certify that all parts of this Degree Project reflect the equal participation of both signatories below.

We refer to the following parts:

• Planning, Conducting, and Transcribing interviews

• Abstract

• Introduction

• Aim and Research Questions

• Background

• Method

• Presentation of Results and Discussion

• Conclusion

Authenticated by:

Aurelia Adio

Fatema Ali

1. Introduction

In education, unspoken norms can shape how students are expected to think, learn, and behave. However, some cognitive profiles face challenges when trying to fit into these norms. The National Agency for Special Needs Education and Schools (2024) in Sweden reports that approximately 10% of students have a neurodevelopmental disorder (NDD). In this research, we highlight ADHD, ADD, autism spectrum disorder (ASD), and dyslexia as they are particularly applicable given the context. Despite the recognition of neurodiversity[1] in Sweden, there are aspects of the school environment that can be challenging, such as organizing their sense of time, maintaining focus, and actively participating in social settings (SPSM, 2024). To address these limitations, scaffolding can be essential in adapting learning strategies to individual needs, ensuring a more inclusive educational environment.

Scaffolding is also a term that you might recognize, and it could be the metal structure supporting a building during construction. Now, imagine this concept in education, where scaffolding becomes a teaching method instead. To exemplify, the student could be the building, while the teacher could be seen as the construction worker, supporting and guiding the process. Similar to construction, the educational scaffolding provides essential support, helping students develop their overall language learning. However, scaffolding is a strategy that is rarely addressed in neurodiverse[2] classrooms, yet support is especially important for students with NDD. Additionally, research on scaffolding strategies frequently focuses on neurotypical[3] students, or both neurotypical and neurodivergent[4] students combined in one classroom. This leaves a gap in understanding how specifically neurodivergent students experience language learning in an inclusive classroom.

Our research will begin by addressing the factors that influence language learning for neurodivergent students according to some primary EFL teachers. Thereafter, we will explore which scaffolding strategies some primary teachers use specifically for neurodiverse EFL

[1] Neurodiversity is the perspective that views neurological differences as natural variations of the human mind rather than disorders to be fixed (Doyle, 2020).

[2] Neurodiverse explains the mixture of neurological profiles in a setting. For example, in a classroom.

[3] Neurotypical describes an individual with a neurological profile that aligns with social and cognitive norms.

[4] Neurodivergent describes an individual with a different neurological profile.

classrooms. Although personal experiences vary significantly, this study aims to provide concrete, contextualized, and grounded strategies for addressing diverse learning in the EFL classroom. It is important to note that neurodevelopmental disorders do not inherently create limitations. Rather, it is about how education can extend beyond a generalized picture of a learning profile, to support diverse ways of learning.

Furthermore, the theories and concepts we are including are Piaget's (2013) and Bruner's (2021) theories of learning and cognitive development. Regarding the scaffolding method, Gibbons (2002) will be introduced to further expand on Bruner's original conceptualization of scaffolding. In addition, Vygotsky's (1978) Sociocultural Learning Theory is significant. Our focus is specifically on his Mediation Theory and the Zone of Proximal Development (ZPD). Together, all of the chosen theoretical perspectives complement and contrast each other, creating this research framework. The decision of theorists is based on their insights and work within cognitive, educational, and developmental psychology to establish inclusive strategies, such as scaffolding.

Moreover, this research aligns with the Swedish curriculum, which highlights an inclusive learning environment. The curriculum (2022) states that all teachers and school staff are responsible for supporting and identifying the students' needs to ensure inclusion. Furthermore, it is specifically stated that the teachers should: "Stimulate, guide and provide extra adaptations or special support to pupils who have difficulties" (Skolverket, 2022, p.14). Therefore, all students have the right to develop and utilize their knowledge according to their abilities (Skolverket, 2022). Aligned with this, scaffolding is parallel with the curriculum as it provides strategies that can be used practically in inclusive teaching.

Lastly, before presenting our aim and research questions, we want to highlight a significant gap in current research. As mentioned earlier, existing research often generalizes scaffolding strategies to all learners or focuses primarily on neurotypical students. Therefore, we aim to contribute by explaining factors that influence neurodivergent students' language learning according to some primary EFL teachers, while also highlighting the interviewed teachers' perceptions on beneficial scaffolding strategies in the neurodiverse primary EFL classroom.

2. Aim and research questions

This project aims to explore key factors that influence language learning for neurodivergent students in the Swedish primary EFL classroom. Moreover, to better understand how to meet the practical needs of neurodivergent students, our research also aims to highlight some primary teachers' perceptions of scaffolding strategies they consider to be beneficial. The study seeks to understand how classroom practices can be adapted to foster classroom inclusion and enhance language learning in neurodiverse classrooms. In order to reach our aim, the following research questions will be addressed:

- What factors influence language learning for neurodivergent students, according to some primary EFL teachers?

- Which scaffolding strategies do some primary EFL teachers perceive as beneficial for language learning in supporting neurodivergent students?

3. Background

The following section explains our qualitative approach and theoretical framework. The chosen theories and concepts are particularly important to understand influencing factors for neurodivergent students' language learning and scaffolding as a method in the neurodiverse EFL classroom. Additionally, we define key terms and provide a literature review.

In this study, we conducted qualitative research and adopted an interpretive approach. The interpretive perspective emphasizes that truth and knowledge are subjective, shaped by individuals' cultural background and life experiences (Pervin & Mokhtar, 2022). Therefore, it acknowledges that reality cannot be objective, but rather context-dependent and created by interpretation. Our study is grounded in constructivism and sociocultural learning theory, with a focus on ZPD and the mediation theory. By combining these theories with an interpretive approach, we aim to gain insight into what some primary EFL teachers perceive as the influencing factors that affect neurodivergent students' language learning and which scaffolding strategies they find beneficial.

Jean Piaget (2013) is a key figure in constructivism, and he highlights two major perspectives on learning. The first perspective emphasizes that learners use previous knowledge in current experiences to create new knowledge, while their cognitive abilities adapt in response. This process is known as assimilation and accommodation. The second perspective he highlights is how learning is an active process. To illustrate, learners will not process information by purely listening to the teacher. Instead, they have to be actively engaged in individual tasks related to the content.

Jerome Bruner (2021) is another key figure within constructivism, and he argues that learning is an active process where students' engagement in language learning is important. Bruner emphasizes that for learning to be engaging, students need to make lasting connections with the content rather than solely memorizing facts. Thus, the teacher has an important role in guiding and deciding which concepts are important and when they should be introduced. In the context of this study, Bruner also highlights the importance of tailored strategies, such as

scaffolding, which acknowledges that students process information differently. Therefore, resonating content, teacher guidance, and individual support all create an active and engaging learning environment.

The sociocultural learning theory, originally coined by Lev Vygotsky (1978), argues that learning must align with a child's developmental stage. Generally, a student's progress is demonstrated through independent abilities, which serve as indicators of mental development. However, Vygotsky (1978) emphasizes that learning with guidance and collaboration may be an even stronger indication of their cognitive abilities. ZPD contextualizes a student's progress into two levels (Vygotsky, 1978). The first level refers to problem-solving abilities through independent tasks. The second level highlights that mistakes or gaps during independent tasks should not be seen as definitive indicators of mental development. Instead, the second level involves scaffolding strategies, such as guided questions from teachers or peer collaboration to help learners complete a task. By using these strategies, teachers place students within their optimal learning zone, which enables students to move beyond what they can solely accomplish independently. Therefore, ZPD is particularly relevant when analyzing beneficial scaffolding strategies for neurodivergent students.

Finally, Vygotsky's Mediation Theory (1978) is an important aspect of his sociocultural learning theory, as it emphasizes that learning happens through the interaction between two different stimuli. These stimuli are external instruments, such as language, symbols, or visual aids. Vygotsky highlights that this process helps with processing information, sustaining attention, and developing self-efficacy. Within the EFL classroom, mediation is necessary for supporting neurodivergent students.

3.1 Defining key terms and key concepts

Neurodiversity and Neurodevelopmental Disorders (NDDs)

Neurodiversity is based on the idea that neurological differences are natural variations of the human mind, rather than conditions that have to be corrected (Doyle, 2020). The term originates from biodiversity, which in environmental science emphasizes the importance of

conserving all species. Neurodiversity includes but is not limited to NDDs such as ASD, dyslexia, ADD, and ADHD. The World Health Organization (2025) defines neurodevelopmental disorders as behavioral and cognitive disabilities that emerge during the developmental stage, and influence specific intellectual, language, motor, or social functions.

Executive functions

Executive functions refer to various cognitive abilities in the brain, including working memory, cognitive flexibility, impulse control, planning, reasoning, and problem-solving. (Frolli et al., 2022). These functions act as a filtering mechanism, helping individuals prioritize relevant information while suppressing distractions. Thus, enabling students to self-monitor, plan, and adjust behavior based on a given situation. In relation to executive functions, special interests, and hyperfixation are two phenomena that neurodivergent students experience. From a general point of view, special interests are long-term engaging topics that bring comfort and predictability, commonly observed in ASD (National Autistic Society, 2020). In contrast, hyperfixation, which is more common with ADHD/ADD, is an in-depth but temporary focus that demands their attention for a period before it shifts (Attention Deficit Disorder Association, 2024).

Scaffolding

Jerome Bruner (2021) describes scaffolding as a process that provides structured support to help learners accomplish something they cannot do on their own. For example, the teacher will support learners by managing the harder parts of a task, allowing the students to focus primarily on what they can manage. As a result, the student will be able to complete the task successfully. However, scaffolding is more than finishing a task, it is also about becoming skilled a lot faster than if they had to attempt it on their own. Gibbons (2002) draws upon Bruner's ideas and explains that scaffolding can be seen as a collaboration through classroom interaction, for example, between peers and a teacher to develop new skills, concepts, and levels of understanding. In this research, we are highlighting the role of scaffolding. This study wants to understand the teachers' perspective on scaffolding techniques.

English as a Foreign Language (EFL)

English as a Foreign Language (EFL) refers to learning English as a non-native language in a formal setting, such as in a classroom (Quimosing, 2022). For English to be considered a foreign language, the exposure is less than a native or second language. EFL is contributing to communication expansion among communities and countries, with extensive influence since the advancement of high-end technology.

3.2 Review of literature

Three key sources have been selected to portray previous research. They were chosen due to their direct relevance to the study's focus on neurodivergent students in the EFL classroom. Instead of aiming for a broad overview, this selection allows for a more focused and in-depth discussion. Importantly, the literature will be revisited and referenced later with our theoretical framework in the results and discussion sections. This will highlight patterns and support our collected data.

Yphantides (2021) offers a clear and concise background of NDD and explains the neurological basis of conditions such as dyslexia, ASD, and ADHD. Thereafter, she explains how these disabilities can affect language learning. According to Yphantides, the characteristics of students with NDD can significantly impact their language learning abilities. Therefore, teachers must develop individual scaffolding methods to support the varying needs of students to achieve the general learning goals. While these scaffolding techniques can differ in approach, they share the same purpose, which is to provide support and enable students to reach higher levels of understanding.

> When the classroom is not only a place of supportive community learning based on the social model of disability and neurodiverse celebration, but also a place where the deficit model is eschewed and the strengths-based model is embraced, students are in a better position to be successful and to feel included (Yphantides, 2021, p. 44).

Furthermore, Kearns (2023) explains that dyslexia, ASD, and ADD/ADHD significantly affect how learners acquire EFL. She emphasizes that neurodivergent students benefit when their disabilities are recognized and when teachers are equipped with inclusive strategies: “First and foremost, when teachers are aware of the challenges their students face and the resources available to make learning more accessible, ESL/EFL students with SLDs[5] have a better chance of reaching their language and academic goals” (Kearns, 2023, p.12). However, although teachers may understand scaffolding strategies and apply them in the neurodiverse classroom, they can often lack confidence and experience. This affects how effectively scaffolding strategies are implemented for each learner. Therefore, Kearns highlights the importance of teacher confidence when applying scaffolding strategies, as this enhances the language learning experience for students.

Finally, Pillajo Mejia & Taco Guamani (2023) conduct qualitative research with a descriptive approach, interviewing two teachers regarding the EFL learning process of a student with ASD. Their study also includes classroom observations of a student with ASD to identify challenges and strengths during four English lessons. Pillajo Mejia & Taco Guamani (2023) highlight that learners with NDD, particularly those on the autism spectrum, can be efficient English learners. It is rather the teachers' attitude and lack of experience that pose challenges when students do not succeed. As stated: “The autistic student has strengths such as his good memory, his visual strength, and mainly he is not afraid of making mistakes and shows a good attitude towards learning English, proving to be a good learner of the language.” (Pillajo Mejia & Taco Guamani, 2023, p. viii).

[5] Specific Learning Difficulties, including dyslexia, autism spectrum disorder and ADHD/ADD (Kearns, 2023).

4. Method

The following section describes the methodological approach behind our empirical study. The semi-structured interviews mainly focused on teachers' perceptions of beneficial scaffolding strategies. However, when conducting interviews, teachers explained influencing factors in language learning for neurodivergent students. These factors, which include scaffolding strategies, were emphasised to shape the students' learning experience. Hence, we recognized influencing factors as our primary research question. By using a qualitative approach, we uncover key themes that contextually emerge from the data, providing deeper insights into teachers' perspectives and practices (Christoffersen & Johannessen, 2015). The method section is divided into subheadings to guide the reader through our research process. The subheadings are: Methodological Paradigm; Participants; Materials; Procedure; Analysis; and Ethical Considerations.

4.1 Methodological paradigm

As mentioned earlier, the methodological paradigm of choice is qualitative research, with a specific interest in the interpretive approach. The interpretive approach advocates for a qualitative, context-based perspective in researching different areas of life; therefore, it is beneficial for the study. Additionally, this approach is based on the idea that social context is crucial in shaping reality and knowledge (Pervin and Mokthar, 2022). Aligned with the interpretive approach, subjectivity is a focal point and of interest when focusing on teachers' perceptions. The interviewed teachers all have their personal experiences and perceptions of influencing factors for neurodivergent students and beneficial scaffolding strategies in a neurodiverse EFL classroom. Therefore, the aim of this study is not to evaluate their perspectives, but rather to identify common themes among the teachers, to provide a deeper insight into their personal experiences.

4.2 Participants

The study was conducted in the south of Sweden, mainly in the wider areas of Malmö. This decision was based on the availability of both in-person and digital interviews.

Due to our research aim, we specifically set out to find primary teachers who would volunteer as informants. In this study, we have five teachers participating. Our selection process for recruiting informants included the following criteria: they had to be certified teachers; they needed experience teaching English to students with NDD, and work in a primary school. Since the criteria for participants were selective, it was necessary to use a personal contact network. Furthermore, all participants were given pseudonyms to protect their identities. Lastly, the teachers were also cited in the text, with their pseudonyms and the year of the conducted interview.

Participant 1

Anna has over 20 years of experience in education. She has worked primarily as a language teacher, mainly in high school but also in 6th grade. Currently, she is employed at the Swedish Teachers' Union where she represents other teachers.

Participant 2

Bella has over 10 years of teaching experience, primarily in grades 1-3. She teaches all subjects, including English. In addition to her teaching role, Bella serves as a representative of the Swedish Teachers' Union.

Participant 3

Charlotte is a headteacher and an author, specializing in pedagogy. She has over 10 years of experience teaching English and Swedish in grades F-6.

Participant 4

Diana is a teacher with experience in education across various levels. She obtained her teaching degree in 2020 and is currently teaching grades 4-6, with a particular interest in English as a subject.

Participant 5

Ellie completed the Teach for Sweden program, which prepares academics for careers in education through leadership development, with 3 years of experience. Although she teaches grades 7-9 in the English subject, she has valuable experience due to her expertise in language teaching and diverse student needs.

4.3 Materials

At the beginning of this research process, our initial idea was to use a mixed-methods approach, combining both data from the quantitative and qualitative research methods. However, since the response rate of our pilot survey was lower than expected, we decided to use it solely to gain insight into teachers' perceptions, rather than as an instrument to collect data. Hence, our pilot survey will not be processed in the main study or further analyzed in this research. As Braun and Clarke (2013) emphasize, qualitative research provides a rich and contextualized understanding, making it particularly valuable when exploring our research focus. Therefore, we used the information from the pilot survey to refine our research area and shape a more targeted set of interview questions.

Building on the understanding of the qualitative approach, semi-structured interviews were conducted both in person and through digital meetings, as they offered the balance between structure and flexibility (Braun & Clarke, 2013). This approach gave the participants space to reflect on their own experiences in depth, while still following the interview template. Additionally, the structured set of core questions allowed us to thematically analyze and compare interview responses. The questions not only captured their views but also shed light on how and why they implemented these strategies.

4.4 Procedure

To collect data through the semi-structured interviews, we began by conducting a pilot survey to try out our initial questions. This process led to an insight into which questions were valuable. Thus, questions were systematically created and revised to provide information that could answer the research questions. Since our goal was to access examples of teachers' experiences, the questions were based on practical applications rather than theoretical models. After revising our questions from the pilot survey, they were tested in a trial interview. Following, they were further modified and 13 of them were concluded. Afterwards, the process of the interview began.

The finalized interview questions were divided into three parts (see Appendix A). The first part consisted of an icebreaker question, and the second part focused on getting to know our participants, consisting of three questions. This was followed by the introduction to the research and theme. Lastly, there were nine main questions regarding our research area. The structure was created to ease into the interview, to make it feel more like a conversation, rather than an official inquiry. This allowed both research partners and the teachers to participate in a discussion. The researchers alternated the interviews, with Researcher 1 conducting every other meeting and Researcher 2 conducting the remaining ones. Regardless, both were engaged in the process, listening and asking counter-questions to further understand the participants' experiences. Conducting our interviews in Swedish was a natural choice, as our conversations led us in that direction. However, the citations are presented in English. We are aware of the possibility that words get lost in translation. Therefore, we have been cautious and translated close to the original connotations.

Furthermore, a dictaphone and an external computer were used during the interviews. This enabled us to solely focus on the participants' input and answers. The duration of the interview was approximately 45 minutes, where some lasted longer and some shorter. Recording the interviews ensured that responses were captured accurately. However, when summarizing the data, we realized that there was less data from the question about difficulties for students with a diagnosis, in comparison to the other questions (see Appendix B). This may have been due to the semi-structured questions, as a part of the data was lost in the

formulation. If we had opted for more targeted, closed questions, we would perhaps have obtained more specific and detailed responses.

4.5 Thematic analysis

This study was based on the 6 phases of Braun and Clarke's thematic analysis (2006). These are: Familiarizing oneself with the data; Generating initial codes; Search for themes; Review themes; Define themes; and Write.

We started by familiarizing ourselves with the audio material that correlates to phase one. During the interviews, preliminary patterns were uncovered and identified in the data, and transcriptions provided a visual representation of the audio. To ensure trustworthiness, the transcribed data was cross-referenced with the audio for accuracy. The data from each participant’s transcriptions were then summarized into individual spreadsheets, resulting in easier access to information based on the participants.

The data was then transferred to a mindmap which according to Braun & Clarke (2006), served as a good method to organize the information. This resulted in a comprehensive overview where all emerging concepts and themes were mapped out. Thereafter, we established headlines to better capture the core of each category. The information from our transcription notes and mind map was then summarized into relevant sub-themes under the selected headlines. These sub-themes were later on reviewed and modified to establish concrete ones, as multiple collapsed into one another. The final disposition of the main themes presented in the Results and Discussion is: Relational Competence; Executive Functions; and Scaffolding Strategies for Neurodivergent EFL Learners. The purpose of the themes is to present the main results of the study in chronological order. This is complemented with an elaborate discussion, where the results are critically analyzed. Furthermore, citations from the transcripts are presented and integrated into the results to enhance trustworthiness.

4.6 Ethical considerations

This study aligns with the ethical principles outlined in the European Code of Conduct for Research Integrity, emphasizing reliability, honesty, respect, and responsibility (Vetenskapsrådet, 2024). To meet this requirement, all participants signed a consent form before the interview, where they were informed of the possibility to withdraw at any time necessary. Additionally, during recordings with each participant, we reiterated the information to confirm their informed consent before the interview. All participants were adults, and given the semi-structured interviews, we were mindful of both the benefits and limitations of the method used. While this approach gave flexibility, we were aware, but also concerned, that it might prevent the participants from expressing their genuine perceptions and authentic experiences. As researchers, we recognized that by structuring questions, we might unconsciously guide participants in a specific direction. Furthermore, data and information might also have been lost due to unasked questions. However, when conducting the interviews, we made a conscious effort to use neutral responses and affirmations to avoid emphasizing an opinionated point of view (Vetenskapsrådet, 2024).

Additionally, the interview questions were not sent to the participants beforehand to maintain the neutrality of the answers. Providing the questions in advance could have been beneficial, allowing participants to familiarize themselves beforehand, and therefore providing more nuanced answers. However, for this research, we aimed to obtain authentic responses based on their experience and tested methods.

Lastly, this study is aligned with the General Data Protection Regulation (GDPR) and Swedish national protection laws, as multiple measures were acquired to ensure the integrity of participants' data (Vetenskapsrådet, 2024). Finally, the transcribed data, audio recordings, and consent forms were stored on Malmö University's internal platform. As mentioned earlier, all participants were also given pseudonyms to protect their identities.

5. Results and discussion

In the following section, we are drawing on our semi-structured interviews, theoretical framework, and the Swedish curriculum to gain a nuanced understanding of the following research questions:

1) What factors influence language learning for neurodivergent students according to some primary EFL teachers?

2) Which scaffolding strategies do some primary school EFL teachers perceive as beneficial for language learning in supporting neurodivergent students?.

Based on our research questions, we have developed three key themes through thematic analysis: *Relational competence*, *Executive functions*, and *Scaffolding strategies for neurodivergent EFL learners*. Each theme addresses one or both of our research questions. Relational competence and Executive functions focus on both questions. Additionally, Scaffolding strategies for neurodivergent EFL learners address the second question. Under each theme, we will present the results with illustrated examples from the interviews, and then provide a discussion.

5.1 Relational competence

A recurring theme in our interviews is the emphasis on a *child-centered approach*.[6] The teachers describe it as a highlighting factor to enhance language learning for neurodiverse classrooms. Charlotte (2025) is among the teachers who describe this approach by stating: “I follow students' interests a lot. I very rarely follow already-made material, but I create a lot based on what they find fun”.

[6] The child-centered approach emphasizes understanding each child’s needs and involving them actively in their own learning (Catalano et al., 2025).

Anna also confirms this by saying:

> For me, it's about raising awareness and finding strategies together with the student that allow the student to develop in a good way, so that the progression is that you learn more and more. So it's support from me to you, from yourself to yourself (Anna, 2025).

Another perspective within relational competence is *peer learning*. One teacher describes it as a dynamic learning process, stating: “It's also about being able to discuss when there's something I don’t know, I can ask my neighbor, then they also get a learning situation” (Bella, 2025). However, another teacher highlights a potential challenge, noting that peer learning in the classroom may result in each pair consisting of one uncertain learner and one stronger counterpart (Charlotte, 2025).

Furthermore, the *non-divisive approach* is showcased, where neurotypical and neurodivergent students learn together in the classroom. Rather than separating based on learning needs, the teachers in our study underline the importance of maintaining a unified environment, where everyone can benefit from structured learning and support. Anna states: “When it comes to the classroom situation and working with children in need of special support, the methods described are usually beneficial for everyone” (Anna, 2025). Furthermore, Charlotte (2025) is also among those who affirm this: “I think a lot about adaptations. Adapting based on the students. Adapting on a broad basis, so that there is opportunity and that it should not be anything out of the ordinary, but that it should be available to everyone and those who need it” (Charlotte, 2025).

Differentiation is also an ability that emerges as a natural outcome of relational competence. It is when a teacher’s strategies are adapted to accommodate students’ varying abilities, and learning styles, but also their motivation. To illustrate, Anna (2025) expresses that neurodivergent students most often have specific interests, and tapping into those interests can be the key to engaging them in learning.

The presented results related to relational competence highlight how teachers actively implement it in their classrooms, by prioritizing a child-centered approach, peer learning, a non-divisive approach, and differentiation. These strategies are practical experiences of the interviewed teachers, and invite further discussion on how theories support or challenge these approaches.

The teachers emphasize a child-centered approach as it is believed to help students feel more engaged and supported, which in turn benefits their language development. This is due to lessons being tailored to student interests, what they need assistance with, and what they are already capable of. Furthermore, it also encourages independence, since students feel more in control and confident in their knowledge. Additionally, a child-centered approach can promote collaborative learning, as students will become more willing to engage and learn with peers when they feel confident and capable.

Moreover, the interviewed teachers express that peer learning is essential. Rather than separating based on learning needs, they express a need to maintain a unified and engaging environment where everyone can benefit from structured learning and support. From a theoretical standpoint, Vygotsky (1978) argues that peer learning is preferred as it reinforces the idea that learning is a socially mediated process rather than an individual task. Furthermore, peer learning supports students to achieve their varying levels of ability (Vygotsky, 1978). While there can be positive effects of peer learning, individualized scaffolding is still emphasized. Bruner (2021) is among those who propose individualized scaffolding rather than peer learning. Similarly, Gibbons (2002) highlights that scaffolding should support learners in developing within their own ZPD. Nonetheless, a teacher also acknowledges that a potential challenge with peer learning can be the contrast in students' knowledge levels. This makes it difficult for both parties to benefit equally, as one student may not be challenged enough, while the other may not fully be engaged. Therefore, we recognize that peer learning should consider students' individual ZPD, ensuring balanced skill development for both parties.

As mentioned, the teachers in our study apply an emphasis on whole-class scaffolding, aiming to create a structured and inclusive environment where neurodivergent and neurotypical students can benefit from the same support system. This non-divisive approach raises concerns regarding how scaffolding strategies influence neurodivergent students, and how it may not provide the targeted support they need. The results suggest that teachers perceive structured repetition and peer collaboration as beneficial for all students, yet the question remains if these strategies sufficiently address the needs of neurodivergent learners in a non-divisive classroom. Therefore, one can argue that there is a difference between theory and practice. We acknowledge the benefits of whole-class scaffolding; every student benefits from structure and clarity. However, there are existing neurological differences between neurotypical and neurodivergent students. This is not to disclose that one is superior to the other, but rather to recognize a variety of neurological profiles and attend to them. Nevertheless, neurodevelopmental disorders are also on a spectrum, therefore, our framework proposes a hybrid scaffolding model as the most beneficial approach. This approach combines structured whole-class strategies with tailored individualized support. Thus, positive outcomes exist with this mixture of scaffolding for neurodivergent learners.

This brings us to the concept of differentiation. Differentiation assures that neurodivergent learners receive tailored support to succeed in the classroom. Additionally, this also highlights the teacher's key role in adjusting expectations of the students, along with the content and methods to meet diverse learning needs (Catalano et al., 2025). Therefore, differentiation allows for individualized support in a non-divisive classroom. Gibbons (2002) emphasizes that this method is beneficial for tailoring support to students in need, while the teacher is free to accommodate the rest of the class. Consequently, differentiation enables teachers to identify the strengths and limitations of each student, which allows them to tailor scaffolding strategies accordingly.

To summarize, within relational competence, child-centered approach, peer learning, a non-divisive classroom, and differentiation were highlighted. The teachers emphasize a child-centered approach as it is believed to be essential for fostering language development. Additionally, we discussed that when language learning is adapted to their interests, needs, and abilities, it encourages independence and collaborative learning. Similarly, peer learning is emphasized as a beneficial strategy. However, a teacher also suggested that challenges

emerge when both students' individual needs are not taken into consideration. Furthermore, the non-divisive approach can foster inclusion in a neurodiverse classroom. However, whole-class scaffolding raises concerns about how it can be beneficial for addressing individual needs of neurodivergent students in a classroom setting. We recognized that the teachers prefer whole-class scaffolding, yet the theories suggest that individualized scaffolding is more beneficial (Bruner, 2021; Gibbons, 2002). To connect theory and practice, differentiation is a method in which the teachers adapt instruction based on the varying needs, motivations, and learning styles of neurodivergent students. Lastly, the informants recognize that scaffolding strategies must be flexible to meet varying needs while maintaining a clear classroom structure. This ensures that neurodivergent students receive tailored support within a whole-class setting.

5.2 Executive functions

One of the results connected to the executive functions is *sensory overload.* Students often run out of energy mid-lesson and have a hard time focusing for longer periods. This is observed by Bella, who states that: "They usually don't have the energy. They can't last a whole lesson" (Bella, 2025). The teachers also argue that it is often due to their heightened sensitivity to sensory input, which affects them both mentally and physically. She goes on to emphasize the importance of sensory input, by stating: "So impressions are important so that it doesn't become too much for an NDD student" (Bella, 2025). Additionally, regarding sensory overload, teachers recognize that students with NDD often struggle with energy depletion during the day. For example, switching between tasks appears to affect their ability to remain productive.

Therefore, all interviewed teachers highlight how breaking down tasks into smaller steps can help neurodivergent students structure their work more effectively. Moreover, they go on to explain that providing visual aids such as checklists and structured task instructions supports their working memory and helps to filter information. Charlotte (2025) explains that during her English lessons, all students receive learning matrices and initial checklists, outlining the topic and required components of the task:

> Some checklists are made so that students can choose whether they want them or not, while other checklists are given at the beginning of an area with information on what is going to happen so that the students can keep track. And then there are clarifying checklists, where you break it down even more for those who need it, and they are voluntary (Charlotte, 2025).

The second key result within executive functions is *special interests* and *hyperfixation* in neurodivergent students. In terms of special interests, most participants in the study observed that it can influence whether students experience challenges or advantages in EFL learning. According to Bella (2025), incorporating the interests of neurodivergent students into lessons can increase their motivation and promote active participation. Another aspect teachers highlight is that YouTube and video games are not merely hobbies, but often serve as either special interests or hyperfixations, increasing engagement and enhancing accessibility due to exposure to English. The activities are not solely increasing engagement, but also reinforce their comprehension and language skills. Diana says: “I have had some students with a diagnosis who were very strong verbally” (Diana, 2025).

However, special interests and hyperfixations are not without limitations. Particularly, teachers observe how students with hyperfixations have a hard time concentrating and focusing on tasks outside of their fixation. Additionally, students’ special interests and fixations may eventually stagnate, leading to disengagement. Diana recognizes this by saying: “If teaching solely relies on students’ special interests, teachers may struggle to maintain common ground with them if their interests shift” (Diana, 2025). To meet this limitation, teachers found peer learning to be an effective tool, keeping lesson activities interesting beyond special interests and hyperfixations.

The presented results demonstrate how sensory overload influences neurodivergent students significantly, which affects their ability to manage executive functions and sustain attention for longer periods. We recognize that the classroom environment has an important role in students’ performance to meet these limitations. We acknowledge how excessive noise or visual distractions can lead to cognitive fatigue, which makes it difficult for students to

sustain attention and stay engaged for longer periods. Furthermore, it is emphasized that breaking down tasks into smaller steps with the help of checklists is a beneficial strategy to limit the risk of cognitive fatigue. Therefore, these strategies can reduce potential cognitive load and instead support their task-switching abilities. Additionally, by recognizing these challenges and using adapted scaffolding strategies, students can make meaningful connections and actively participate, which enhances their learning experience (Bruner, 2021).

Another discussion point is the role of special interests and hyperfixation, particularly concerning ADHD/ADD and ASD. The interviewed teachers describe how such special interests act as a strong motivator for learning. In fact, it is suggested that neurodivergent students who engage in special interests exhibit higher levels of concentration and motivation. Aligned with this, the National Autistic Society (2020) suggests that special interests can act as powerful motivators, fostering higher levels of engagement and concentration. This is largely because it activates the dopamine reward system, providing motivation and sustained attention in learning (Huang, 2022). Additionally, special interests help create a sense of stability and predictability, reducing cognitive load (National Autistic Society, 2020). Furthermore, teachers observe a potential link between neurodivergent students' digital engagement outside of school. Through platforms such as YouTube and video games, students develop strong verbal skills, often excelling in these areas. This aligns with Piaget's (2013) theory that students use their prior knowledge gained from experiences, to accommodate new learning in the English classroom.

Nonetheless, relying on special interests and hyperfixation also has its limitations. If teachers solely structure lessons around them, there may be a risk of decreased lesson engagement once the special interests and hyperfixations eventually stagnate. Moreover, hyperfixation can make it difficult for students to transition between tasks, especially when sensory input plays a major part in their ability to focus. While building on their interests can enhance engagement, we also recognize the risk if tasks rely mainly on what they have an interest in. From our perspective, growth happens when students are challenged and introduced to new perspectives. Therefore, a balance has to be present between interest and requirements, which also ensures that curriculum goals are met. Thus, teachers need to find a balance between interest-based learning and adaptability when catering to neurodivergent students. One

effective method is peer learning. It allows neurodivergent students to engage in social interactions that extend beyond a single fixation, thus enhancing cognitive flexibility.

Moreover, Vygotsky (1978) emphasizes how learning is a social process, and through collaboration with knowledgeable peers, students can develop new skills. Additionally, with peer learning, students are naturally exposed to cognitive demands through social cues and interactions. This requires a switch between abilities depending on social settings and different tasks. Therefore, peer learning gradually strengthens their task-switching abilities as they continuously need to navigate through topics and perspectives, which can reduce the risk of sensory overload. Peer learning can also strengthen the sense of accomplishment, as they are actively productive and engaged in the EFL classroom. Thus, we suggest that peer learning plays an important role in fostering adaptability in neurodivergent students

To summarize, sensory overload within executive functions is a state where students experience energy depletion, leading to difficulties in focusing. Consequently, this leads to cognitive fatigue, therefore, it is important to implement scaffolding strategies that help students manage and maintain energy levels throughout the day. Beneficial scaffolding techniques to meet limitations of executive functions are checklists and peer learning. With social interactions from peer learning, neurodivergent students become accustomed to adapting their focus through social and cognitive cues. This ultimately leads to strengthening abilities to transition between tasks. Thus, peer learning reinforces the idea that developing knowledge is a social process, where neurodivergent students develop flexibility and a deeper sense of accomplishment in the EFL classroom.

5.3 Scaffolding strategies for neurodivergent EFL learners

The most frequent strategy that all informants use in the classroom is *image support* in various forms. Charlotte (2025) states: “I have worked a lot with checklists and conceptual maps as they concretize information and make it accessible to all students”. Another widely recognized method within image support is checklists. The structure of checklists ensures that

tasks are managed step by step, encouraging student self-efficacy. Charlotte (2025) highlights that checklists do not pressure the students to remember all instructions, but rather support them in working efficiently.

Another preferred method is *multimodality*. This strategy engages multiple senses simultaneously, which enhances understanding. Ellie (2025) emphasizes that it is highly beneficial for students with dyslexia, as they get to process auditory input in parallel to visual input. Moreover, when asking Ellie regarding which scaffolding strategy she observes as beneficial for multiple students with NDD, she answered: “Listen to texts while reading”.

Furthermore, *peer learning* is recognized as a beneficial scaffolding strategy that leads to interaction and enhances engagement among neurodivergent students. Bella explains that it allows students to help each other, leading to a learning environment in social settings: "It's also about being able to discuss when there's something I do not know, I can ask my neighbor, then they also get a learning situation." (Bella, 2025). Peer learning as a strategy can create a motivating dynamic, instead of relying on tasks that solely mirror special interests or hyperfixations. Moreover, it benefits students who may lack confidence in the English classroom. Bella says: "By discussing with a classmate, the students can feel more comfortable” (Bella, 2025).

The last recurring method that is recommended by the teachers is *modeling*. This is when the teachers demonstrate the assignment, which then displays the expected task outcome. As Ellie (2025) states: “When you read a text, you read it aloud, for example” (Ellie, 2025).

Following this, the way the *learning environment* is structured is highlighted and explained as important when creating a learning-enriched space. Bella (2025) explains the value of visual aids when supporting neurodivergent students. She argues that a classroom with numbers and the alphabet displayed on the walls provides a supporting learning environment: “Because they, as well, are images, and you see it daily. In the end, you have that image imprinted on your retina, and the students know it because they have seen it so many times” (Bella, 2025). Hence, she points out that a learning-enriched space supports the students by exposing them

to language learning through meaningful ways (Bella, 2025). Additionally, Bella (2025) expresses that when neurodivergent students are exposed to visual elements of their environment, such as the alphabet, they internalize the information and make it a part of their knowledge. In correlation, Anna specifies that a clear lesson plan in the students' learning environment will provide structure and expectations from students: "I think it's really important to be well prepared. So that the lessons don't become; *Oh, what am I doing today?* So well-planned lessons based on the group you're teaching" (Anna, 2025). Additionally, another teacher says that individual task explanations are important for some students: "To give extra scaffolding, you provide an individual review after doing it at the group level" (Ellie, 2025).

Inclusion in terms of teaching practices also enables a positive educational experience for all learners, according to the teachers. One inclusive strategy that was identified is interest-based scaffolding. The teachers adapt their method and strategy based on the students' interests, resulting in greater engagement and motivation. Charlotte (2025) explains that: "It may be that the concentration or interest is not always there, but it has still worked if you adapt it based on their interests" (Charlotte, 2025). Furthermore, textbooks are highly recommended due to their differentiating nature, which caters to different levels of knowledge. Diana (2025) confirms this by saying: "There are books at an advanced level or a slightly easier level; students with different diagnoses or needs can use the level that is most suitable and best for them" (Diana, 2025). Another focal point of inclusion is digitalization. The teachers find it to amplify accessibility for neurodivergent students, through image support and multimodal approaches. Anna (2025) explains that through the digitalization of teaching materials in later years, teachers are now able to: "Listen, read, pause, stop and underline, there are a lot of such functions" (Anna, 2025). Furthermore, she adds how digitalization ensures engagement, as the teachers can use diverse ways to engage with the digital content (Anna, 2025).

However, limitations are also presented in the inclusive classroom. Anna (2025) observes that if lessons solely focus on supporting instead of challenging advanced learners, teachers might establish a new baseline for learning. This may not meet each student's learning needs. She states, "This may result in a shift in the level of instruction for the students, including those

who are more advanced in their development" (Anna, 2025). Therefore, this can lead to exclusion in an attempt to gain inclusion.

The presented results acknowledge how information through concept maps and image support can help to bridge the gap between what a student can achieve independently and what they can achieve with support (Vygotsky, 1978). Additionally, images such as checklists can support neurodivergent students in gaining more knowledge, which is not as needed once they grow more confident and independent (Bruner, 2021). In correlation with the Swedish curriculum: "The teacher shall stimulate, guide and provide extra adaptations or special support to pupils who have difficulties" (Skolverket, 2022, p.14).

Following, multimodality engages multiple senses simultaneously, while enhancing comprehension, especially for students with dyslexia, as they require both auditory and visual input. From our perspective as researchers, this multimodal approach can arguably support pronunciation and word recognition. Aligned with Vygotsky's (1978) mediation theory, knowledge is constructed through interaction with the environment and tools to enhance learning. Along with this theory, suggestions are made that digital resources such as interactive texts serve as a tool for language improvement. Through digitalization, new opportunities to enhance accessibility and motivation are created. The multimodal approach is also reflected in the Swedish curriculum, which states: "Clearly spoken English and simple texts that are instructional, descriptive and stimulate interaction, from a variety of media, also in combination with illustrations" (Skolverket, 2022, p. 46). Thus, the Swedish communicative classroom recognizes multimodality in enhancing language learning strategies. Furthermore, the curriculum suggests that digital tools through digitalization cater to diverse learning styles, which further reinforces individual language learning (Skolverket, 2022).

Another discussion point is that modeling provides clarity by reducing cognitive overload and offering neurodivergent students support before they are expected to become proficient (Bruner, 2021). This approach ensures guidance during significant tasks, gradually leading to independence. The Swedish curriculum highlights this by emphasizing communicative competence among students and the expectation to engage in simple conversations

(Skolverket, 2022). Hence, modeling strategies are essential for students' oral language development.

Additionally, peer learning is perceived as a beneficial scaffolding strategy. Vygotsky (1978) supports peer learning as it enables learners to accomplish tasks beyond their abilities. This social interaction encourages language learning and enhances executive functions such as working memory and cognitive flexibility, since these factors often affect neurodivergent students in the EFL classroom. While it can be a beneficial strategy, it may not be an optional strategy for everyone. Nevertheless, it challenges traditional notions of communication. This reinforces that language is a social and dynamic interaction. By collaborating with classmates, they experience diverse communication styles, which later on may reduce the fear of mistakes and encourage experimentation. The Swedish curriculum agrees with this outcome, stating that teachers should provide opportunities for students to express themselves and communicate in spoken English (Skolverket, 2022).

Furthermore, a language-rich environment supports learners through engaging practices and surroundings (Vygotsky, 1978). Visual aids have an essential role in English language learning. By providing the students with constant exposure to main concepts, such as the alphabet, visual aids help strengthen language learning. Image support and checklists in the classroom mainly work because students remember the things they see daily. Gibbons (2020) emphasizes that image support fosters linguistic development, aligning with Bruner’s (2021) theory that images, charts, and diagrams enhance learning. Through visual aids, teachers encourage active learning by helping students connect new and current knowledge with their personal experience. This aligns with Sweden’s inclusive education because image support ensures that knowledge is accessible (Skolverket, 2022).

Lastly, a scaffolding tool used frequently in the EFL classroom is textbooks, which provide structured yet flexible support for learners on different levels. Gibbons (2002) highlights how differentiating learning material optimizes comprehension by ensuring all learners have a foundation to build on. Thereafter, Vygotsky (1978) highlights the relevance of providing learning materials that meet students at their current level, while gradually adding challenging tasks. In Sweden, textbooks with various levels ensure that individual learning

needs are met while maintaining curriculum alignments. Additionally, the Swedish curriculum also emphasizes a balance between structured guidance and independence (Skolverket, 2022). Therefore, we believe that by incorporating a range of texts with varying levels, teachers can cater to diverse learning needs, providing accessible challenges that help students learn at their own pace. In turn, this may foster confidence, because it gives students a sense of capability.

6. Conclusion

This study is based on a limited number of participants and relies on self-reported experiences, but it highlights an important gap in research. Many existing studies either generalize scaffolding strategies for all learners or mainly focus on neurotypical students. To address this, we explore factors that influence language learning for neurodivergent students, based on insights from some primary EFL teachers. We also highlight the scaffolding strategies these teachers perceive as beneficial in the neurodiverse classroom.

Using qualitative research and semi-structured interviews, three key themes are identified: Relational Competence, Executive Functions, and Scaffolding Strategies for Neurodivergent EFL Learners. Relational competence, which includes a child-centered approach, peer learning, the non-divisive approach, and differentiation, has an essential role in inclusive EFL teaching for neurodivergent students. The teachers highlight the importance of creating supportive learning environments where everyone can participate collaboratively with whole-class scaffolding. Yet, we highlight how the non-divisive approach raises concerns regarding its ability to ensure that every student develops within their own ZPD. Chosen theories also suggest the importance of individual scaffolding instead. Therefore, our study highlights the balance of both whole-class and individualized support for neurodivergent learners. This is what we refer to as the hybrid scaffolding model.

Furthermore, executive functions such as sensory overload, special interests, and hyperfixation emerged with benefits and challenges for neurodivergent students. Special interests and hyperfixations are observed as powerful motivators, fostering higher levels of engagement and concentration. Special interests can also reinforce a sense of stability and predictability, which may reduce cognitive demand in the EFL classroom. Additionally, the teachers acknowledge YouTube and video games as specific interests and hyperfixations, which in turn are believed to stimulate the students' English verbal skills. However, task transitioning can be exceptionally harder if the task's content is mainly focused on specific interests and hyperfixations. Instead, a balance has to be established between interest-based learning and adaptability. In addition, the teachers explain that the surrounding environment has a crucial impact on sensory overload. In response, task breakdowns, visual aids, and peer

learning are three methods observed as beneficial when supporting neurodivergent students in the EFL classroom.

Thereafter, scaffolding strategies such as multimodality, modeling, peer learning, and structured checklists are widely recognized as beneficial. Teachers find that these strategies not only benefit neurodivergent students but also support overall language learning in inclusive classrooms. While the teachers displayed a valuable understanding of scaffolding strategies, our results suggest that there is a need for further training in relational competence and understanding of executive functions when selecting targeted scaffolding methods for neurodivergent learners.

Ultimately, inclusion in the EFL classroom is not just about neurodivergent students being present, but rather about them being involved even if their cognitive variations are different from the neurotypical norm. Instead, strategies and methods must be adapted to a neurodiverse classroom. This ensures that every student, despite cognitive profile, can thrive in an inclusive EFL classroom. When addressing future research, compelling areas to explore could include perspectives on teacher training, scaffolding strategies, and long-term learning outcomes for neurodivergent learners. When finalizing this research, one question remains: How can teachers' strategies further evolve to ensure that neurodivergent students are not solely accommodated, but also included in the EFL classroom?

7. References

Attention Deficit Disorder Association. (12 July 2024). Understanding ADHD. https://add.org/adhd-hyperfixation/

Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. Sage.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3. 77-101. 10.1191/1478088706qp063oa.

Bruner, J.S. (2021). *In search of pedagogy: the selected works of Jerome Bruner*. Vol. 1. (Malmö). MTM.

Catalano, H., & Rus, A., & Gabriela, M., & Dohotaru, A. (2025). The child-centered paradigm and its implications for the continuous professional development of early childhood teachers. *International Journal of Social and Educational Innovation*, 12, 7-26. http://doi.org/10.5281/zenodo.14775576

Christoffersen, L., & Johannessen, A. (2015). *Forskningsmetoder för lärarstudenter* (1:a uppl.). Studentlitteratur AB.

Doyle, N. (2020). Neurodiversity at work: A biopsychosocial model and the impact on working adults. British Medical Bulletin, 135(1), 108–125. https://doi.org/10.1093/bmb/ldaa021

Frolli, A., Cerciello, F., Esposito, C., Ciotola, S., De Candia, G., Ricci, M. C., & Russo, M. G. (2022). Executive functions and foreign language learning. *Pediatric Reports*, 14(4), 450-456. https://doi.org/10.3390/pediatric14040053

Gibbons, P. (2002). *Scaffolding language, scaffolding learning: teaching second language learners in the mainstream classroom*. Portsmouth, NH: Heinemann.

Huang, C. (2022). A snapshot into ADHD: The impact of hyperfixations and hyperfocus from adolescence to Adulthood. *Journal of Student Research*, *11*(3). https://doi.org/10.47611/jsrhs.v11i3.2987

Jensen, M. (2012). *Kommunikation i klassrummet*. (1. uppl.) Lund: Studentlitteratur.

Kearns, K. (2023). Understanding and identifying specific learning difficulties: Dyslexia, autism spectrum, and attention deficit/hyperactivity in the adult ESL/EFL classroom (Master's Thesis, University of San Francisco). Master's Projects and Capstones. 1489. https://repository.usfca.edu/cgi/viewcontent.cgi?article=2846&context=capstone

National Autistic Society. (14 August 2020). Obsessions and repetitive behaviour - a guide for all audiences. https://www.autism.org.uk/advice-and-guidance/topics/behaviour/obsessions/all-audiences

Pervin, N., & Mokhtar, M. (2022). The interpretivist research paradigm: A subjective notion of a social context. *International Journal of Academic Research in Progressive Education and Development,* 11(2), 419–428. https://doi.org/10.6007/IJARPED/v11-i2/12938

Piaget, J. (2013). *Barnets själsliga utveckling*. (3. uppl.) Stockholm: Norstedt.

Pillajo Mejia, D. S., & Taco Guamani, K. F. (2023). *EFL teaching-learning process of a student with autism spectrum disorder* [Undergraduate thesis, Universidad Técnica de Cotopaxi]. UTC Repository. https://repositorio.utc.edu.ec/bitstream/27000/9857/1/PP-000177.pdf

Quimosing, A. (2022). Learning English as a foreign language (EFL): A narratology. *SALTeL Journal (Southeast Asia Language Teaching and Learning).* 5. 13-21. https://doi.org/10.35307/saltel.v5i2.85.

Roos, H. (2020). *Inkluderande matematikundervisning - tidiga insatser i FK-6*. Natur & Kultur.

Skolverket. (2022). Läroplan för grundskolan, förskoleklassen och fritidshemmet. Stockholm: Skolverket. https://www.skolverket.se/getFile?file=13128

Specialpedagogiska skolmyndigheten. (2024). Neuropsykiatriska funktionsnedsättningar, NPF. https://www.spsm.se/funktionsnedsattningar/neuropsykiatriska-funktionsnedsattningar-npf/

Vetenskapsrådet. (2024). God forskningssed [Elektronisk resurs]. (Reviderad utgåva). Stockholm: Vetenskapsrådet. https://www.vr.se/analys/rapporter/vara-rapporter/2024-10-02-god-forskningssed-2024.html

Vygotskij, L.S. (1978). *Mind in Society: the development of higher psychological processes*. Cambridge, Mass.: Harvard U.P.

World Health Organization. (2025). *ICD-11 for mortality and morbidity statistics.* https://icd.who.int/browse11/l-m/en#/http%3a%2f%2fid.who.int%2ficd%2fentity%2f1207960454

Yphantides, J. (2021). Supporting Neurodiverse Students in the EFL Classroom: A Cross-border Challenge and Responsibility. *English Scholarship Beyond Borders.* Issue 1, Volume (7), 34-49. https://www.englishscholarsbeyondborders.org/wp-content/uploads/2021/08/Jennifer-Yphantides.pdf

8. Appendices

8.1 Appendix A: Interview questions

Part 1	Ice Breaker	Så vi förstår att du har undervisat i engelska, stämmer det? Vad fick dig att vilja bli lärare?
Part 2	Introduction	När tog du examen? Hur länge har du undervisat i ämnet engelska?
		Vilka åldersgrupper har du undervisat inom?
		Hur skulle du med dina egna ord beskriva din undervisningsstil?
Part 3	Main Questions	När du hör scaffolding (stödstrukturer) i undervisningssammanhang, vad tänker du på då?
		Hur tänker du kring att använda stödstrukturer i undervisningen för att hjälpa elever med olika inlärningsbehov, vilket i det här sammanhanget är elever med NPF?
		Har du erfarenhet av att undervisa elever med olika neuropsykiatriska funktionsnedsättningar (NPF)? Om du känner dig bekväm att dela, vilka typer av diagnoser har du stött på i din undervisning? De mest förekommande diagnoserna? (Med detta syftar vi på officiellt fastställda diagnoser).
		Vad upplever du som de största utmaningarna för elever med NPF när de lär sig engelska i klassrummet?
		Kan du ge exempel på en situation där du har behövt ge extra stöd till en elev i engelskundervisningen? Hur gjorde du då?
		Har du märkt att vissa typer av stöd fungerar bättre än andra för elever med NPF? I så fall, vilka?
		Varför tror du att de strategierna är fördelaktiga?
		I forskning syns det att karaktärsdrag från NPF diagnos kan vara fördelaktiga i undervisningen för eleverna. Hur har du observerat att vissa styrkor hos elever med NPF-diagnos kan påverka deras lärande av engelska? Ge gärna exempel.
		Hur brukar du balansera att ge extra stöd till vissa elever samtidigt som du undervisar hela klassen?

8.2 Appendix B: Translated interview questions

Part 1	Ice Breaker	So we understand that you have taught English, correct? What made you want to become a teacher?
Part 2	Introduction	When did you graduate? How long have you been teaching the subject of English?
		What ages have you taught?
		In your own words, how would you describe your teaching style?
Part 3	Main Questions	When you hear scaffolding (support structures) in the teaching context, what do you think of?
		How do you reason regarding using support structures in teaching to help students with different learning needs, which in this context are students with NDD?
		Do you have experience teaching students with various neurodevelopmental disorders (NDD)? If you feel comfortable sharing, what types of diagnoses have you encountered in your teaching? The most common diagnoses? (By this, we mean officially established diagnoses).
		What do you see as the biggest challenges for students with NPF when learning English in the classroom?
		Can you give an example of a situation where you had to give extra support to a student in English teaching? How did you do then?
		Have you noticed that some types of support work better than others for students with NPF? If so, which ones?
		Why do you think those strategies are beneficial?
		Research shows that character traits associated with NDD diagnosis in students can be beneficial when learning. How have you observed that certain strengths of students with a diagnosis of NPF may affect their learning of English? Please present examples.
		How do you usually balance giving extra support to some students while simultaneously teaching the rest of the class?