Learning Strategies for Students with Dyslexia

A qualitative case study about learning strategies taught to students with dyslexia
Abstract

This paper presents a case study carried through with interviews from three remedial teachers in English working with students with dyslexia at public schools in the south of Sweden. The aim of the study was to investigate the learning strategies used by remedial teachers in order to help students with dyslexia to facilitate their learning process and reach higher grades in English as a foreign language. The results of this study indicated an agreement between the remedial teachers and previous research found regarding the use of technological learning aids, the adjustment made for students with dyslexia as well as using formative assessment. However, the remedial teachers appeared to show a divided approach to the aspect of focusing on grading requirements when supporting student with dyslexia in English. Since previous research on the area of working on grades appeared to be deficient, these finding could indicate a need for research of effective strategies to support students with dyslexia in developing and reaching higher grades in English. This study therefore concludes the necessity of further and wider research within the area of supporting student with dyslexia in the process of learning a foreign language.

Keywords: Dyslexia, EFL, Swedish High School, Remedial teachers, Learning strategies, Language didactics.
1 Introduction

The organisation Dyslexia International claims that 700 million people in the world are at risk of living a life of illiteracy due to their dyslexia (DI, 2014:2). The organisation attributes this state of affairs to teachers' lack of knowledge and emphasizes the responsibility of creating awareness in the teaching programs. This project will therefore investigate effective learning strategies when working with students with dyslexia to highlight the importance of this area and its complexity.

This section of the paper will give an introduction to the area of dyslexia in second language acquisition with connections to previous research and the background of the support for students with disabilities in the Swedish school system for high school. The aim of this study is to investigate the range of strategies and resources used in high schools in the south of Sweden in facilitating students with dyslexia to achieve high grades in English. The relevance of this research is in presenting an extract of experiences and used strategies by special needs teachers in Sweden. The findings of this study shed light on the current situation for students with dyslexia for the educational sector.

1.1 Aim of study

The aim of this case study is to investigate what strategies and resources are used for helping students in Swedish high schools with dyslexia to learn English as a foreign language. This paper seeks to shed light on the present situation with regards to the range, or lack of support that students with dyslexia in three high schools in southern Sweden may receive and how remedial teachers deal with the students’ requests for support in the classroom from students and teachers. This paper will further show a comparison between the theoretical support and research within the area of efficient strategies to facilitate the process of learning and the strategies used to help students with dyslexia to work towards higher grades. The objective of this study is to offer insight to an area of importance for teachers, as well as remedial teachers, serving as an
inspiration for further research. More specifically, this case study will investigate the following aspects.

1. How do remedial teachers help students with dyslexia develop and aim towards higher grades, from C to A, in Upper Secondary school?

2. What teaching strategies do remedial teachers in the South of Sweden use to facilitate the learning process for students with dyslexia in English as a foreign language?

It could therefore be argued that this essay is of interest for teachers, and teacher trainees, amongst others, that work in a learning environment, in order to understand and support learners with dyslexia and provide these students with the same opportunities as other students to reach higher grades in English.

1.2 Background

Public Swedish schools today are administered by the municipality in which they are located. However, the Swedish Government creates national goals, a curriculum and syllabi for all Swedish schools to follow. The Swedish National Agency for Education works as “the central administrative authority for the public school system”, including adult education amongst other educational areas (The Swedish National Agency for Education, henceforth SNAE, 2015 [www]). The purpose of the Agency as a supervisory authority is to work continuously with the evaluation of all public schools and to provide support for development in order to assure equal education for all students (The Swedish National Agency for Education, 2011). To assure equality for all students, the Swedish schools are obliged by the Government to provide support and functioning strategies to help students with different disabilities (SNAE, 2011 [www]; The National Agency for Special Needs Education and School (henceforth SPMS), 2012 [www]).

However, the Swedish school system is built upon a philosophy of equality and right to learn for all students regardless of intelligence or need of support (The European Agency for Special Needs and Inclusive Education, 2015b [www]). Therefore, the
Swedish school curriculum for compulsory levels does not make a distinction between students with or without disabilities thus advocating a comprehensive school environment embodying an inclusive education system (The European Agency for Special Needs and Inclusive Education, 2015b [www]).

As a result, if students, parents or teachers do not apply for or seek special support, the European Agency for Special Needs and Inclusive Education (2015b) states that Swedish students are obliged to proceed with the same general education as others. The Swedish National Agency for Education (2015b) argues however, that there is no requirement for students with a diagnosis or specific disabilities to have the right to special support in the Swedish schools. The Agency (2011 [www]) claims that students, with or without different disabilities, that do not achieve the minimum requirements and national goals in one or several subjects ought to be reported to the school principal by the teachers for further investigation. The school principal is thereafter responsible to proceed with the investigation and find solutions for the student in order to achieve the goals for each subject. The school principal is obliged to include the student in the process as well as the legal guardians if the student is under age (The European Agency for Special Needs and Inclusive Education, 2015 [www]).

The National Agency for Special Needs Education and School was therefore created by the Swedish Government to administer and validate special needs provision in schools for students with difficulties (SPSM [www]). The SPSM (2015 [www]) claim that support and resources for helping students with learning difficulties is a mandatory requirement for these students to be able to succeed. As the national goals in several of the subjects taught in Swedish schools are based on reading and comprehension of text, the SPMS (2015) argues that 'alternative learning resources' (my translation) are therefore key aspects in helping students to reach the goals. Alternative learning aids are such as used by students with learning disabilities to help them reach the same understanding as students without disabilities. Commonly used alternative learning resources in Swedish schools are functions like “Text-to-Speech”, a function that will read written text aloud, and the practice of phonics which can briefly be described as a practice of the audible language (SPMS, 2012; Swedish Council on Health Technology Assessment, SBU, 2014:33). The Learning Disabilities Association of America (2015) highlight strategies such as using computer aids by students with dyslexia when writing essays in class, using books that are available as recordings, providing material for the
students that is written clearly and divided into small units and trying a variety of
teaching methods. Blackman (2010:9) on the other hand, argues for the beneficial
outcomes of letting students with dyslexia work in groups to support each other when
learning.

The research of learning strategies for students with dyslexia is a broadly studied area.
However, the results appear to show smaller differences in techniques and studies found
in this essay do not show any research aiming towards helping students with dyslexia to
reach higher achievement then the minimum requirements. It is therefore of interest to
investigate what strategies help these students to achieve higher grades, or goals within
the subject of English, as a foreign language

2 Theoretical Background

In this section of the essay the theoretical background for this case study will be
presented. The key concepts of the study will be defined in relation to research in the
area of dyslexia and learning strategies. Thereafter, previous studies found in this
research area will be stated.

2.1 Defining Key Concepts

2.1.1 Dyslexia
Dyslexia is most commonly defined as a learning difficulty. However, research in this
area suggests considerable differences in definitions and varieties of dyslexia and there
appears to be two opposing sides. The neuroscientific definitions of dyslexia are
described as a disorder or sickness, in contrast to the social-scientific approach where
dyslexia is described as a 'weakness' or a difficulty (The Australian Dyslexia
Association of America, 2015[www]).

The Australian Dyslexia Association (2014) and Høien and Lundberg (2013:11) claim
that dyslexia is not a disability or a sickness but a learning difficulty with words. The
authors (Høien & Lundberg, 2013:11) argue for this definition through the Greek
meaning of the word; *dys (difficulty/bad)-léxia* (word) (Dictionary, 2015). The Swedish Council on Health Technology Assessment (SBU, 2014:33) in accordance with The Australian Dyslexia Association (2014), state that dyslexia is a 'weakness' in some of the phonological aspects of language which is commonly shown as a difficulty in decoding words in different forms, such as speech and writing.

Hickman and Brens (2014:336) on the contrary, claim that dyslexia is a “physiological condition” by arguing that research and brain scans have found that “activity levels in the brain are much lower in people with dyslexia when they are trying to read, leading to problems with phonological processing”. Høien and Lundberg (2013:11), additionally leaning towards the neurological aspects of dyslexia, claim that individuals with dyslexia have a limited cognitive weakness which obstructs reading ability. The authors appear to have combined the two opposing poles by capturing the neurological explanation of the cognitive weakness, however, arguing for the humanistic aspect of dyslexia by leaning towards a definition of a difficulty rather than a disorder. Høien and Lundberg (2013:13) furthermore state that there is a great discrepancy between reading difficulties and intelligence which is argued to be a common misunderstanding.

In one aspect of the definition of dyslexia, the research appears to be unified. The identification of the difficulties for individuals with dyslexia is often described alike, with minor changes or additions. The Swedish Council on Health Technology Assessment (2014:33) and Høien and Lundberg (2013:217) describe dyslexia as a weakness in the decoding of the phonological aspects of language which are important for a reader to be able to decode written or oral language. The Australian Dyslexia Association (2015) claims that individuals with dyslexia have difficulties “to convert letter symbols to their correct sound and convert sounds to their correct written symbol...”. The Council (2014:33), accordingly, argues for the common and easily detected symptoms of dyslexia appearing as a difficulties or weaknesses in the automatized decoding while reading. Another indication of dyslexia can be the continuous errors in spelling (SBU, 2014:33). The Council (2014:36) claims that the early reading and writing education in Swedish schools focus greatly on all students’ ability to decode words and to hear the sounds of the target language. Individuals with dyslexia often have difficulty in transforming this knowledge into an automatized action or use it fluently. A lack of reading comprehension and lower reading experiences are
argued to follow as possible consequences of having dyslexia, according to The Swedish Council on Health Technology of Assessment (2014:33).

When using the concept of dyslexia in this paper, the different aspects of the learning difficulty will be combined in an attempt to view dyslexia as a whole. This research will analyze dyslexia as a learning difficulty that affects the language learning processes such as comprehending written language, speech and sounds.

2.1.2 Learning strategies
Høien and Lundberg (2013:60) claim that there are two important strategies used by an individual when reading: the phonological strategy and the orthographical. Briefly, the phonological strategy is defined by Høien and Lundberg (2013:41-42) as the representation of the sounds of words while orthographical strategy is defined as the characteristics of a word, the letters and the spelling. According to the authors (Høien and Lundberg, 2013:60) students with dyslexia often have a weakness in one or both of the decoding strategies mentioned. By investigating how the phonological and orthographical strategy is used by the student, the extent of the dyslexia can be determined.

Accordingly, Chung and Ho (2010:196) indicate that “the orthography–phonology correspondences that play important roles in the acquisition of reading” are somewhat dependent of each other in the process of comprehending units of words and texts (Reid, 1998:107; Chung & Ho, 2010:196). Høien and Lundberg (2013:233) argue for the strategy of playing memory games with a student who experience problems with their orthographical decoding. A memory game using words that the student has difficulties spelling or to recognize words and their meaning, is suggested to be a stimulating activity for the practice of orthographical decoding (also see: Reid, 1998:26).

Taylor, Duffy and England (2009:146) researched students with dyslexia in higher education in the UK, and found that students with dyslexia that requested to be given additional time during examinations showed higher average achievements during a three year period. These improving achievements were compared to those students who had not made this extra time request (Taylor et al., 2009:146). The students with dyslexia were given 25% additional time than other students, which the authors concluded to be of importance for the achievements of the students with dyslexia (Taylor et al.,
Furthermore, Taylor et al. (2009:145) found, in accordance with Reid (1998:153) and Høien and Lundberg (2013:234), that the use of computers, including appropriate software for the sessions, could also help the learning process of students with dyslexia. The computers could facilitate reading and writing tasks as well as help the students to structure essays and longer written assignments (Reid, 1998:153; Taylor et al., 2009:145; Høien & Lundberg, 2013:234).

The National Agency for Special Needs Education and School (SPSM, 2015) argues for an 'accessible learning environment' (my translation) as the key to giving students, regardless of disability, the opportunity to learn based on individual needs. Within this concept it is proposed that the schools create an environment which is adapted and pedagogically stimulating for students to learn in the 'normal' classroom. The 'accessible learning environment' is therefore a concept that should be aimed towards in every Swedish classroom (SPSM, 2015). Agreeing with this proposal, Høien and Lundberg (2013:221) suggest a stimulating learning environment for students with dyslexia by having a variety of materials, creating a desire to read and learn, as well as methods to work interactively with the students. The suggestion of how to work interactively with students was described as the work of peer reviewing in terms of letting students read and react to a text written by a peer in order to improve the reading and writing skills of both parties (Høien & Lundberg, 2013:237). Two other important methods mentioned by the authors (Høien & Lundberg, 2013:218) as well as Reid (1998:106) are the 'direct teaching' and the 'multisensory' teaching methods. Direct teaching is defined as a method where the student has an individual teacher who can direct and help in the learning process in the classroom, while multisensory is a learning strategy which include visual, audible, emotional, kinaesthetic and tactile stimuli (Reid, 1998:106; Høien & Lundberg, 2013:218). Taylor et al.’s (2009:144) research claims that the teaching at a higher level of study is mostly auditory and for students with phonological difficulties, such as some of the students with dyslexia, this teaching method could have a very significant impact on the learning process (Taylor et al., 2009:144).

The authors therefore suggest, in agreement with Høien and Lundberg (2013:218) and Reid (1998:106), that the addition of “pictorial and experiential learning materials that can be beneficial for dyslexic students (as well as for non-dyslexic students)” should be included in the learning environment. These strategies are found to be effective for older students with dyslexia, which Høien & Lundberg (2013:258) believe are somewhat
different to younger learners since the older students have developed a body of knowledge and emotional bond to their difficulties. The authors (Høien & Lundberg, 2013:258) claim that older learners have higher negative emotions towards their learning disability and therefore need a more meaningful and practical approach to learning. Reid (1998:82) and Høien and Lundberg (2013:214) therefore suggest that to find effective strategies for each student with dyslexia, it is important to involve the student in the process of finding the strategies. Høien and Lundberg (2013:214) advise the inclusion of the learner’s parents in some cases, and in agreement, Reid (1998:82) and Høien and Lundberg (2013:214) propose to encourage the inclusion of previous experiences and emotional relationships in the learning process.

The learning strategies shown in this section are strategies that research suggests are effective when working in a learning environment for students with dyslexia. This review of effective learning strategies brought up in this section will therefore create the basis of the definition for helpful learning strategies in this study.

2.2 Previous Research

Blackman (2010:8) researched the outcomes of group work for learners with dyslexia in the Caribbean by giving the participants a task to solve together and thereafter analyzing their reflections. Blackman (2010:8) argues for the positive effects of group work strategies for learners with dyslexia. The study shows how a pleasant environment around and within the group appeared to affect the interaction positively between the members of the group. When analyzing the outcomes, Blackman (ibid:8) found that factors which made group work a successful strategy as stated by her participants were the “consensus building [...] that helped establish the correctness of an answer or information”. The group work helped students understand the difficulties they found and to find comfort in their ideas and understanding. The author additionally mentions the dynamics of the group as being more effective for solving the task when the group consisted of learners that were already friends. Close friends working in groups have been shown to be more cooperative and positive towards the task according Blackman (ibid:9). Therefore, Blackman (ibid: 9) claims that teachers ought to use these findings to create effective group work in their classrooms instead of dividing existing groups into units with new students.
Hickman and Brens (2014:340) focused on the learning, and teaching methods of teachers and teacher trainees with students with dyslexia in art to investigate their understanding of effective strategies. In this research, the authors discovered that teachers with dyslexia often use strategies for learning, and teaching, that they are familiar with and use themselves while learning. Commonly used strategies proposed by the teachers included the ability to identify the struggle for the students, to use repetition in the classroom for important information as well as being able to feel great empathy for the learners. Hickman and Brens (2014:340) additionally argued for some strategies that might be associated with the homogeneous group of teachers and teacher trainees with dyslexia, or in the subject of art. The study (Hickman & Brens, 2014:341) found that these participating teachers used strategies such as teaching through visual spatial learning. Hickman and Brens (2014:341) define this as the use of demonstration, teaching through pictures, which were reported to commonly be in a three-dimensional format, and an excessive use of interaction in the classroom. Hickman and Brens (2014:341) also discovered that the teachers with dyslexia showed signs of 'somatic sensibility' in their teaching, which the authors define as “a heightened understanding of non-verbal communication”. Some of these strategies however, as argued by Hickman and Brens (2014:341) might be used unconsciously, to some extent, by the teachers and teacher trainees with dyslexia.

The Swedish Council on Health Technology Assessment (SBU, b) is an independent authority, entrusted by the Swedish Government to carry out research and assess different aspects of health care. The Council (2014:33) researched dyslexia in Swedish schools and investigated three aspects of learning difficulty. In their study, they found that students with dyslexia often show signs of difficulties with phonemics and reading disabilities. The study investigated the effect of a learning strategy called 'phonics' which lets students practise the relationship between the phonemes (sounds) and graphemes (letters) when learning to read in a language. This strategy was shown to be used effectively in low intensive practice with the students, increasing the connections from letters to complex units of written language (the Swedish Council on Health Technology Assessment, 2014:33).

Chung and Ho (2010:195) on the other hand, studied Chinese students with dyslexia, more specifically whether their phonological difficulties found in their first language,
L1, were transferred into their second language, L2 English. Chung and Ho (2010:195) claim that studies in this area had previously solely focused on students with their first language using the Roman alphabet, such as Swedish, Spanish or French. The authors therefore wanted to study the possible transference and interaction between the languages of students that showed weaknesses in their first language, Chinese, and studied their second language, English, in a Chinese-speaking setting (Chung & Ho, 2010:195). Chung and Ho (2010:196) argued that the “problem of dyslexic readers in foreign language learning may be phonologically based, like the core cause of their difficulties in native language learning” which implies that the transference between students’ first language and their second will bring about difficulties, caused by the dyslexia, into the learning of the new language. However, the authors found in their study that the students’ “phonological difficulties at the levels of phonemic awareness in English were found to contribute to reading difficulties in English, but this was not the case in Chinese” (Chung & Ho, 2010:198). Chung and Ho (2010:206) therefore conclude the following:

It seems that Chinese children with dyslexia have difficulties learning L2 English because of their phonological difficulties at the phonemic level, whereas this difficulty is not a main cause of their dyslexia problem in Chinese.

(Chung & Ho, 2010:206)

3 Method and Material

This section of the essay will present the method used in this qualitative case study, discuss the ethical considerations for the procedure and describe the reliability and validity of the investigation. A qualitative approach was adopted in this research project using interviews to collect data for comparing and conducting a case study. The limitations and problems of this case study will also be presented in this section.
3.1 Method

There are two main theoretical approaches within research in social science (Bryman, 1997:8). When researching a language and learning strategies, the two opposing scientific research approaches, the qualitative and the quantitative method, could both be used (Patel & Davidson, 2011:26). The qualitative approach is often associated with methods such as observation and interviews together with the desire to discover the understanding of others (Bryman, 1997:86). The quantitative research method is frequently related to methods following the ‘traditional’ scientific approach, such as experiments and questionnaires (Bryman, 1997:8).

The research in this essay uses a heuristic qualitative design with a case study method to collect and organize data from three interviews (Dörnyei, 2007:152). This approach was found most appropriate for the purposes of this study due to the investigation of understanding the view of the participants and apprehending their pedagogical approaches (Denscombe, 2009:265) However, since this small-scaled study only generated data from three remedial teachers working in a smaller geographical area it could be assumed that the participants work with similar methods when teaching English to students with dyslexia, which connects all participants to one “unitary character of the […] object studied” (Dörnyei, 2007:152). When studying data of an object or phenomenon, such as learning strategies used for students with dyslexia, with similar specific components or characteristics, Dörnyei (ibid) argues that the research is conducted as a case study. A form of case study called ‘intrinsic case studies’ argues for the importance of the particular findings in the study rather than its resemblance to previous research results (Dörnyei, 2007:152). Since this study seeks to find results on effective and used strategies for teaching English to students with dyslexia, this study could be argued to be concluded as a case study (ibid). This method allows the study to in depth examine the strategies used by the remedial teachers and to discover the attitudes of the participants towards the strategies. Additionally, a case study allows the researcher to understand the measurements used when teaching students with dyslexia (Dörnyei, 2007:152; Denscombe, 2009:265; Patel & Davidson, 2011:82).

When conducting interview studies it is required of the interviewer to avoid determining any form of answers or outcomes in order for the participant to feel fully supported and heard when questioned (Patel & Davidson, 2011:82). Denscombe (2009:265) mentions
that for this method to be useful in smaller projects, the interview should be constructed as a semi-structured interview. The semi-structured method of interviewing is characterized as a guide of themes and questions which the interview will be based upon, however all questions do not have to be asked in the same order or with the same follow-up questions for each participant (Denscombe, 2009:266). The semi-structured interview approach has its focus on the participant and seeks to provide extensive opportunities for the participant to develop and discuss their thoughts during the course of the interview (Denscombe, 2009:266).

3.2 Material

This essay is built upon material from 2 hours and 33 minutes of interviews with three remedial teachers in the south of Sweden who work continuously with students with dyslexia, learning English as a foreign language. As the aim of this study was to investigate what teaching strategies the remedial teachers used to help students with dyslexia learn English as a foreign language and to help them reach higher grades within the subject, the participants in this case study were naturally selected among special needs teachers in English. Swedish remedial teachers in English have special training in helping students with different difficulties in learning English as a foreign language and are familiar with the support that can be used by students with dyslexia through learning aids or different strategies. Special needs teachers also work more individually with these students and therefore have more experience and knowledge of the struggle of students with dyslexia to reach certain grades or levels in English.

Two of the three participants were remedial teachers in English currently working at high schools in the south of Sweden. The third participant in this research project works as a remedial teacher at a junior high school. This participant was chosen, despite working with younger students than the aim of this study, as there was a lack of high school special needs teachers who were prepared to participate in the study. The participants were between the ages of 29-40 and had from 1 to 12 years of working experience as special needs teachers. The requirement for participating in this case study was also a demand of working experience in teaching English to student with dyslexia, which limited the amount of possible participants. All special needs teachers involved in this study met these requirements. Two of the three participants additionally work as remedial teachers in other subjects than English, for example Swedish, history
and civics. The three remedial teachers participating in this case study worked with students with dyslexia on a daily basis.

The procedure of finding participants for this research began by compiling a list of all remedial teachers in English working at high schools in the municipality. Emails with the research description, information about the interviews and information regarding the safeguarding of full anonymity were sent to all remedial teachers found. Nine interview questions were drafted, modified and accepted for the interviews. The interview questions were written in Swedish, then later translated into English (see Appendix A & B), to facilitate the situation for the teachers since all participants were native Swedish speakers and had English as their second language. To minimize the risk of misunderstanding or the feeling of restraint, all interviews were carried out in Swedish and were then translated into English. The interviews were held at the working places of all participants. All interviews were recorded on an Android phone as a mean of recording and documenting findings. The three participants were all informed about the recording of the interview in the opening letter as well as about their anonymity. All three participants were further informed about their possibility to end or withdraw their participation in the study whenever they wished.

3.3 Problems and limitations

3.2.1.1 Ethical considerations

Previous to this research an ethical consideration was made to exclude all risks of violating The Central Ethical Review Board (2004 [www]) for Swedish research. All possible negative effects on the participants in this study, such as physical or psychological affects, were eliminated. Since the study does not intend to investigate any personal or sensitive phenomenon nor was the study considered to leave the participants with any short or long term effects (Denscombe, 2009:195), no other ethical risks for the participants were found. The area of study for this research was considered to be a highly relevant professional area for remedial teachers. However, the research could at times lead to personal opinions and strategies in the process of occasionally working with underage students with difficulties. Therefore, all participants were assured of the possibility of accessing the collected data from their interview and the
right to change or add their contribution to the case study (Denscombe, 2009:192). All participants in this study were also informed about the aim of the study, their optional participation and the consistent anonymity of their identities throughout this study before agreeing to participate in this research (Denscombe, 2009:199). The confidentiality of the data for this essay as well as the possibility to withdraw or end participation in this study was also made clear to all participants (Denscombe, 2009:199).

3.2.1.2 Limitations

The main problems encountered in this essay were, as with many small scaled studies, the restricted time for the execution of the study. As a result from this, the process of finding participants in accordance with the aim of this study was a source of great difficulty. This research aimed to investigate remedial teachers working at high schools however, since the possibility to travel in order to find additional participants was limited and a number of the contacted remedial teachers had limited time to participate in this research, a special needs teacher at junior high school level was included in this study. This could have an effect on the findings of the case study since not all of the participants work with students at the same level or with the same problematic areas. However, since all students with dyslexia have individual varieties in their difficulty, it would be assumed that the remedial teachers would have various experiences. Additional limitations of this study included the lack of previous research on the area of remedial teachers working towards higher grades with students with dyslexia. Though no relevant previous research on the area was found, the decision to retain the aim of investigating the work towards higher grades was made due to the relevance of this area for teachers and remedial teachers as well as to highlight a possible area for further research. Consequently, it may not be possible to connect the effect on the analysis of the results found in this case study directly to any previous study. Therefore, the sample collected for this research is not sufficient to be able to make extensive generalizations of the results although the findings may show interesting aspects that could be further investigated.
4 Results and Analysis

This section of the paper will present the results of this case study. The findings will be structured into two main themes which were found in the collected data from the interview sessions. The participants will be referred to as ‘Teacher A’, ‘Teacher B’ and ‘Teacher C’. Following the results there will be an analysis of the findings in relation to the previous research presented above together with a general discussion concluding the results.

4.1 Results

4.1.1 Focus on grades

Since the purpose of this case study was to investigate how remedial teachers worked to help students with dyslexia develop within the subject and work with the students towards achieving higher grades, a focus was directed towards this area. However, all three remedial teachers declared that they did not work with a large focus on the grading requirements when working with a student in English. One of the three special needs teachers said that no focus was put on grading requirements if the students did not suggest it and therefore did not discuss anything regarding the grades with these students. Teacher A stated that:

It is about formative assessment. Since you can achieve the grade requirements in different ways (My translation)

Teacher A claimed thereafter that there should not be a focus on grading requirements in special needs teachers work with students with dyslexia. Teacher B however showed a somewhat different approach towards discussing grading requirements in comparison to the two other remedial teachers:

Many students tell me that they only want to achieve an E level, they say that they are ’satisfied with an E level’ and I think that it is risky to only give them assignments on an E level. I rather tell them that 'this is what you can develop [for higher grades]. (My translation)

(Teacher B)
Teacher B argues for the necessity of talking about the grades by stating that:

The grade requirements are not always easy to understand, they are often quite abstract and fuzzy” (My translation)

This suggests that Teacher B devotes time to explain the grade requirements for many of his/her students. Teacher A however, appeared to have a different attitude towards grading requirements with his/her students:

It is actually mostly the high achieving students. Then there is a lot of focus on the grades” (My translation)

Teacher A explains and suggests that only with the high achieving students it become relevant to discuss the grading requirements. However, the participants were all in agreement with the experience that a large group of their students with dyslexia experienced difficulties in the subject and would not expect higher grades in English. Teacher C expressed the following:

Many students just want to get through English and pass (My translation)

Teacher C experienced that this negative attitude and underestimated understanding of their own knowledge restrained the students from developing with their English proficiency. Teacher B described the course of action when meeting students with an attitude expressed in the following terms:

Many [students] know more [than they say and show] but they have characterized themselves as ‘E students’ and that is when I think it is better to work with formative assessments and try to push them [students] to develop instead of focusing on a grade. (My translation)

(Teacher B)

Teacher C suggested that appraisal and “work with giving feedback, receiving feedback from peers and reading each other’s texts” (My translation) could help students develop a confidence in working with their language and their texts. All remedial teachers in this research project appeared to focus mainly on working on the student’s development, making progress within the subject and the provision of continuous feedback to their
students. Only one of the three participants claimed to discuss grading requirements in
detail and with all students to be able to help them focus on higher grades.

4.1.2 Adjustments and the use of learning resources

4.1.2.1 Learning resources and strategies

When summarizing the collected data from the participants, it was clear that several
strategies used in schools for students with dyslexia were comparable. All three special
needs teachers stated that technical aids were available to students with dyslexia and
appeared to work continuously with the resources. One of the remedial teachers stated
that only students with dyslexia or other forms of disabilities had the right to use
specialized technical aids from the school:

Students here get their own iPad if they have a reading and writing disability. It works perfectly (My
translation)

(Teacher C).

The remaining two participants explained that all students, regardless of having a
disability or not, were able to borrow a portable computer free of charge from the
school. Working with technical aids appears to be a useful tool when helping students in
language learning, according to the participants. Teacher B suggests that any one of the
technical resources given by the school can be useful for any student, regardless of
having a disability or not:

We have a reading service which is a great tool and all students in The Union [School Union]
have access to it, you do not need to have dyslexia to access it and there you have all teaching
material as audio books. (My translation)

(Teacher B)

Teacher A referred to the phonological difficulty which some of her students with
dyslexia had, and appeared to agree with Teacher B regarding the possibilities of having
technological aids for students to use:

Some [students] need to listen to the learning material. Others need someone [a teacher] to write the test
for them while they say what to write (My translation)
With this statement, Teacher A seems to emphasize the differences between students with dyslexia and the several methods that follow. This participant explained how several of her students showed better results when using the reading service method instead of trying to read the textbooks while others preferred to read themselves or work orally with all information. All three remedial teachers also appeared to be in agreement regarding the students' difficulties in the writing process when working with English, trying to incorporate spelling programs and text-to-speech programs as helping resources. Two of the three participants stated, in contrary to previous strategies, that they excluded some technical learning aids when helping students to write texts:

I say that to all students. 'Just write your text! Inactivate all spelling corrections. Take it all away, the text-to-speech etcetera, and then you write what you want to write. When you have finished your text, then you can go back and check the spelling'. (My translation)

(Teacher A)

With this strategy, Teacher A suggested that the students were able to produce a text with all their ideas that they wanted to include without having to focus on misspelled words and such. Both Teacher B and Teacher C agreed with this learning strategy and Teacher C explained the experience with students with dyslexia which was the common problem of not being able to express themselves as freely as others. Teacher C suggested that this problem occurred due to these students’ difficulty in transforming thoughts into written form. Teacher A appeared to agree with the other two participants, however emphasizing a more grammatically focused problem of using the spell checker with students with dyslexia. This remedial teacher explained the following problematic aspects:

It [spell checker] only reacts if the words are misspelled. Not if you have conjugated the verbs incorrectly in a sentence and it is often those students [with dyslexia] that have difficulties in conjugating words correctly. (My translation)

(Teacher A)

Teacher B also claimed that similar problems appeared when students with dyslexia were focusing on reading texts. Since the orthographical, or spelling difficulty seemed
to dominate as problems for several students with dyslexia, according to the interviewed remedial teachers, spelling appeared to be strongly in focus when the students were struggling in English. Teacher B therefore used the strategy stated as following:

Many [students] experience difficulties when reading and have not developed a strong reading habit. Then I try to tell them: 'try not to focus on words that you don’t understand, try to see if you can understand the context, underline words and write notes at the same time'. (…) Otherwise they just get stuck and think about the spelling of this and that and then they lose the flow [of the text]. (My translation)

(Teacher B)

Other than using technical aids when working with the student, Teacher C gave examples of how to work creatively with students with dyslexia to help their development in the target language. Teacher C tried the following approach:

I had a student that was very musically talented so we decided to work together with English and work with texts. We chose texts and I played the guitar and she sang them. (…) When you work with texts you get the grammar for free” (My translation).

With this method, Teacher C suggested that it was important to find what capacity the students with dyslexia have and to combine this ability together with English to create an interest as well as motivation to learn. This remedial teacher also stated that the relationship with the students was the foundation of successfully helping them develop:

It is a lot about the relationship with the young [students] when it comes to special education (My translation)

(Teacher C).

This participant also described a different approach and strategy in working with students with dyslexia, which the teacher suggested could be useful with any students, laying the emphasis on the relationship between the remedial teacher and the student. Teacher C stated this relationship in the following terms:

Any student that you would select to work with one on one for 40 minutes will probably learn much more than what they would have in class. You do the same things as the rest of the class but you break it down or work at a different level, or show alternative learning methods or strategies, or you visualize it or work with the iPad or such. (My translation)
4.1.2.2 Adjustments

When the remedial teachers described the principles at their school regarding adjustments for students with dyslexia, all three participants appeared to be in agreement with each other. Since adjustments in the Swedish schools are of such a nature that they do not interfere for a longer period of time with the ordinary schedule, all three remedial teachers declared to use adjustments that were integrated within the ordinary lessons or made to be used in the classroom together with the rest of the class. Teacher B believed these adjustments were easy to integrate into the ordinary classroom and stated the following.

Some methods are simple and work excellent in any subject or with any student. To be clear, write an agenda for the class on the board and have clear instructions. Pretty basic things really” (My translation).

(Teacher B)

Teacher C appeared to be of the same understanding and mentioned a variety of minor changes that could be very useful for students with dyslexia, which were not described by the other remedial teachers:

It could be about the environment, extra time, adjustments in the room, adjustments to the daily schedule, coloring the schedule (…) and short breaks” (My translation)

(Teacher C)

With these statements, the two teachers seem to be indicating changes which could be useful and are easy to make for any student, regardless of disability or subject.

Teacher B also suggested additional strategies aimed towards students with dyslexia which the English teachers could use in the classroom. The other two remedial teachers did not mention strategies similar to these presented by Teacher B, as in the following:

When you hand out an assignment, you should think about having the text in large size, that it is clear for the student that firstly they should do this, and then this and that, that you split up the instructions since many students do not have the ability, or find it difficult, to know what to start with. (My translation)
In contrast, Teacher C described more specific adjustments which students with dyslexia were given when diagnosed. These adjustments appeared to be made both by the ordinary English teachers as well as remedial teachers and seemed to be part of a system of used strategies at the school for helping students with dyslexia to learn and succeed in English:

Besides all technical things like apps, programs, iPads and technical resources, they have extra time when taking tests, oral complementary assignments and they do oral testing. Some larger questions [at tests or assignments] could need a teacher to guide them [students] through it. (My translation)

Teacher B and Teacher C both expressed how they actively tried to be available for the students in their ‘natural’ environment and approach them instead of leaving the responsibility on the students to reach out to the special needs teacher. However, this appeared to be a delicate matter:

You [remedial teachers] are present in the same classroom as the students are, so that you don’t separate them directly (My translation)
Teacher B seems to agree by stating the following:

Me and XX [colleague], we are out visiting all classes and the students get to meet us there. Then they are less resistant to actually come to us since they know who we are (My translation).

The two remedial teachers appeared to suggest that the most effective way to show their availability to help students is by entering the ‘natural’ sphere of the students and showing their accessibility for everyone, so that students with disabilities do not feel divided from the other classmates. Teacher A appeared to agree with the strategy of approach towards the students, describing it however as having a greater focus on the student and what Teacher A’s role during the visit in a class would be. This remedial teacher focuses more on the aspect of observing the student in terms of how they learn and how to support the regular teacher in his or her work. Teacher A stated the following:

Sometimes I have to come to a class because someone tells me that the student is not holding up in class and then I attend class and observe. Then I can give the teacher suggestions and help or observe the student. (My translation)

4.2 Analysis

From the data presented in the results, the participants in this research appeared to have similar experiences with learning strategies and learning resources as the previously reviewed research. However, several differences have also appeared and a number of aspects did not generate an answer. The aim of this case study was to investigate how remedial teachers helped students with dyslexia to work towards higher grades in English and what strategies they used, this area was firstly summarized in the result. Although no previous research on specific strategies for supporting students to reach higher grades was found, the experience from the remedial teachers enriched the discussion in this area. In this case study, it appeared that the special needs teachers had different views of the awareness of the grading requirements. Both Teacher C and
Teacher B stated that by giving feedback, working with development and with formative assessment, the students could aim towards specific goals and develop their proficiency which is required for the higher grades. Teacher A claimed that by not discussing grading requirements or mentioning them to the students, they could work formatively and focus more on the student since the teacher argued that grading requirements can be reached in more ways than one. Therefore, it can be assumed that the students of these remedial teachers participating receive support to develop within the subject. However, not all students will be aware of what grading requirements they are working towards or actively focus on them. Some of the special needs teachers appeared to believe that discussing grading requirements could set boundaries to the student’s creativity or narrow them down to a certain mindset. Yet all participants were in agreement that students experience major difficulties within the subject and do not appear to believe that they can achieve higher grades in English.

The remedial teachers seemed to use similar strategies to motivate and help their students to improve in English as found by Reid (1998:83) and Blackman (2010:8) with giving examples such as peer reviewing and formative techniques. Additionally, Høien and Lundberg (2013:237) suggested working formatively and letting the students read each other’s texts in order to give feedback and improve their written texts. Moreover, one of the remedial teachers mentioned strategies similar to the direct and multisensory method of teaching suggested by Reid (1998:106) and Høien and Lundberg (2013:218). Teacher C stated that the relationship between the student and the special needs teachers was crucial which would be a requirement when working with multisensory methods in terms of being able to include motivational and emotionally activating methods to learn (Reid, 1998:82; Høien & Lundberg, 2013:214). This teacher described the situation of having a musically talented student with dyslexia struggling with English and therefore created a method of integrating music when learning English. Teacher C appears to have found a combination of a direct and multisensory method of teaching, based on Reid (1998:106) and Høien and Lundberg (2013:218) theories, which appeared to have been successful due to the close relationship between the remedial teacher and the student with dyslexia. This remedial teacher also stated that any student separated from their class and helped by a remedial teacher would learn more than they would if still being in a classroom. With this statement, it could be assumed that this special needs teacher works closely with the direct method of teaching. The strategy of lowering the level, dividing texts into smaller paragraphs and supporting the student in their learning
are all characteristics of the direct method, described by Reid (1998:106) and Høien and Lundberg (2013:218).

Furthermore, the remedial teachers mentioned several learning strategies which were supported by previous research, as well as some methods which were not mentioned in any research found. Two of the participants described a method not found in the previous research which these remedial teachers appeared to use frequently. The strategy of inactivating all spell checkers and technical aids, which two of the remedial teachers often recommended to their students with dyslexia, seem to contradict previous research. The technical aids such as text-to-speech, spell checker and similar, was advised to be used for students with dyslexia by SPSM (2015 [www]) and the Learning Disabilities Association of America (2015 [www]) amongst others (Reid, 1998:153; Taylor et al, 2009:145). Nevertheless, the two teachers also mention situations when using these technical aids, appearing to have found situations where students need the technical aids in a wide use, contrary to other situations where the technical aids are merely used as a support when the written text is finished. This indicated that the work of the remedial teachers is not only to provide resources for the students yet also includes the aspects of flexibility and listening to the student’s experiences and needs, which Reid (1998:82) and Høien and Lundberg (2013:214) claim to be one of the most important factors when working with older students.

In the area of experiencing difficulties with writing and reading, which the remedial teacher mentioned, there are indications of similar problematic areas as found in the research made by Høien & Lundberg (2013:41-42) and Chung and Ho (2010:196) which were categorized as either phonological or orthographical. The researchers (Høien & Lundberg, 2013:60; Chung & Ho, 2010:196) argued that students with dyslexia used the strategies mentioned to be able to understand written text and had to correctly automatize the understanding of words, spelled words and sounds which they found was a lacking ability for students with dyslexia. Through the reflections collected from the remedial teachers in this study, these two categories of difficulties could be identified. All participants appeared to agree that their students showed wider knowledge orally than they could produce in written form, which could indicate that these students experienced difficulties in the orthographical strategies of producing written text. Two teachers also mentioned that their students varied in either wanting to listen to the learning materials and reading them by themselves, or with help of others,
which could suggest that these special needs teachers had a variety of students with both phonological and orthographical problems. One of the remedial teachers also described how a range of students could write texts without experiencing great difficulty, however they showed a lack of knowledge of conjugations of English verbs. This problem could be compared to the findings of Chung and Ho (2010:206) who claimed that students with dyslexia could experience different decoding problems caused by dyslexia in each of their languages learned. The researchers (Chung & Ho, 2010:206) presented findings which indicated that learners could have different problems in their first language and in their second language. Remedial teachers working in subjects with both first language learners and second language learners with dyslexia could therefore find varying differences in the students’ weaknesses in each of the languages. The same student could have an orthographical difficulty in their first language and then show phonological difficulty in their second language, as found by Chung and Ho (2010:206).

Further strategies that were mentioned by the remedial teachers in this study were categorized as adjustments within the regular schedule which were restricted to students with dyslexia, in contrast to the other strategies mentioned which were argued by the participants as useful for any student or disability. All the participants mentioned the adjustment of giving students additional time during test taking, which Taylor et al (2010:146) found to generate great improvements and effectiveness in their study of older students with dyslexia. However, the students in Taylor et al's (2010:145) research were studying at university level. Yet all the participants in this study claimed that an effective strategy for students with dyslexia is to allow them additional time during test taking. It may be assumed that the participating remedial teachers working in junior high schools and high schools could be advised to apply this method.

Additionally, the remedial teachers appear to work very closely with regard to the recommendations of The National Agency for Special Needs Education (2015) in creating an accessible learning environment and the philosophy of the Swedish schools regarding the inclusive classroom (The European Agency for Special Needs and Inclusive Education, 2015). The participants indicated adapting these recommendations by mentioning how they work actively with helping all personnel at the schools to work more inclusively and pedagogically as well as accommodating all disabilities and difficulties. The remedial teachers participating also declared how they continuously work with showing their accessibility and meeting the students in a ‘natural’ setting in
order to create a relationship and reduce the reluctance to receive help from the remedial teachers. Two of the participants also mentioned their method of observing classes in order to help both teachers with being more pedagogical and clear, and observing students to be able to detect possible difficulties the student might have.

However, as argued and emphasized in the majority of the research found for this study (Reid, 1998:106; Taylor et al, 2009:144; Høien & Lundberg, 2013:218; Hickman & Brens, 2014:341; SPSM, 2015; Learning Disabilities Association of America, 2015), the remedial teachers of this study did not mention any strategies or methods suggesting that the learning setting should involve more visual and audible elements when teaching. The research found on this area (Reid, 1998:106; Taylor et al, 2009:144; Høien & Lundberg, 2013:218; Hickman & Brens, 2014:341; SPSM, 2015; Learning Disabilities Association of America, 2015) claimed that more multisensory methods (Reid, 1998:106; Taylor et al, 2009:144; Høien & Lundberg, 2013:218; Learning Disabilities Association of America, 2015) and the ability to relate information to pictures and find motivation for the student within the learning process has resulted in successful learning for students with dyslexia (Reid, 1998:106; Taylor et al, 2009:144; Høien & Lundberg, 2013:218; Hickman & Brens, 2014:341; SPSM, 2015; Learning Disabilities Association of America, 2015). The absence of these methods found in the findings of this case study could have originated from faulty questions or forgetfulness. However it may also suggest that these remedial teachers were not aware of the common learning settings in a classroom, or they might be unfamiliar with the particular strategies.

5 Conclusion

To conclude this essay, the aim to investigate the learning strategies used by remedial teachers in order to help students with dyslexia to develop in English and reach higher goals was partly successfully researched. Since this small scale case study was vastly limited in terms of time available for the collection of the data, the investigation could not be proceeded as thoroughly as wished. Additionally, the previous research did not provide sufficient support for the specific aim investigated however the remaining research found was considered fulfilled and enabled to highlight areas of interest. The
results appeared to be in great agreement with previous research and a few new aspects arose. The remedial teachers share the same focus regarding the accessibility of the resources from special needs teachers and the adjustments that should be provided to students with dyslexia, in accordance with the previous research. The participants did however have different views of how to work with grading requirements, appearing to focus differently on how to introduce them in the learning process. However, all three participants did mention similar learning strategies when working with their students and how to help them develop. Therefore, the results of this case study indicate that the remedial teachers work similarly with their students, in accordance with supporting adjustments and strategies though they do not share a unanimous focus of learning.

This essay has sought to show the importance of effective learning strategies and elaborate support for students with dyslexia for them to develop and successfully learn a foreign language. However, to be able to show any significant results and conclude useful strategies for remedial teachers and language teachers, this research would require a much more significant body of collected data, preferably both from remedial teachers and language teachers as well as participants with dyslexia, as well as enhanced resources to create a further depth in the research. In addition, the research could also integrate a mixed methodology where questionnaires with questions regarding experiences and emotional relations could be included in order to strengthen the results.
References


Blackman, Stacey. (2010). "Who I work with is important’: dyslexic students’ narrative about the benefits of grouping for instruction in Caribbean classrooms”. Support for Learning (2010), 25 (1). pp 4-10.


http://www.spsm.se/tillganglighet Accessed: 2016-12-17

Specialpedagogiska Skolmyndigheten/ National Agency for Special Needs Education and Schools; SPSM. (b).
https://www.spsm.se/sv/Om-webbplatsen/Start-page/ Accessed: 2016-12-17

Swedish Council on Health Technology Assessment, SBU. Dyslexi hos barn och ungdomar - tester och insatser. En systematisk litteraturöversikt.

Swedish Council on Health Technology Assessment, SBU. (b)


https://www.european-agency.org/about-us/who-we-are Accessed: 2016-01-08

Appendices

Appendix A: Interview Guide in Swedish

1. Enligt Skolverket skall en åtgärdsplan göras för en elev med dyslexi. Vilka faktorer tar ni hänsyn till när ni gör en sådan plan för en elev med dyslexi?

2. Hur mycket tas föräldrar in vid en åtgärdsplan? Hur bestämmer ni vilka önskningar/förslag/krav som ska tas med och varför?

3. Hur gör ni för att fastställa att en elev har dyslexi? Har ni några generella regler eller specifika utredningsplaner?
   - Ser utredningen annorlunda ut från en fastställning av dyslexi i svenska och i engelska?

4. När man tittar på tidigare forskning så visar de på skilda åsikter vad gäller effektiviteten av olika ”alternativa läromedel” när man studerar engelska som andraspråk, t ex talsyntes eller enskild instudering. Vilka metoder/strategier för ökad läsförståelse/inlärning av text brukar ni förespråka/använda/prata om med eleverna som söker stöd?
   - Har ni märkt några skillnader i resultaten eller något som är anmärkningsvärt bra/dåligt?

5. Hur mycket arbetar Ni med (hur förhåller du dig till) betygskriterierna för engelska när ni fastställer åtgärdsplanen och effektiva inlärningsstrategier för eleverna?
   - Brukar eleverna nämna betygskriterierna eller önskemål om nivå/betyg?

6. Brukar det finnas stödundervisning tillgängligt för eleverna? T ex en grupp med undervisning med enskild engelsklärare, extrainsatt timme för ”läxläsning” etc.

7. Hur gör ni för att hitta vilka inlärningsstrategier i engelskan som bör användas för vilken elev?
8. Får elever med dyslexi en åtgärdsplan som gäller för alla ämnen eller görs specifika planer för vardera ämne?

9. Vad händer om en elev tycker att det är för pinsamt/emotionellt jobbigt att få "specialbehandling" i engelskan? t ex använda talsyntes, få sitta längre på prov etc. Vad gör ni då? Är det effektivt? - Har det hänt att någon elev har vägrat att få hjälp/använda hjälpmedel?
Appendix B: Interview Guide in English

1. According to The National Agency for Education, there should always be a measure of action-plan for a student with dyslexia. What factors do You take in consideration when doing such a plan for a student with dyslexia?

2. To what extent do You involve the parents of/legal guardians for the student when making a measures of action- plan? How do you decide which suggestions/wishes/claims to have in mind and why?

3. How do you establish that a students has dyslexia? Do you have any generall rules or specifik plan of action?
   - Is the procedure of establishing dyslexia different in Swedish and in English (as a foreign language)?

4. When looking at previous research, two separate opinions regarding the effectiveness of ”alternative learning aids” when studying English as a second (and foreign) language, for example the text-to-speech- aid or individual studying. What methods/strategies for enhanced comprehension of reading/ learning through texts do you usually recommend/use/discuss with the students that seek help?
   - Have you noticed any differences in the results or anything remarkably positive or negative?

5. How much do You work with (conduct to) the grading requirements in English when creating the measurements of action- plan and effective learning strategies for the students?
   - Do the students usually mention the grading requirements or desire of achievements?

6. Are there usually remedial intructions/guidence available for the students? For example group teaching with an English teacher, an additional hour for homework preparations and such.
   - What kind of? How? Who is allowed to attend? Do you have to ask for such teaching?

7. How do you find what learning strategies in English that should be used for each student?

8. Do students with dyslexia receive a generall measurements of action-plan for all subjects in school or do you do specific plans for each subject?
9. What happens in a student thinks it is too embarrassing/emotionally rough to receive “special treatment” in English? For example having to use text-to-speech functions, receiving additional time during tests etc. How do You act?  
- Is it effective?  
- Has it ever happened to You that a student has refused to use/receive any aids?