

**ASSESSING EFL TEACHING MATERIALS FOR  
LEARNERS WITH DYSLEXIA IN FINNISH UPPER  
COMPREHENSIVE SCHOOLS**

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<b>Tiivistelmä - Abstract</b> <p>Lukivaikeus on yksi yleisimmistä oppimisvaikeuksista. Arviolta noin kymmenen prosenttia väestöstä kärsii eriasteisesta lukivaikkeudesta. Sen tyypillisimpiä ilmenemismuotoja ovat lukemiseen ja kirjoittamiseen liittyvät virheet ja hitaus, heikko työmuisti ja kuulonvaraisen prosessoinnin heikkous. Tyypillisiä lukivaikkeuteen liitettyjä vahvuuksia taas ovat visuaalinen oppiminen ja luovuus.</p> <p>Suomalainen koululaitos on perinteisesti nojautunut vahvasti kirjalliseen oppimiseen ja oppikirjojen käyttöön, jotka voivat lukivaikkeuksisille oppijoille olla työläisiä. Erityisen hankalaksi kirjallinen oppiminen saattaa osoittautua vieraita kieliä opiskeltaessa, jolloin lisähankaluutta tuo toimiminen vieraalla kielellä. Lukuisten tutkimusten mukaan parhaita oppimistapoja lukivaikkeuksisille oppilaille on useiden oppimiskanavien (kuulo, näkö, kinesteettinen, jne.) stimulointi. Myös visuaaliset vihjeet ja tekemällä oppiminen ovat tärkeitä oppimismetodeja.</p> <p>Tämän tutkimuksen tarkoituksena oli selvittää, kuinka hyvin englannin kielen oppikirjat noudattavat tutkimuksissa havaittuja periaatteita hyvistä opetustavoista lukivaikkeuksisille oppijoille. Tutkimus toteutettiin analysoimalla neljän eri kirjasarjan seitsemännen luokan työkirjan kaikki tehtävät ja kategorisoimalla nämä sen mukaan, mitä oppimiskanavia ne stimuloivat. Hypoteesina oli, että merkittävä osa oppikirjojen tehtävistä olisi kirjallisia. Tästä syystä myös kirjasarjojen opettajan oppaat analysoitiin, jotta nähtäisiin minkälaisia ohjeita ne antavat materiaalin muokkauksesta erilaisten oppilaiden tarpeisiin.</p> <p>Tutkimus osoitti, että englannin kielen oppikirjat sisältävät hyvin yksipuolisia tehtäviä, eivätkä opettajan oppaat anna hyviä neuvoja materiaalin muokkaamiseen. Opettajilla on kuitenkin oppimissuunnitelmassa annettu velvollisuus ottaa erilaiset oppijat huomioon, joten tekstikirjoja ja oppaita olisi kehitettävä tämän tavoitteen varmistamiseksi.</p>	
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## **ABBREVIATIONS**

EFL                      English as a foreign language

ICT                      Information and communication technology

L1                        First language

L2                        Second language

MSL                     Multisensory structured learning

# 1 INTRODUCTION

Dyslexia is a common learning deficit affecting approximately 5-10 % of all learners. According to research the underlying issue behind dyslexia is poor phonological awareness, i.e. the ability to recognise sounds and the letters or letter clusters that correspond with them (Moilanen 2002). Common symptoms of dyslexia are for example reading and spelling difficulties, inability to memorise written text and slowness in performing tasks.

Dyslexia can especially hinder the ability to learn foreign languages, as the letter-phoneme mappings vary between languages. When considering the commonness of dyslexia, foreign language teachers should have methods and materials that they can use to better help learners with dyslexia. However, studies (for example Rontou 2012, Gwernan-Jones 2010) have shown that many teachers do not have enough knowledge of dyslexia to be able to accommodate their teaching to the needs of dyslexic learners.

Learning English is vital in the modern, global world, especially for people whose L1 is not linguistically prominent. English is the dominant world language and it surrounds us both in working life and in freetime. In Finland foreign language learning starts already in the first grade, and for the vast majority this first foreign language is English. It can therefore be assumed that EFL plays a significant role in every Finnish learners' education. However, according to Dörnyei (2010), foreign languages are also some of the most difficult and anxiety-causing subjects for many learners. If teachers were able to take the needs of learners with dyslexia into account in EFL classes it could improve the motivation they have towards language learning as well as their results.

Aalto (2019) discovered in her BA thesis that according to EFL teachers in Finland, there are no ready-made materials available for dyslexic learners in textbooks. Therefore, the teachers would need extra time and effort to properly differentiate their teaching, and search for or modify the existing materials and exercises. Unfortunately, the teachers also considered that they do not have enough time to do so and that the teacher training did not prepare them adequately on how to modify materials.

This study aims to discover if this aforementioned lack of ready-made materials in EFL textbooks is true. The study will be conducted by evaluating the exercises in four different textbook series' workbooks and by critically analysing the teachers' manuals of these textbooks. The main emphasis is on assessing the exercises based on their suitability for learners with dyslexia and investigating the teachers' manuals to find out if they give adequate information on how to take the needs of learners with dyslexia into account.

This study is divided into 7 chapters. Chapters 2, 3, and 4 explain the terms dyslexia and differentiation in the context of foreign language learning and introduce studies of effective teaching methods. Chapter 5 presents the aims of this study and the specific research questions, as well as describes the data collection and analysis methods. Chapter 6 presents the results of data analysis. Chapter 7 presents the conclusions of the study.

## 2 DYSLEXIA

Dyslexia refers to difficulties in learning to read and write. It is a neurological condition that often has genetic traits. When diagnosing the condition, it is important to understand the role of intelligence - people with dyslexia have normal IQ. That is, they have difficulties in learning to read and write as expected despite not having intellectual deficits. Individuals with dyslexia have the ability to learn, even foreign languages, though the most effective teaching methods differ from those that have been often used in comprehensive schools. (Moilanen 2002: 11; Nijakowska 2010: 1.)

It has been discovered in brain scans that dyslexics have lower activity on their left cerebral hemisphere (Moilanen 2002: 12). The left cerebral hemisphere also contains the verbal centre, as well as the auditory centre. The right cerebral hemisphere on the other hand has for example the visualisation centre. These differences in brain activity might explain the common deficits, as well as the usual strengths of dyslexics, such as creativity and strong ability to visualise. The common deficits are discussed further in chapter 2.4.

Moilanen (2002: 11) estimates that approximately 5-15 percent of the Finnish population has dyslexia. In addition, the proportion who have difficulties in learning foreign languages is even greater, approximately 15-20 % of all basic education learners. As the number of learners affected with dyslexia or difficulties to learn foreign languages is so high, it is safe to assume that every teacher will encounter such learners and therefore every teacher should also have the knowledge and ability to modify their teaching to match the needs of these learners. Especially in the modern world, where the role of English as a global language is unquestionably important, attention must be paid to ensure that learners with dyslexia are taught with methods that enable them to reach language skills, equivalent of their intellectual potential.



Such language skills will further ensure that individuals with learning disabilities are not excluded from the society.

## **2.1 Developmental dyslexia**

Dyslexia can be either acquired or developmental. Acquired dyslexia is a result of a brain injury and means that a person loses already obtained skills in reading and writing, either partially or totally. Developmental dyslexia on the other hand is innate and often genetic. (Nijakowska 2010: 1.) Developmental dyslexia is incurable, and as a neurological condition it affects other features associated with learning as well, such as the preferred learning method. This study focuses on learners with developmental dyslexia, as most of the dyslexic in comprehensive schools have developmental dyslexia.

Developmental dyslexia is a genetic neurological condition. It is a lifelong condition, but according to Nijakowska (2010: 5) the characteristics and symptoms may change on an individual over time. Learners can for example discover coping mechanisms that reduce the severity of their symptoms. However, the symptoms will not disappear completely, and the individual will always have some deficits when compared to one without dyslexia.

## **2.2 Phonological awareness**

The underlying problem behind developmental dyslexia is poor phonological awareness, i.e. the ability to distinguish significant phonemes from each other (Nijakowska 2010: 4; Moilanen 2002: 13). Moilanen (2002: 11) therefore characterises developmental dyslexia as foremost an auditory deficit. However, he continues by

remarking that the problem does not lie in the auditory channel or hearing, but in the neurological system of how individuals perceive sounds and how they encode them in the linguistic system.

According to Moilanen (2002: 13), poor phonological awareness might especially hinder the ability to learn foreign languages, as their significant phonemes and phoneme-to-grapheme mappings usually differ from the learner's native language. Another factor that makes learning foreign languages more difficult for learners with dyslexia is their inability to recognise pseudo-words, i.e. words that resemble real words in a language orthographically but do not actually mean anything. Therefore, Moilanen notes that English might be an exceptionally difficult language to learn for dyslexics, as its orthography is highly irregular.

### **2.3 Deficits linked to dyslexia and learning**

Moilanen (2002: 10) lists the following as common deficits of developmental dyslexia: frequent mistakes both in reading and spelling, slow reading, difficulties with reading comprehension, slow writing, difficulties in listening comprehension, inability to learn foreign languages, and overall slowness in processing information.

According to Moilanen (2002: 11), the symptoms and their severity between individual dyslexics vary greatly. The condition can be described as a continuum, where each dyslexic has a unique place. Furthermore, even those learners without a diagnosed condition can have similar deficits and benefit from teaching methods tailored for learners with dyslexia. A learner with dyslexia might have other learning difficulties as well, such as perceptual deficits, poor motor skills, poor short-term memory, and attention deficit. The older the learner with dyslexia is, the more prone

they are to having anxiety, motivational issues, and poor self-confidence towards learning, due to negative experiences in learning contexts.

Nijakowska (2010: 98) reminds that such negative attitudes towards learning and low self-esteem can eventually turn into behavioural problems, such as aggressiveness, in classrooms. Other, less severe, consequences of not coping at school include daydreaming, getting easily distracted, avoiding schoolwork and withdrawing. In addition to being harmful for the individual learner and their academic success, such problems can also negatively affect the class atmosphere and therefore the learning results of everyone in the class. Offering positive learning experiences for dyslexic learners is therefore a relatively easy method of preventing potentially serious complications.

Moilanen (2002: 14) also highlights the role of the auditory channel as the origin of deficits for dyslexics. As the auditory channel works abnormally for dyslexics, hindering for example their ability to process what has been said, it is very important for teachers to pay attention to disturbing noises and background noises, such as other learners whispering. Furthermore, teaching should not rely too much on the teacher delivering information and instructions via the auditory channel. The role of different learning channels is discussed more in chapter 3.4.1.

## **2.4 Remediation and accommodation**

Even though developmental dyslexia cannot be cured, the symptoms that it causes can be reduced with careful and well-planned remediation. Nijakowska (2010: 25) notes that many adults with dyslexia have found coping mechanisms that reduce their deficits, sometimes so efficiently that it is difficult to notice their dyslexia. According

to Apel and Swank (1999), remediation, i.e. teaching learners how to overcome their deficits, can significantly improve reading skills, as well as the self-confidence of learners. However, Apel and Swank (1999) claim that remediation is not usually offered to learners. Instead teachers use accommodation, such as giving extra time for learners to perform tasks. Accommodation, though positive and supportive in nature, does not offer such positive learning outcomes to learners as effective remediation could. Therefore, the ready-made exercises in textbooks should include remediation as well.

Aalto (2019) studied the methods that Finnish EFL teachers use to take their learners with dyslexia into account. The most used methods were relatively simple accommodation methods, such as giving extra time in exams and reducing the amount of homework.

Remediation often needs to be planned individually according to the specific problems that a learner has, but there are also some general guidelines that should be followed with everyone. Kipp and Mohr (2008) list teaching letter-sound associations, paying attention to errorless output, and keeping the learning material simple and constant as such methods.

In order to alleviate the common deficits of learners with dyslexia, Moilanen (2002: 15) recommends teaching word forming techniques. Knowing these helps with both recognition and forming of text. Teachers should also pay attention to automating the spelling and pronunciation of the most common words.

### **3 TEACHING LEARNERS WITH DYSLEXIA**

According to Nijakowska (2010: 4) learners with dyslexia require a specific learning program in order to perform adequately and up to their intellectual potential in schools. Such a program should include both individualised teaching programs and requirements, as well as individualised teaching methods. Nijakowska also highlights the importance of qualified teachers in properly applying such individual programs and methods. How this is taken into consideration in the Finnish school system is introduced in chapter 3.1.

Motivation, both internal and external, plays an integral part in the success of acquiring a foreign language. According to Dörnyei (2010: 5) motivation is the most important factor in determining the result of foreign language learning. It surpasses even cognitive abilities, such as language learning aptitude or learning disabilities. Dörnyei (2010: 26) also emphasises that motivation works hand in hand with efficient teaching – working teaching methods create motivation for learners, and learners are often unable to upkeep their motivation if the quality of teaching is poor. The subject of motivation is elaborated in chapter 3.3.

As for qualified teachers, Bernadowski (2017) emphasises self-efficacy: in addition to proper education, teachers also need to believe in their abilities to take different learners and their needs into consideration. According to Bernadowski, self-efficacy derives from teaching experience, but does not necessarily have to be traditional classroom work. In her study, teachers who participated in one-on-one tutoring sessions reported significant increase in their self-confidence. This increased self-confidence in turn became evident in the teachers' abilities to implement differentiation methods for learners with dyslexia. The role of teachers is discussed further in chapter 3.2.

### **3.1 Inclusive teaching and three-step support in Finnish schools**

The principle of inclusion is that every learner should have the opportunity to reach the same learning targets while being part of the same group and community. For learners with special needs, this means offering them specialised learning opportunities, environments and methods. In public discussion inclusion has often been seen as a negative phenomenon, but Huhtanen (2011: 70) notes that Finnish schools do not implement inclusion very well. Instead they often offer only integrative methods for learners with special needs. Such methods include placing special education learners into normal classrooms without proper guidance from a special education teacher. Therefore, at worst, integration can deepen the problems that a learner has, and bring more problems to areas where they did not exist before. Huhtanen (2011: 71-73) highlights that inclusion must be properly designed and enough resources, such as access to special education, individualised learning materials, and support for the general education teacher must be given.

The current national core curriculum for basic education (Opetushallitus 2014: 27) states that every pupil has an equal opportunity to receive individualised teaching and support. The core curriculum also emphasises the use of versatile learning methods and encourages teachers to utilise different learning environments. All in all, the involvement of all pupils, diversity and individualised learning methods are some of the core values of the curriculum.

The national core curriculum for basic education (Opetushallitus 2014: 61) also states that all pupils should be taught in their local school and in regular classrooms. To enable this inclusion, learners with various learning difficulties are offered a three-step support system. These steps are general, intensified, and special support. Specific methods of support include for example remedial instruction, part time special

education and special learning aids. Each learner is offered support for as long as they need it and on the level they require it. The specific support methods are always planned individually, and in accordance with the learner's strengths and learning targets. Special attention should be paid to recognising learning difficulties in their early stages and preventing their aggravation.

### **3.2 The role of teacher**

According to Nijakowska (2010: 145), true inclusion of learners with dyslexia requires several accommodation methods. At the core is the awareness of teachers. They need to know how to recognise learners with dyslexia and how to modify their teaching methods and learning materials according to the learners' individual needs.

The newest national core curriculum emphasises teaching learners the skills of lifelong learning, expanding the learning situations to outside the classroom as well, and utilising authentic teaching materials. In L2 context, these authentic materials can be for example newspaper articles, song lyrics and novels. (Opetushallitus 2014.)

All these requirements demand new skill sets from teachers. Niemi (2016: 27) notes that especially the teachers need more wide understanding of pedagogically justified actions. For example, the Internet is full of authentic material in English, but for a teacher who is accustomed to only utilising textbooks, it can be difficult to find and use interesting and pedagogically relevant materials. Additionally, the amount of co-work and knowledge sharing should increase, so that teachers can learn from each other.

Furthermore, the relationship between a teacher and their learners is a key factor in ensuring positive learning outcomes. For example Bouras and Keskes (2014) mention

that teacher qualities such as the teacher's personality and teaching style affect learner's motivation as much as the right pedagogical methods. In their interview study, Kormos, Csizér, and Sarkadi (2009) discovered that learners with dyslexia felt more enthusiastic and positive about foreign language learning, when they were taught by teachers who they deemed effective and supportive. The learners that Kormos et al. interviewed valued highly the following: "teacher enthusiasm, supportive attitude, opportunity to learn, appropriate goal setting, relevant and interesting teaching materials, clarity of presentation, appropriate pace of learning and assessment methods that are adjusted to their disability" (Kormos et al. 2009: 133).

### **3.3 Motivational strategies to promote language learning**

Dörnyei (2010: 5) believes that motivation is the most important factor contributing to success in L2 learning. It plays an even larger role than for example language learning aptitude or possible cognitive deficits. Therefore, it is vital to study the aspects of what builds and sustains a good motivation for learning foreign languages. According to Dörnyei (2010: 31), the following preconditions are vital building blocks for motivation, which must all be in effect before more subtle motivational strategies can be deployed: a good relationship between teacher and students and the teachers' own behaviour, a good classroom atmosphere, and cohesive learner groups with distinct group norms. Of these, the teacher-learner rapport has already been discussed in chapter 3.2.

Dörnyei (2010: 40) argues that foreign languages are one of the most face-threatening school subjects and many students have L2 related anxiety, because their skills in L2 are still limited, and yet they are expected to produce utterances where the pronunciation, intonation, grammar, and content are all correct. In order to alleviate



this anxiety, the atmosphere in the classroom should be pleasant and accepting. Learners should not be punished or ridiculed if they make mistakes. Making mistakes is an inevitable part of learning and learners should be made aware of this as well. Furthermore, physical environment affects the atmosphere as well. Teachers should pay attention to how appealing their classrooms are and how much their learners can influence it. For example, having student-made posters on the classroom walls and allowing students to listen to music when possible can significantly increase the physical atmosphere.

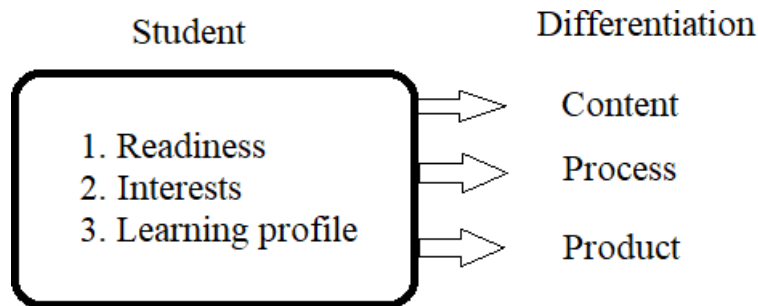
The learner group is naturally also a vital part of the classroom atmosphere and therefore the motivation to learn. Dörnyei (2010: 43) names particularly the group cohesiveness and constructive group norms as important factors in creating motivation. A cohesive learner group is one where all the learners work together, they help each other, and they motivate each other to higher achievements. Constructive group norms are a set of rules within the group, either implicit or explicit. By initiating discussion about good classroom behaviour and rules, the teacher can support the formation of constructive rules, such as always using L2 in class and not ridiculing others if they make mistakes.

Once these bigger outlines have been established, smaller methods that increase motivation towards language learning can be introduced. Dörnyei (2010) lists the following as such methods: modification of teaching materials to better suit the needs and interests of the learners, making learning stimulating and enjoyable by modifying the teaching methods, and individual learning goals and strategies. All of these methods will be further discussed in following chapters.

### 3.4 Differentiation

Using differentiation in teaching is required in the national core curriculum (2014), but it is not accurately defined what it means in practice. Therefore, it has become a somewhat abstract term and every teacher seems to have their own idea what differentiated teaching entails. In its widest, differentiation refers to all the different methods that teachers use to acknowledge the individual strengths, weaknesses and needs of their students. According to Roiha & Polso (2020: 29), teachers often find the requirement to differentiate as a burden, because they see it as time-consuming and difficult, and they often use rather constricted methods, such as creating an easier worksheet or giving more time to finish tasks. Thus, rather than incorporating a truly holistic differentiated teaching style, they include small parts of differentiated teaching whenever they have the time and energy to do so. Roiha & Polso (2020: 29) argue that when the teachers have a larger understanding of what differentiation is, it will also be more widely implemented in their teaching.

Following the principles of Tomlinson (2014), differentiation can occur in three concepts of teaching: the content, the process, and the product. The differentiation method being used should always be justified by the readiness, interests and learning profiles of the student who is in need of differentiation (Figure 1). The content refers to both the subject content, such as specific grammar knowledge in foreign languages, and learning abilities, such as reading comprehension skills. The process refers to the learning method of the student, such as seeing and hearing, as well as other teaching arrangements, such as utilising group work and peer tutoring. The product refers to the assessment of learning.



**Figure 1.** The principles of differentiation. (Tomlinson 2014).

Furthermore, differentiation is usually divided into differentiation for low-achieving and high-achieving learners, integrative and distinguishing differentiation, and reactive and proactive differentiation. Integrative differentiation aims for ensuring that all learners reach the same learning goals through differentiation, while distinguishing differentiation accepts that learners with individual needs also have individual learning goals. Reactive differentiation means that differentiation methods are only implemented once it becomes clear that the learner is struggling. Proactive differentiation aims to take the students' individual needs into consideration even before any problems arise. It is a preferable method in comparison to reactive differentiation, but its use requires that the teacher knows the students, what motivates them, how they learn, what are their strengths and weaknesses. It also requires constant reflection and adjusting, if it seems that the student is not responding well to the used methods. (Roiha & Polso 2020: 30-31.)

Roiha & Polso (2020: 36) have divided differentiation methods into five categories:

1. Teaching arrangements
2. Learning environment
3. Teaching methods
4. Support material
5. Assessment

They argue that the most efficient differentiation includes actions from each of these five categories. Learning materials are thus only one way to differentiate teaching, and actions such as altering the used learning channel (hearing, writing, etc.) and ensuring a disturbance free learning environment are also vital for learners with dyslexia. Considering the topic of the thesis, however, the emphasis is on downward differentiation and how to apply it with the help of learning material.

### **3.4.1 Modification of learning materials**

Dörnyei (2010: 63) argues that one of the most demotivating aspects of learning for students is to be forced to learn something they cannot see the relevance of. The syllabus is created by authorities, based on what they think students should learn, instead of giving the students themselves a voice and opinion on the matter. Furthermore, the syllabi are not updated often enough to include current information. The same problem of outdated content affects many textbooks as well. Dörnyei notes that such texts are less interesting for students and they engage with these texts less. Bearing in mind the role of motivation in L2 learning, the need for modification of learning materials is therefore even further justified.

Dörnyei (2010: 65) also highlights the same aspects as Roiha and Polso (2020: 53) as starting points for material modification: finding out the needs and interests of learners. However, this does not mean that the material should be different for all individuals. Designing modified exercises and materials on a group level can effectively reduce the time and effort needed for differentiation. They all further suggest using the learners themselves in the process of material gathering and modification. More advanced learners can search for relevant material, design exercises and tutor other learners in need.

### **3.4.2 Individual learning styles**

Exley (2003) has studied how the use of a dyslexic learner's preferred learning style affected their spelling. Her study included seven learners with dyslexia in year 7 and 8 in an English comprehensive school. Their preferred learning styles were determined by using two different questionnaires, after which they received differentiated teaching via this determined learning method in spelling in small groups. After nine weeks of differentiated teaching, five of the seven learners showed significant improvement in their spelling skills. All participating students also reported having better feelings and attitudes towards school after the study period.

Therefore, Exley's work shows a clear need for determining the preferred learning styles of learners with dyslexia and providing them with instructions in this learning style. The question of learning methods usually working for learners with dyslexia is discussed in more detail in the following.

Using Multisensory Structured Learning (MSL) is often recommended for learners with dyslexia. Nijakowska (2010: 124-125) describes MSL as direct, explicit, highly structured, systematic, cumulative, and highly repetitive. Naturally, all instruction is given by stimulating multiple sensory channels. Dyslexic learners acquire foreign

languages poorly, so they require more explicit and direct instructions. They also benefit greatly when they know the structure of lessons and given tasks, so they can concentrate on the essential instead of figuring out what to do. All new information is built on already acquired knowledge and it is repeated often to ensure that the information is learned and adopted correctly.

As for detailed instruction, Nijakowska (2010: 125) says:

“ - multisensory teaching is based on the constant use of the following: what a letter or a word looks like, how it sounds and how the speech organs and hand feel like when producing it”

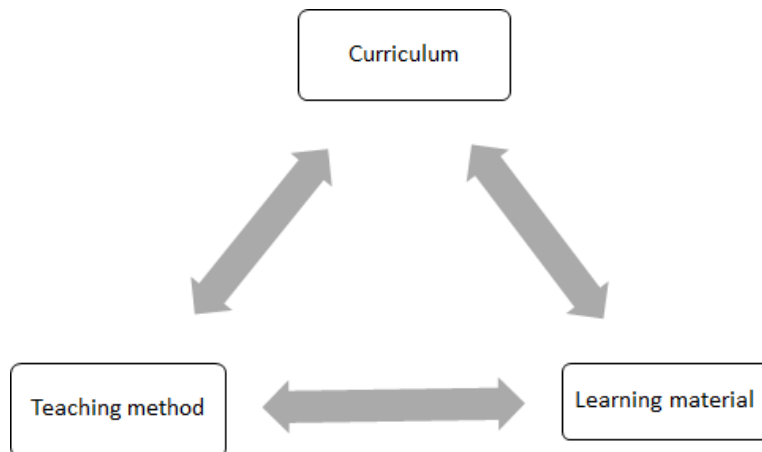
The importance of stimulating as many sensory channels as possible must not be neglected. According to Nijakowska (2010: 125), the more sensory channels that are being activated, the more the learner is able to form associations between phonemes and graphemes.

To properly plan a working teaching method, Nijakowska (2010: 122) recommends starting with assessment. The learner's strengths and interests, as well as weaknesses and specific learning targets must be reviewed in detail, to understand what modifying methods would be the most useful for them.

## 4 LEARNING MATERIALS FOR LEARNERS WITH DYSLEXIA

This chapter describes the role of learning materials in teaching. Chapter 4.1 explains the role of textbooks in teaching in Finnish schools and chapter 4.2 introduces some basic guidelines on how information and communication technology (ICT) could enhance the learning experience and add variety to learning materials for dyslexic learners. Chapter 4.3 introduces the principles on how learning materials should be modified in order to take the needs of learners with dyslexia into account.

Learning materials are in the core of effective teaching. Ruuska (2016: 172) describes teaching as a triangle: curriculum, teaching methods and learning materials are all vital components, that work in unison (Figure 2).



**Figure 2.** The components of teaching (Ruuska 2016: 172).

## 4.1 Textbook derived teaching in Finnish schools

Even though textbooks are not the curriculum, and the Finnish national core curriculum for basic education does not require the use of any textbook, Ruuska (2016: 173) notes that all current Finnish textbooks follow the latest national core curriculum. However, as the national core curricula have become more ambiguous, the textbooks have become more diverse.

According to Ruuska (2016: 175), a good textbook is first and foremost clear: it has informative headlines, table of contents, clearly distinguishable exercises and at all times it indicates what the aim of learning is. The contents have been designed for a certain age group and the cumulative nature of information has been taken into consideration.

According to Hentunen (2004: 39), many teachers follow the content of the textbook in their teaching more than for example the curriculum or latest pedagogical research. She argues that such teaching can quickly become too teacher-derived, mechanical and de-motivating for learners. Instead teachers should review the content of the textbook critically - what is relevant, what can be excluded, what other methods there are to teach the same content, what is the logical order of presenting new information, etc. Varying the methods on how to present the content of the textbook keeps the learners interested and engaged, and lessens the risk of textbook taking too big of a role in teaching. The same result can be achieved by occasionally giving the learners materials outside the textbooks.

Aro (2009) argues that the wide use of textbooks in language learning has shaped the learners' impression on how to effectively learn languages. In her interview study she discovered that Finnish elementary school pupils regarded learning to *speak* English



as important, but they thought that the best way to learn it was by *reading*. Furthermore, the pupils thought that textbooks teach them the 'real' English that they will need when for example travelling, and the English that they encounter in their freetime, for example in the Internet, is not as important or prestigious. Shifting the teaching to be less book-oriented might widen the learners' understanding of lifelong learning and utilising all available learning materials and opportunities, as the latest national core curriculum tries to advocate.

## 4.2 Digital materials and the use of ICT

Nowadays the use of computers, tablets and other devices is very wide in Finnish schools. Different computer programs and software tools, such as proofreading, can help learners with dyslexia to compensate for their reading and writing related difficulties. Erilaisten oppijoiden liitto (2017) lists at least the following tools, applications and software as beneficial for learners with linguistic related deficits: dictation (both for converting speech to text and to give the computer commands), text to speech programs that read aloud all written texts, spellcheckers, audiobooks and different cloud services, that allow the learners to demonstrate their knowledge without the use of text, and online translators.

The growing trend of digitalisation leads to learning materials being more and more in digital form as well. Ruuska (2016: 177) nevertheless criticises the open access materials. In her opinion, these materials often lack the thorough pedagogical viewpoint that textbooks have. She also fears the growing workload and responsibility that open access learning materials might pose to teachers - constantly creating, modifying, and searching for new materials.

However, there are other digital learning materials as well in addition to open access material created by teachers. For example, textbook publishers provide extra digital learning materials and readily differentiated textbooks that complement their traditional textbooks. Many (for example Ruuska 2016: 180; Roiha & Polso 2020: 141) criticise that these do not work as perhaps intended - the material follows very strictly the same pattern as printed textbooks and it does not offer true variation or utilise all the abilities and application that ICT can offer. In addition, this extra material often costs more, which is a problem for many schools already struggling with low material budgets.

Ruuska (2016: 180) points out that the core function of school is still to educate learners - using games and ICT has to be justified pedagogically. At best the introduction of digital materials and games can motivate the learners and increase enjoyment towards learning. However, using too much technology and games can have negative effects too, such as making concentration more difficult and emphasising wrong aspects, such as winning instead of co-operation.

### **4.3 Modification of materials**

According to Fadjukoff (2007: 257), individualised teaching requires modifying the learning material according to individual needs. When learners can see the relevance of the learning target in comparison to their own lives and interests, they are more prone to acquiring the content. However, Fadjukoff (2007: 259) also acknowledges the limits that teachers have - they have many other responsibilities as well, and they often do not have enough time to create meaningful individualised learning material.

Some textbook publishers offer readymade specialised material and books for learners who need differentiated material. Roiha & Polso (2020: 141) argue that in essence this is a good thing, but in reality they suit few learners. Readymade material cannot meet the needs of different types of learners, as they all have individual needs. Instead they emphasise the need for better teachers' guides - the tasks and exercises should be easily modified and the guides should give concrete instructions and tips on how to modify them to different types of learners.

Motzo (2018) has modified existing open-source learning materials to better suit the needs of learners with dyslexia. Her aim was to incorporate the principles of MSL into the exercises. She modified different exercises so that they would overcome the issues caused by poor phonological awareness and utilise the usual strengths of dyslexic learners. All of the exercises utilised for example color coding in a systematic way, for example marking all letters or letter clusters that are pronounced with the same phoneme with the same color, and marking all sentence elements with the same color. These color codes were often further highlighted with visual cues. For example, when teaching the learners the difference between 'k' and 'ch' sounds, the words containing a 'k' sound were placed next to an image of a king, and the words containing a 'ch' sound were placed next to an image of a cherry.

Another method that Motzo (2018) incorporated a lot for her modified exercises was the introduction of a kinaesthetic element. While the original exercises instructed the learners to write down their answers, Motzo's modified exercises included textboxes that the learners were asked to organise into correct order. Motzo's study shows that material modification for learners with dyslexia does not have to be complicated, and adding elements that are beneficial for dyslexic learners is rather straight-forward.

Holmqvist Olander, Wennås Brante and Nyström (2016) have studied the effect that multimodal texts have on the reading of people with dyslexia by recording their eye-movements when reading a text and comparing them to a control group of non-dyslexic people. Their study revealed that dyslexic spent less time looking at the pictures than the controls, and that dyslexic learn more from a material that is text-only than from a material with pictures. The learning was controlled by reading comprehension questions. The presence of pictures in the text reduced the learning of non-dyslexic control group as well, but not as steeply. In light of Holmqvist Olander et al. study, the visual aids in teaching materials aimed at learners with dyslexia should be planned carefully.

## 5 PRESENT STUDY

The following chapter will present the aim and the research questions of the study. The data collection process is also described, as well as the methods of analysis.

### 5.1 Aims and research questions

The aim of this study is to discover what kind of exercises EFL textbooks have that incorporate the idea of MSL and the use of multiple learning channels and how much there is such material. The study is carried out as a workbook analysis and a teachers' manuals analysis. The workbooks are evaluated in terms of exercise types (for example oral, kinaesthetic). Additionally, the instructions given in the teachers' manuals on how to differentiate the materials in workbooks are evaluated. The research questions are:

1. What kind of and how much materials EFL workbooks have that suit the needs of learners with dyslexia?
2. Do the teachers' manuals give information on how to modify exercises for learners with dyslexia?

The hypothesis is that there is little, if any, readymade exercises for learners with dyslexia in EFL workbooks, especially in the conventional books. The assumption is that the books still have a large proportion of written exercises and that there are little visual cues or other differentiation methods incorporated into the workbooks. Thus, another hypothesis is that teachers are required to modify existing material.

The primary method of answering the research questions is to evaluate the exercises in EFL workbooks according to the primary learning channels they stimulate, and the instructions given in the teachers' manuals.

## **5.2 Selection and collection of the data**

The analysis focuses on workbooks aimed for upper comprehensive school, more specifically the seventh grade. The seventh grade was chosen as the study context, as it is the first grade in Finland when every pupil is taught English by a subject teacher. The pupils have already studied EFL for four to six years, so the assumption is that they have acquired the basics of the language and do not need to be taught everything from the beginning. Furthermore, the transition from elementary school to upper comprehensive school might showcase as a more intensive studying, highlighting the need for specialised learning methods for learners with dyslexia.

The chosen textbooks are Scene 1 and Top 7 from Otava, and Spotlight 7 and On the Go 1 from SanomaPro. Otava and SanomaPro are the biggest textbook publishers in Finland. The content of all chosen textbooks follows the newest national curriculum. All four textbook series have two books, one textbook with written texts and one workbook with corresponding exercises. For this study, the choice was made to analyse only the exercises on workbooks. The textbooks all follow a similar pattern of listening and reading a text, so the assumption was that the workbooks could potentially utilise a wider range of learning channels.

The digital extra material provided by the publishers was excluded from the data, as they mostly consisted of the exact same exercises as the printed books. Sometimes they were in facilitated form, for example when the printed exercise instructed the learner

to write full sentences, the digital exercises only instructed to write certain words. However, the primary learning channels remained the same. Furthermore, the digital extra materials must be bought separately, and schools struggling with budgets might opt out of buying this material.

Scene 1 contains six study sets, each of which have two texts. Each text is covered with the same six basic exercises: getting to know the vocabulary, understanding the text, essential phrases of the text, irregular verbs, grammar introduced in the text, and revising the essential vocabulary. There are also listening and pronunciation exercises for each text. In addition Scene has five exercise types that appear regularly throughout the book: *Action!* - doing something creative together, *Go online* - finding authentic study material from the Internet, *Show and Tell* - sharing important things and experiences with others, *Get This!* - deducting grammar rules, and *How Am I Doing?* - reviewing own development.

Spotlight 7 is divided into six units, each of which has two texts. Of these, only the first one is meant to be covered by all and the second is intended for upward differentiation. Each unit also has one grammar theme. The updated workbook contains communication exercises, optional exercises, and exercises for advanced learners. In addition, the exercises encourage integration for other subjects, using the Internet for searching information and doing projects with the help of ICT. The pupils have a possibility to test their skills with *Test yourself* -exercises.

On the Go 1 has six study units, each of which contains one text that is meant to be covered by all pupils. There are also several optional texts for upward differentiation. In addition to the text, each unit consists of a grammar theme, communication strategies, talking exercises with pronunciation guidelines, and one longer listening comprehension exercise. There are also exercises that encourage the pupils for more

project-oriented working and utilising ICT. At the end of each unit the pupils have an opportunity to test and self-evaluate what they have learned.

Top 7 is divided into two themes, both of which have eight chapters. Each chapter has one text meant to be covered by everyone plus bonus texts for upward differentiation. The chapters all have a different grammar section as well. After each chapter there is a possibility to self-evaluate your progress.

### **5.3 Methods of analysis**

The material was analysed with quantitative and qualitative methods. The first part of the analysis was to categorise the exercises in workbooks based on the used learning channel and thus determine the proportion of different task types. The second part of the analysis was to evaluate the teachers' manuals, to determine if they provide information for teachers to modify tasks to different types of learners.

The aim was to evaluate the exercises by categorising each one of them based on the learning channels it activates, i.e. listening, speaking, tactile, etc. The categorisation derives from the theory of Multisensory Structured Learning (MSL), which encourages the stimulation of multiple sensory channels when teaching, and it is modified according to the exercise types found from selected workbooks. The learning channels are visual (seeing, reading), auditory (speaking, hearing), tactile (doing with hands, writing) and kinaesthetic (more extensive doing, moving). However, exercises in the chosen workbooks were seldom constructed to fully support this distribution. There were few exercises that activated only one learning channel, and thus the choice was made to combine two learning channels to get a more objective view of the needed learning channels for each exercise. The categorisation is presented in Table 1.



**Table 1.** Categorisation of exercises.

	N	%
Speaking & writing		
Speaking & listening		
Speaking & reading		
Speaking & doing		
Speaking		
Listening & writing		
Listening & reading		
Listening & doing		
Listening		
Reading & writing		
Reading & doing		
Reading		
Writing & doing		
Writing		
Doing		

All exercises in workbooks were counted and categorised, even those listed as bonus or optional exercises. Exercises that consisted of sub-exercises, such as 5a, 5b and 5c, were counted according to the number of sub-exercises. If the instructions gave options on how to perform the exercise, they were categorised according to the first-mentioned method.

According to Tuomi and Sarajärvi (2009: 93), categorisation according to predetermined criteria and calculating the occurrence of each category in the data is considered as quantitative content analysis. When analysing the results, the greatest emphasis is on finding similarities and typicalities in the data. In the case of this study, the main purpose is to discover the most common exercise types and see if there are differences between the four workbooks chosen.

The chosen analysis method can be described as theory based (Tuomi & Sarajärvi 2009: 95-97). The categorisation is created with the help of pre-existing theory, and this theory helps with the analysis process. However, the data also modifies the categorisation, and therefore the approach is not solely theory driven.

## 6 RESULTS

This chapter presents the results of the data analysis. First the proportional distribution of different exercise types in each selected workbook is displayed in chapter 4.1, along with examples of selected exercises. Chapter 4.2 discusses the findings of teachers' manuals.

### 6.1 Workbooks

Scene 1 has 563 exercises in 12 chapters, which is the most exercises in the analysed workbooks. It has the least amount of written only exercises, but their portion is still very high, altogether 210 exercises (37 %). Scene 1 also has the biggest amount of speaking only exercises, 118 exercises (21 %). The third most common exercise type is combined reading and writing with 72 exercises (13 %). Scene 1 contains all categorised exercises types, except combined reading and doing. All exercises and their portions by categories are presented in Table 2. Each column of the table represents exercises that correspond to a specific text.

Scene 1 has 23 doing only exercises, which is 4 % of all exercises. There are 59 exercises (10 %) that have some doing element. Exercises that have some writing element on the other hand account for 64 % of all exercises.

**Table 2.** Exercises and their types in Scene 1.

														N	%
Speaking & writing	1	1	2		5	2	1		1		1	1	1	15	2.66
Speaking & listening		1	1	1	2			1	1	3	3	1		14	2.49
Speaking & reading					1	1			1					3	0.53
Speaking & doing		1			1							2	1	5	0.89
Speaking	7	9	10	7	12	10	17	6	10	10	13	7		118	20.96
Listening & writing	4	3	3	3	3	2	5	2	2	3	3			33	5.86
Listening & reading					1									1	0.18
Listening & doing												2		2	0.36
Listening	2	1	4	1	2	1		1	1	1		1		15	2.66
Reading & writing	7	6	9	7	1	2	4	7	4	5	8	12		72	12.79
Reading & doing														0	0.00
Reading	2	2		2	4	3	2			4	1	3		23	4.09
Writing & doing	2	2	3	3	5	1	3	3	1	1	4	1		29	5.15
Writing	14	20	25	10	15	17	30	13	15	23	12	16		210	37.30
Doing	1	2	1	4		1	1	3	2	3	2	3		23	4.09
Total														563	100.00

The majority of the doing exercises in Scene 1 are projects that require a tangible outcome, such as a poster. The instructions on how to execute these projects are not too specific, so the learners have the option to use their creativity while doing them. Often the instructions also encourage the use of ICT. One exercise for example instructed the learners to interview their classmates on what their rooms look like, and then produce a poster based on the answers, either by hand or by computer. Other doing exercises in Scene 1 are either acting or drawing.

Scene 1 has *Go online* exercises in every chapter, that encourage learners to utilise ICT and find information on the Internet. However, most of these *Go online* exercises instruct learners to write their findings on a notebook and thus they lose their potential of widening the used learning methods. Therefore the majority of the *Go online* exercises were categorised as reading and writing exercises.

On the Go 1 has the least amount of exercises of the analysed workbooks, 395 altogether in six chapters. The most common exercise types are writing only with 155 exercises (39 %), reading only with 60 exercises (15 %) and combined reading and writing with 33 exercises (8 %). On the Go 1 has exercises for every category type, but combined speaking and writing, combined speaking and doing, combined listening and reading, and combined listening and doing only have one exercise each. All exercises and their categorisation are presented on Table 3.

Exercises that require writing account for 53 % of all the exercises. Exercises that require doing account for 12 % of all exercises. They are heavily writing oriented though, as combined writing and doing consists of 54 % of these 50 exercises.

**Table 3.** Exercises and their types in On the Go 1.

							N	%
Speaking & writing	1						1	0.25
Speaking & listening	5	3	3	4	4	4	23	5.82
Speaking & reading	1	1		1			3	0.76
Speaking & doing			1				1	0.25
Speaking	3	6	4	4	10	4	31	7.85
Listening & writing	4	2	4	2	4	3	19	4.81
Listening & reading	1						1	0.25
Listening & doing						1	1	0.25
Listening	4	3	3	3	2	4	19	4.81
Reading & writing	5	11	3	5	6	3	33	8.35
Reading & doing	1			1		1	3	0.76
Reading	5	11	11	14	10	9	60	15.19
Writing & doing	3	6	6	6	5	1	27	6.84
Writing	20	32	30	24	28	21	155	39.24
Doing	2	7	2	1	2	4	18	4.56
Total							395	100.00

An example of a combined writing and doing exercise in On the Go 1 is a cartoon, where the learners are instructed to write the dialogue on existing images. It allows the learners some creativity, but the end result is once again something that the learners must write down. For example encouraging the learners to draw their own cartoons would widen the utilised and needed learning channels.

On the Go 1 has also a lot of written exercise types that were not found on other workbooks, such as underlining words from a text, writing words on a picture, and anagrams. While this adds versatility to the exercises, they all stimulate the same learning channel and promote the idea that languages are learnt by writing. They do not take the needs of learners with dyslexia into account. For example the exercise shown in Figure 3 might pose strong difficulties for learners with dyslexia. It requires learners to deduce missing letters, while spelling and memorisation are usually difficult elements for learners with dyslexia.

**123+** Mitä epäsäännöllisten verbien imperfektimuotoja saat, jos lisäät eteen yhden kirjaimen? Imperfektimuodot ovat aakkosjärjestyksessä.

1 ___ OUGHT	5 ___ AVE	9 ___ HOT
2 ___ UT ( UT)	6 ___ OT	10 ___ ANG ( ANG)
3 ___ ROVE	7 ___ NEW	11 ___ OLD ( OLD)
4 ___ ELL	8 ___ AN	12 ___ OOK

**Figure 3.** A writing only exercise in On the Go 1.

Another exercise type in On the Go 1 that does not exist in the other analysed workbooks is watching a video. The categorisation table did not have a visual learning channel so these exercises were counted as listening. In essence all the videos were only listening exercises, as they presented talking heads discussing with each other about pronunciation rules. The videos did not offer any visual cues to help learning.

Top 7 has 506 exercises altogether, divided into 16 chapters. Of these 208 exercises (41 %) are writing only exercises, 86 exercises (17 %) are speaking only exercises and 60 exercises (12 %) are reading only exercises. Exercises that require writing in some form account for 59 % of all exercises. There are 10 (2 %) doing only exercises, and 54 (11 %) exercises that require doing. There are no exercises that combine listening and reading, or speaking and doing. All exercises are listed on Table 4.

**Table 4.** Exercises on Top 7.

																		N	%
Speaking & writing	2		1	1			1	1									1	7	1.38
Speaking & listening		2	1	1	3	1	1	2	2	2						1		16	3.16
Speaking & reading					1			1							1		1	4	0.79
Speaking & doing																		0	0.00
Speaking	5	4	7	6	7	4	5	6	6	7	6	5	5	4	4	5		86	17.00
Listening & writing		2	1	1			2	1			2	1			1	1		12	2.37
Listening & reading																		0	0.00
Listening & doing												1						1	0.20
Listening	2		1	2	3	4	1	1	1	1	1	1	3	1	1	2		25	4.94
Reading & writing	2	1			1	6	2	3	4	2	2	2	2	2		5		34	6.72
Reading & doing								1				1	1		1			4	0.79
Reading	5	4	6	3	1		4	5	3	4	4	4	4	3	6	4		60	11.86
Writing & doing	1	1	2	3	5	1	3	2	3	5	2	1	1	3	1	5		39	7.71
Writing	9	17	17	14	18	10	8	13	15	14	11	14	14	12	10	12		208	41.11
Doing							1		1			1	2	1	1	3		10	1.98
Total																		506	100.00

Of the analysed workbooks, Top 7 has the most combined writing and doing exercises, almost 8 % of all the exercises. These are all different kinds of crossword puzzles or vocabulary exercises that included drawing. The exercise types are not therefore very versatile. Top 7 has few doing only exercises, under 2 % of all exercises.

A combined doing exercise type in Top 7 that other books do not have is a map, shown in Figure 4. In it the learners need to draw out a route according to written instructions (categorised as reading and doing) or oral instructions (categorised as listening and doing).



**9b** Katso karttaa. Lähtöpaikka on merkitty pallolla. Ruudut kartalla ovat kortteleita. Missä olet, kun seuraat ohjeita?

1. Walk down the street all the way to the museum.
2. Turn left at the museum.
3. Keep walking until you come to Jackson Street.
4. Turn right and walk straight on.
5. Turn right at the corner of Jackson and 33rd.
6. When you reach the second building on your right, you're there.



**10a** Piirrä reitit karttaan kuulemasi perusteella. Lähtöpaikka on merkitty pallolla.



**10b** Neuvo reitti eksyneelle karttaa avuksi käyttäen. Sopikaa lähtöpaikka.

Excuse me, where is the...?

**Figure 4.** A map exercise in Top 7.

Spotlight 7 has 478 exercises in 6 units. It has as much as 217 (45 %) written only exercises, which is the highest percentage of the analysed workbooks. Furthermore, there are 79 (17 %) combined reading and writing exercises and 44 (9 %) reading only exercises, so it can be interpreted as the least versatile workbook. Altogether there are 359 exercises that contain a writing element, which accounts for 75 % of all the

exercises. There are only six (1 %) listening only exercises and 29 exercises (6 %) that have some listening element. All exercises are listed on Table 5.

**Table 5.** Exercises in Spotlight 7.

							N	%
Speaking & writing	5	2	3	5	3	7	25	5.23
Speaking & listening			1	1		1	3	0.63
Speaking & reading	2	2	3	3	1	2	13	2.72
Speaking & doing	1						1	0.21
Speaking	2	4	6	8	9	8	37	7.74
Listening & writing		1	4	1	2	2	10	2.09
Listening & reading	4	1	1	3	2	2	13	2.72
Listening & doing							0	0.00
Listening	1	2		1	1	1	6	1.26
Reading & writing	17	17	16	12	10	7	79	16.53
Reading & doing							0	0.00
Reading	5	12	5	8	7	7	44	9.21
Writing & doing	2	3	4	9	5	5	28	5.86
Writing	32	34	32	35	43	41	217	45.40
Doing		1			1		2	0.42
Total							478	100.00

There are only two doing only exercises in Spotlight 7, both of which were drawing exercises. There are no exercises that combine listening and doing, or reading and doing. Altogether there are only 31 exercises (6 %) that contain a doing element and of these combined writing and doing are the vast majority. The combined writing and doing exercises were mostly crossword puzzles.

The amount of written only exercises is especially evident on grammar sections. The gravest example of is a spread on the book that has eight exercises, all of which are categorised as written only exercises. The book does not therefore offer the learners any optional learning channels to internalise the content. The textbook creators' assumption seems to be that grammar is best learnt with traditional means of reading and writing, while the theory of MSL clearly states that the more learning channels are used the better.

There are few listening exercises in Spotlight 7. In practise their number is even fewer than the table shows, because many exercises have sub-exercises that are alternative to each other, and the given instructions are to only do one of them. The taped dialogue is same for both of them, only the questions are different. Following the general guidelines of categorisation in this study, these were counted as two separate exercises.

Spotlight 7 advertises itself of having communication exercises and exercises that encourage the use of Internet and ICT. However, when compared to other textbook series, these features were lacking. 17 % of the exercises have a speaking element, but the speaking only exercises do not encourage communication, as showcased in Figure 5. Instead of having a spontaneous conversation, the learners are only required to translate the sentences.

- 17 Sano suomenkielinen lause englanniksi. Parisi kuuntelee, tarkistaa ja neuvoo. A aloittaa.

A	B
No, onko kysymyksiä?	So, any questions?
<b>Have the teachers been more demanding?</b>	Ovatko opettajat olleet vaativampia?
Kyllä ovat. Ja meillä on ollut enemmän kokeita.	<b>Yes, they have. And we've had more tests.</b>
<b>You're Finnish. Why have you started Spanish?</b>	Olet suomalainen. Miksi olet aloittanut espanjan?
Minusta kielten oppiminen on hauskaa. Rakastan myös kirjojen lukemista.	<b>I think learning languages is fun. I love reading books, too.</b>
<b>Really? Aren't you busy with your basketball team?</b>	Todellako? Etkö ole kiireinen koripallojoukkueesi takia?
Kyllä olen. Joten tänä vuonna minulla ei ole ollut niin paljon aikaa lukemiseen.	<b>Yes, I am. So, this year I haven't had so much time for reading.</b>
<b>You said that the Finnish school system is more relaxed. How come?</b>	Sanoit, että suomalainen koulujärjestelmä on rennompi. Miksi?
Kutsuimme usein opettajiamme heidän etunimillään.	<b>We often called our teachers by their first names.</b>
<b>Interesting. How about vacations? Or don't you have them?</b>	Mielenkiintoista. Entä lomat? Vai eikö teillä ole niitä?

Figure 5. A speaking exercise in Spotlight 7.

Furthermore, some speaking elements in exercises were more difficult to detect. For example, the exercise shown in Figure 6 has the speech bubbles logo on it, indicating that it is a speaking exercise, but no written instructions were given on how learners are expected to communicate. This exercise was categorised as combined speaking and writing exercise. In other series, where the textbook authors have wanted learners to co-operate with each other, such instructions have been clearly mentioned.

**9** Kun omistajia on useampia kuin yksi, vaihtoehtoja on kaksi.

the girls' room tyttöjen huone	Monikossa s-pääte: pelkkä heittomerkki <b>'s</b>
people's names ihmisten nimet	Monikossa ei s-päätettä: heittomerkki ja <b>'S</b>

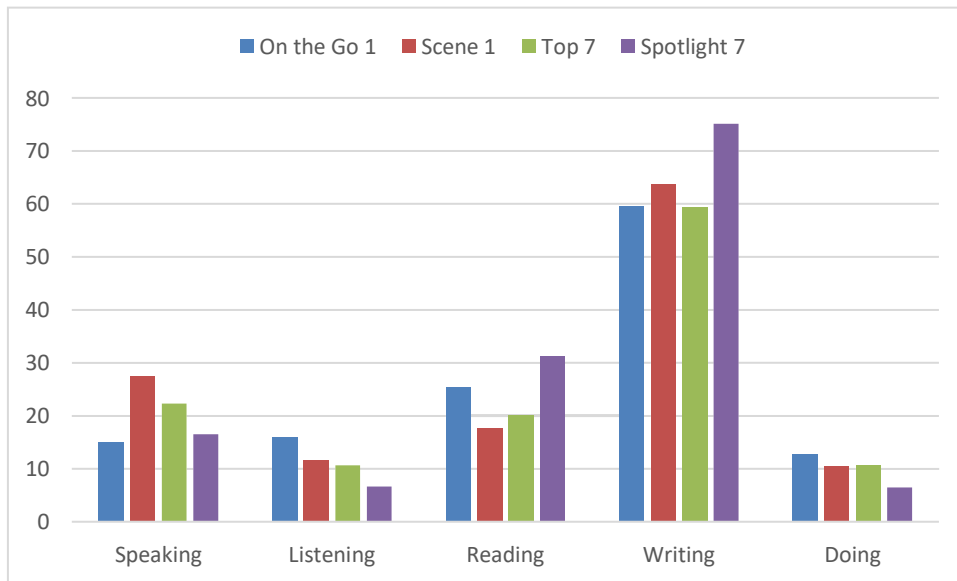
**Kirjoita suomenosta vastaavat genetiivimuodot.**

1 Is ice hockey only a _____ sport?	polkien
2 Why are _____ things often on the floor?	lasten
3 Are your _____ friends rich?	vanhempieni
4 Where's the _____, please?	miehen huone
5 Why are _____ so big?	naisten urheilukassit
6 Are your _____ interested in poetry?	siskojesi luokkakaverit

**Figure 6.** A combined speaking and writing exercise in Spotlight 7.

The proportional exercise types of all analysed textbook series are presented in Figure 7. All in all, the excess of writing exercises is evident in all workbooks, as well as the very low percentage of doing exercises. The share of different exercise types is similar in all four analysed workbooks. Therefore, it can be concluded that there is no textbook available that would take the needs of learners with dyslexia better into account than the others or be the 'best' option. The role of teachers and how they modify the ready-made exercises or conduct their own is thus pivotal.

One of the most important tasks of teachers is to control that students learn the required content and perhaps the simplest way to ensure this is to teach the same content with multiple different ways. Material modification is an option, but taking into consideration how many studies indicate that teachers do not have enough time or skills for creating and modifying pedagogically justified exercises, it seems contradictory that the exercises in textbooks are not more versatile.



**Figure 7.** Proportional exercise types in analysed workbooks.

Taking into consideration the anxiety and motivational issues that language learning and negative experiences can provoke, as discussed in chapter 3, it should be of the utmost priority to offer interesting exercises that are not too difficult for learners. However, it is unlikely that learners with dyslexia will see these highly reading and writing oriented exercises as interesting and motivating, and thus it is likely that these learners are not able to reach the language competence that would be possible for them when regarding their intellectual properties.

Roiha and Polso (2020: 24) point out that textbooks are mostly written by teachers who have vast experience of practical teaching work as well. Therefore it seems odd that there is not more versatility on the exercises or more ready-made exercises for downward differentiation. All analysed workbooks however have ample opportunities for upward differentiation. This is especially difficult to understand with workbook series, which advertise themselves as being specially designed for different learners and containing a lot of material for differentiation. This seems to indicate that teachers do not have enough information about what teaching methods

are beneficial for learners with dyslexia and what kind of materials would suit them the best. For example Nijakowska (2010: 115) notes that there is a significant gap between research findings and actual classroom practices – teachers seldom design their teaching methods based on methods that studies recommend.

Perhaps the textbook writers do not even realise themselves how monotonous their exercises are. There are a lot of different exercise types in the workbooks, and this might deceive them into believing that there is variety in the learning channels as well. For example, the cartoon and project exercises are examples of exercises that differ from the customary ‘write words or sentences’ exercises, but they still do not activate more sensory channels. One possibility for this monotony is that the textbook writers are doing what has always been done – as discussed in chapter 4, the teaching in Finnish schools has traditionally been very writing-oriented and relied heavily on the use of books. Using more versatile methods, such as the kinaesthetic exercises that Motzo (2018) created, might still be too new and different for the teachers to implement.

Finally, it must be noted that there are no universal guidelines on how to categorise exercises, and thus this study is open to subjectivity. Another researcher might interpret and categorise the exercises differently. However, the results show that the vast majority of ready-made exercises in workbooks require writing and that there are very few functional exercises. Even though another researcher might categorise the exercises differently, the bigger picture is unlikely to change. There is no versatility in the readymade exercises in EFL workbooks to cater for the needs of learners with dyslexia.

## 6.2 Teachers' manuals

The teachers' manual of Scene 1 gives the teacher basic information on how the exercise types in the workbook can be modified for different types of learners. There are also tips on how to increase learning by doing, different games, and how to utilise ICT during classes, for example naming different learning applications. The manual does offer some tips for downward differentiation, but mainly these tips are just simplified versions of the exercise, such as writing sentences instead of a full story, and not expanding the variety of learning channels.

The teachers' manual of On the Go 1 has similar instructions. It gives details on how the writers have intended the exercises to be modified or how they can be utilised for downward differentiation. The main emphasis on these tips is on how to simplify the exercises and give material that has more Finnish than the regular exercises on the workbook. There are also some game options, but not as many as in Scene 1's manual.

Top 7's teachers' manual has its own section dedicated to differentiation. The section briefly discusses three learning deficits (ADHD/ADD, asperger syndrome, specific language impairment), how to detect them, common symptoms related to these deficits, and how to best support learners with these deficits. Although specific language impairment is not a synonym for dyslexia, many of the difficulties and also remediation methods are the same for the two deficits. The manual suggests for example using multiple different methods to teach the same content, varying different learning channels throughout the class, and visualisation of the content.

While it is great that the teachers' manual presents these learning difficulties at all, the absence of dyslexia is puzzling. With estimates of around 10 percent of learners having dyslexia it is one of the most common learning deficits, and especially language



teachers should be made aware of how to take their needs into account. Additionally, as the remediation methods for dyslexia and specific language impairment are so similar, it is odd that dyslexia is not mentioned at all.

Spotlight 7's teachers' manual does not offer any tips or guidelines for modification or differentiation. There are just extra exercises, most of them simplified versions of the workbook's exercises that mostly require the learners to write down their answers.

All in all the teachers' manuals do not have very tangible instructions on how to modify exercises for different learners or how to properly differentiate the content downwards. Mostly the differentiated material is just simplified versions of the existing exercises, for example shorter sentences and more readily translated words. The few instances that mention learning by doing seem to treat it as a synonym for playing and games. For example, the color-coding and movable objects tips mentioned by Motzo (2018) were not mentioned at all. Therefore it seems evident that teachers will not be able to properly modify the exercises for dyslexic learners with the help of the teachers' manuals.

## 7 CONCLUSIONS

The first aim of this study was to discover what kind of material there is for learners with dyslexia in EFL workbooks. The hypothesis was that the workbooks would not contain exercises for dyslexic learners, but teachers are required to modify or create materials themselves. This hypothesis proved to be true, as a vast majority of the ready-made exercises in analysed workbooks required reading or writing, and only few incorporated a kinaesthetic element in them. The second aim of this study was to evaluate the instructions given to EFL teachers in the teachers' manuals on how to modify the exercises and how to differentiate their teaching for them to better suit the needs of learners with dyslexia. Upon examination the teachers' manuals do not seem to have adequate information on this. For example, they do not mention methods such as MSL or adding visual cues, which research has found to be beneficial for dyslexic learners.

### 7.1 Implications and applications

Hopefully the results of this study will help textbooks publishers to notice the deficit of ready-made material for learners with dyslexia, and possibly other learning difficulty groups as well. It could therefore serve as a prompt for them to further develop their textbooks. Additionally, the textbooks or digital materials could incorporate instructions and guidelines on how to modify existing tasks to better suit the needs of different learners. Especially with the new initiative of starting a foreign language already in the first grade, and the hope of widening the language selection in schools, the needs of learners with dyslexia need to be properly catered for.

Another possible need for improvement lies in teacher training. As the need of differentiation is increasingly emphasised in schools, new teachers need to learn concrete methods on how to successfully implement it. Universities offering teacher training could incorporate the task modifying guidelines found in this study into their teacher training programs.

Niemi (2016: 29-32) states that Finnish teachers have high independence in their work and the Finnish school system is not very test-oriented. Part of this independence is also the assumed critical self-reflection that teachers should have: they should constantly review their own methods and the school system, and how they could improve these to better match the current needs of their students and the society at large. One teacher alone cannot change a lot, so they need more opportunities to work together and share their knowledge. According to Niemi, this should also reflect to teacher training. The assumption and demand for continued learning even in teacher training programs is a prerequisite for the training programs to maintain their quality and ability to correspond to arising challenges and needs.

As the national core curriculum is the only guideline that teachers are required to follow in Finland, it should also better reflect and recommend the use of practises that research has found to be useful. At the moment it only advocates methods such as inclusion and differentiation, but does not give any details how to do this effectively.

## **7.2 Future research**

The study was conducted as a textbook analysis only. Another point of interest would be to know the opinion of teachers, to understand how they evaluate the efficiency of workbooks and whether they think that the instructions on teachers' manuals are

adequate. It would also be interesting to know what kind of and how much modification teachers do to ready-made exercises and how much and what kind of exercises they construct themselves.

Additionally, it would be beneficial to interview the textbook creators – how do they see the versatility of their material and their suitability for different learners? Many of the analysed textbooks advocated themselves as being designed for differentiation and containing diverse material, but in practise the type of versatility the exercises showed does not correspond with research findings with effective learning methods for different learners. Are the textbook creators aware of this gap?

Furthermore, the opinions of learners with dyslexia are also valuable. There is no research available that has studied how learners see the functionality of workbooks and their exercises, and whether they would prefer less writing-oriented teaching.

The current study focused only on the upper comprehensive school and the seventh grade. A similar study carried out in another context, such as primary school, would also reveal valuable information on how to properly take the needs of learners with dyslexia into account. Especially important would be to study the materials aimed for primary school learners to ensure that their needs are being catered for right from the beginning of EFL learning. Negative experiences about English or learning can affect the self-esteem and motivation of the learner for years. Furthermore, establishing the use of multiple learning channels and not focusing too heavily on writing and reading based learning could encourage the learners to actively learn English in a manner most suitable for them.

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