ESL/EFL teachers' perceptions of the reading and writing challenges and teaching strategies for dyslexic students learning English

by Cathy Madden

British Council's Master's Dissertation Awards 2022

Commendation

ESL/EFL teachers' perceptions of the reading and writing challenges and teaching strategies for dyslexic students learning English

Cathy Madden

Masters in TESOL

Ulster University

Faculty of Social Sciences

School of Education

Ulster University

A dissertation submitted in partial fulfilment of the requirements for the degree of MA in the Teaching of English to Speakers of Other Languages (TESOL)

2021

Table of Contents

Acknowledgements

I am exceptionally grateful and appreciative to my dissertation supervisor Dr Helen Hou for her continued support, guidance, and kindness. Her belief in me as well as her valuable and efficient feedback has not only aided me academically but also personally. This dissertation would not be what it is today without her help, so I would like to say thank you for everything and for always going above and beyond for me.

I am also extremely thankful to the participants who gave up their time to help with this dissertation. Your involvement was incredibly beneficial, and I thoroughly enjoyed working with you all. Thank you for your generosity, willingness, and support.

I would also like to give a huge thanks to my wonderful family and friends for always being there for me and for your patience through this busy time. Your constant support and genuine happiness in seeing me succeed means the world to me. I couldn't ask for a better family and friends.

Lastly, I would like to thank my dog Ellie for always putting a smile on my face and keeping me company while working on my dissertation.

Abstract

In today's rapidly evolving, multilingual, and globalised world, there is an increased requirement to learn English as a foreign/second language. As a result, learning English as an additional language has become compulsory in many school curriculums. However, many EAL learners with dyslexia may severely struggle with this requirement. Ultimately, this could result in these individuals being at a disadvantage within the global job market or in their personal life. Little is known about dyslexia within an ELT context and EAL dyslexic adolescents within mainstream settings are frequently overlooked.

Consequently, this study aims to raise awareness of this topic by investigating EFL/ESL teachers' perceptions of the reading and writing challenges facing secondary school aged (12-18 years old) dyslexic students within mainstream educational settings. Furthermore, it will examine EFL/ESL teachers' perceptions of the effectiveness of teaching strategies for supporting these students and how confident they feel in appropriately supporting these dyslexic students.

This study consisted of 4 participants who each took part in a semi-structured interview and a follow-up 'thinking aloud' interview session. Many intriguing discoveries were established from this research; however, the main findings were that there are a colossal amount of reading and writing challenges which hinder dyslexic EAL students' language learning progression. Nevertheless, many teaching strategies were found to be effective in benefiting these students, such as a multi-sensory approach and pair work, whereas other teaching strategies such as a communicative approach, differentiation, and drilling had mixed views. Many of these strategies appeared to come from the teachers' own practice through trial-and-error rather than research informed practice. Overall, it was found that there is a severe lack of professional dyslexia training available for ESL/EFL teachers and unfortunately, most teachers do not feel prepared or entirely confident in catering for dyslexic learners. Consequently, this dissertation has concluded that additional ESL/EFL teacher training for dyslexia is desperately required in order to suitably support dyslexic EAL students and ensure that they receive equal learning opportunities and reach their full potential.

Abbreviations:

EFL – English as a Foreign Language

ESL – English as a Second Language

EAL - English as an Additional Language

ELT – English Language Teaching

TESOL – Teaching English to Speakers of Other Languages

L2 – Second language

Declaration

Chapter 1: Introduction and Background to the Study

This introductory chapter begins by outlining the overall research topic in section 1.1 and why it is beneficial to focus on this area of study. Section 1.2 then goes into more detail about dyslexia and a brief overview of what it is like to have dyslexia within an ESL/EFL context. Following this, the researcher's motivation is discussed and a significant need for further research is highlighted. Next, section 1.4 looks at problems which occur due to a lack of attention paid towards dyslexia within an ESL/EFL context. Section 1.5 then lists the research questions for this study before ending with section 1.6 which provides an overview of the study and a brief conclusion of this introductory chapter.

1.1 Introduction

The English language is one of the most utilized languages across the globe, therefore, the learning of English has become obligatory in order to effectively communicate one's thoughts and ideas throughout the world (Rao, 2019). In a swiftly evolving and multilingual world where globalisation is becoming increasingly popular, individuals who do not speak a foreign language are at a disadvantage (Nijakowska, 2010). Therefore, learning English as a second/foreign language has become a necessity in many school curriculums. Usually, dyslexic learners are not exempt from this requirement. This obligation can unfortunately prove to be incredibly difficult for dyslexic individuals, not only due to the language difference but also the potential obstacles they may encounter within the classroom due to unsuitable teaching strategies (Daloiso, 2017). Consequently, Rao (2019) urges the importance of ESL/EFL teachers identifying and understanding each learner's specific educational needs so that suitable teaching strategies can be implemented.

1.2 Understanding Dyslexia in ESL/EFL Context

Dyslexia is a common universal learning difficulty that affects a widespread, extensive number of learners (Lama, 2019). It can be specifically characterised as being a neurodevelopmental disorder which mainly has an adverse impact upon reading, spelling, and pronunciation skills, which consequently results in writing challenges since it involves spelling and pronunciation. The overriding traits of dyslexia comprise of errors in spelling, non-fluent and slow reading, poor working memory, a lack of phonological awareness and difficulties with processing information (Cardillo et al, 2018). Unfortunately, Lama (2019),

Kormos and Kontra (2008), Nijakowska, (2010) and Ahmad et al (2018) all believe that dyslexic learners are highly susceptible to experiencing a unique assortment of difficulties when acquiring English as an additional language. Nijakowska (2010) explains how difficulties that dyslexic students may already face in their native language will likely be transferred to their second/foreign language learning, which could considerably impede their language development. Furthermore, Nijakowska (2010) also acknowledges that English as a foreign language is compulsory in most school curriculums. Therefore, this can result in many distressing challenges for these dyslexic learners as their reading, spelling, and writing difficulties often prevent them from accomplishing this social and educational prerequisite regardless of their powerful intellectual abilities. However, Pilcher (2004) interestingly points out that Chinese children who struggle with reading tend to have varying brain anomalies in comparison to their Western counterparts. Consequently, due to language variations, it has been discovered that several bilingual learners may experience dyslexia in one language but not in another. For instance, a bilingual learner may have difficulties reading in English but not in Japanese.

1.3 Researcher's Motivation

There is a striking absence of publications focusing on dyslexia within an ELT context (Nijakowska, 2010; Kormos and Kontra, 2008). More recently, Kormos (2017) cited in Reraki (2020) once again reiterates the sparseness of research surrounding dyslexic learners acquiring an additional language. Moreover, Chum and Lam (2020) state that existing research concentrates mainly on children learning to read and write in their native language, rather than focusing on essential support required for dyslexic adolescents acquiring an additional language. Furthermore, Ahmad et al (2018) claim that even though there is an apparent and vital need for further investigation into the language acquisition of individuals with special educational needs, there is still an extreme shortage of studies which concentrate on the second/foreign language learning of individuals with dyslexia. Lastly, Bonifacci et al (2017) articulate that if more research is carried out within this area of study, this will provide us with a necessary deeper and improved comprehension of the children's reading and writing skills in their additional language.

Thus, it is clear to see that there is unfortunately a lack of research within this topic; - therefore, it is crucial that additional research is carried out in order to help fill this gap in knowledge. Ahmad et al (2018) claim that while it is imperative that we pay attention to the

needs of dyslexic students within ESL/EFL classrooms, it is also extremely important to gather the ESL/EFL teachers' perceptions and experiences when working with dyslexic students within mainstream settings. "Measuring teachers' knowledge and perception of dyslexia is important." (Tosun et al, 2021, p.342). The ESL/EFL teachers' perceptions and experiences may potentially benefit other ESL/EFL teachers, school administrators, classroom assistants and parents in comprehending how to effectively support dyslexic students learning English (Ahmad et al, 2018).

1.4 Statement of Problem

If we do not have a sufficient understanding of dyslexia and how this affects individual's additional language learning, this could potentially lead to dyslexic learners' needs not being appropriately catered for and supported. Ultimately, they will not receive equal learning opportunities, which can result in these individuals being at a disadvantage within the global job market or in their personal life (Ahmad et al, 2018). Kormos and Kontra (2008) implore that it is vital that dyslexic learners receive equal opportunities to successfully acquire a foreign language so that their learning and life prospects are not hindered.

This problem has urged me to carry out this necessary research in order to ensure that dyslexic learners receive equal learning opportunities and can reach their full potential within the English language. Consequently, they will not be at a disadvantage in this multilingual and globalised world.

Therefore, this study aims to investigate ESL/EFL teachers' perceptions of the reading and writing challenges of dyslexic secondary aged (12-18) students within mainstream settings. Additionally, it seeks to discover the ESL/EFL teachers' perceptions on the effectiveness of the reading and writing teaching strategies they currently use or have previously used with their dyslexic students. Lastly, this study will attempt to determine how confident these teachers feel in appropriately supporting their dyslexic students.

1.5 Research Questions

The following questions have been designed to directly target the ESL/EFL teachers' perceptions and experiences:

1. What are ESL/EFL teachers' perceptions of dyslexic students' reading and writing challenges in learning English?

2. What are ESL/EFL teachers' perceptions of the effectiveness of teaching strategies used to support dyslexic students' reading and writing skills?

3. How confident do ESL/EFL teachers' feel when supporting dyslexic students' reading and writing skills?

To answer these questions, a purely qualitative methodology will be implemented. This will comprise of 4 semi-structured interviews and a follow-up 'thinking aloud' method, which will be explained in further detail in later chapters.

1.6 Overview of Study

The subsequent chapter will examine and critically review a number of relevant literatures before moving onto chapter 3, which will focus on the methodology, such as the research paradigms, the rationale for the chosen paradigm/design and other important aspects and stages of the research process. Chapter 4 will provide a thorough analysis of the data and will deliver a detailed exploration of the findings. Lastly, chapter 5 will give an overall conclusion of this study, as well as limitations and relevant recommendations for the ESL/EFL teachers and possible future research will be suggested.

Conclusion

This introductory chapter has provided a brief outline of the topic, the importance and aims of the study, and the research questions. The next chapter will discuss the associated literature and deliver a critical analysis. This will determine the foundation for which this research will develop.

Chapter 2: Literature Review

Introduction

This literature review discusses and critically examines relevant literature. It specifically delves into the areas of study pinpointed within the research questions. Firstly, section 2.1 provides a more detailed insight and background to dyslexia. Section 2.2 and 2.3 discusses the prevalent reading and writing challenges faced by dyslexic EAL learners. Section 2.4 explores the variations and views of dyslexia across the world before moving onto ESL/EFL teachers' training in dyslexia and what it is like for EAL dyslexic learners within the ESL/EFL classroom. Lastly, relevant teaching strategies and gaps in knowledge will be considered.

2.1 An Insight into Dyslexia

Surprisingly, dyslexia was first discovered back in 1881 by Oswald Berkhan. Since then, further research has been collected within English speaking countries. However, it was not until recently that dyslexia has slowly began to be recognised within schools across non-English speaking countries, but more awareness is still necessary (Daloiso, 2017). Lately, the understanding of and knowledge about dyslexia has endured considerable changes due to more scientific and educational research being carried out (Reid, 2001 cited in Unni, 2014). However, Unni (2020) and Indrarathne (2019) comment that there is still little known about dyslexia within an ELT context.

The word "dyslexia" originates from the "Greek words -dys" which means to have a "difficulty with", and "lexicos or lexis" which means "words" (Unni, 2014, p.29). International Dyslexia Association (2002) cited in Ahmad et al (2018, p.1) define dyslexia as being "neurobiological" and genetic in its source. It comprises of inaccurate/non-fluent word identification, and "poor spelling and decoding abilities". Dyslexia is not caused by brain damage or inadequate teaching, and it is not classified as a disease, rather it is the unique way in which the brain processes some inputs (Daloiso, 2017). Ahmad et al (2018) reiterate that it is these issues with the brain functions that lead to impediments when acquiring linguistic skills such as reading, spelling, and writing.

Unfortunately, dyslexia is life-long in existence. When a dyslexic learner attempts to acquire English as a foreign language, their struggle with these linguistic skills become even more prominent which can end in major impediments (Daloiso, 2017; Gerlach, 2017). Similarly,

Sparks et al (2006) observed that regardless of the development and growth that dyslexic learners achieve when acquiring a foreign language; they tend to still perform below their non-dyslexic peers. Therefore, many of the dyslexic students and their parents have resorted to withdrawing them from learning a second language (if this is an option) as it causes the students to experience a significant amount of stress and anxiety which can also lead to low self-esteem/confidence and a lack of motivation (Crombie, 2000). However, Crombie (2000) also states that if dyslexic students are denied the opportunity to learn a new language, this can put them at a disadvantage for future personal or employment opportunities. Nevertheless, Siegal (2016) intriguingly found that several dyslexic students can outperform their non-dyslexic peers when acquiring a foreign language. Likewise, Miller-Guron and Lundberg (2000) discovered that in numerous European countries, dyslexic learners tend to experience fewer dyslexic traits and difficulties in English compared to their native language.

2.2 What is Reading like for Dyslexic EAL Learners?

In order to accurately pronounce a word, it is necessary to be able to identify a collection of written symbols, put them together and match them with the correct sounds of the language (Daloiso, 2017). However, dyslexia causes many issues when acquiring phonological awareness skills. Consequently, this leads to an adverse effect upon literacy development when acquiring an additional language (Caravolas et al, 2013 cited in Reraki, 2020). Ultimately, this leads to the dyslexic learners experiencing issues with reading. In particular, they may struggle to divide words into syllables, identify rhyming words and recognise similar or dissimilar sounds. Therefore, the dyslexic learners' reading ability may be extremely slow and inaccurate (Daloiso, 2017).

Furthermore, dyslexic individuals tend to have a poor working memory, meaning that they find it difficult to retain and remember information which they have just been given. Therefore, they may not be able to recall the visual information about certain words or the physical movements needed to pronounce these words (Daloiso, 2017).

Moreover, dyslexia results in auditory processing difficulties, meaning that dyslexic learners may struggle to make a link between letters and sounds. Therefore, it is sometimes challenging for them to understand spoken language, as they are slower at identifying the sounds within a syllable and the variations between syllables (Kolawole Waziri, 2008).

Additionally, it has been identified that individuals with dyslexia also experience issues with processing speed, meaning that they find it challenging to make certain skills automatic. Consequently, they may take a while to respond to activities which require rapid responses, and they may be slower at completing tasks which involve more than one skill at once (Daloiso, 2017).

Ultimately, these specific challenges result in poor reading and writing abilities. This is due to these skills both sharing common features such as phonological process, working memory and processing speed (Daloiso, 2017). Within transparent orthographies, dyslexic children tend to experience slow reading. Whereas, in deeper orthographies, for instance; English, dyslexic children may also encounter inaccuracies when reading as well as a slow reading speed (Hagtvet & Lyster, 2003 cited in Van Setten, 2017).

Moreover, Lopez and Campoverde (2018) state that due to dyslexic learners' difficulties with reading, they will likely struggle with reading comprehensions. If the dyslexic learner is unable to understand the content of the reading passage, this will cause future challenges in trying to proceed and progress in learning English as a foreign language. Nevertheless, it is extremely important to note that although individuals with dyslexia (or specifically adolescents with dyslexia) encounter trouble when trying to read, this does not mean that they have a low level of intelligence (Chung & Lam, 2020; Lopez & Campoverde, 2018).

If dyslexic learners perform below average in their reading within their native language, they tend to face the same challenges when learning English as a foreign language (Gerlach, 2017; Ahmad et al, 2018; Miller-Guron and Lundberg, 2000). However, Frith (1999) cited in Kormos and Smith (2012) highlights that with age and practice, a dyslexic learners' reading ability can improve and their previous struggles with reading can decline. Even though Van Setten (2017) explains that the connection between phonological awareness and reading declines with age, phonological processing still affects dyslexic learners as they grow older. Additionally, Van Setten et al (2017) carried out a study which investigated dyslexic adolescent learners' reading skills in their native language (Dutch) and in their second language (English). It was found that even though the reading deficits for the dyslexic learners was less than expected in their L2, they still endured many reading deficits. Whereas Miller-Guron and Lundberg (2000) discovered that several ESL teachers in Sweden have observed dyslexic students performing extraordinary well in their English reading texts compared to their reading quality within their native language. Contrastingly, Van der Leij

and Morfidi (2006) carried out a study on Dutch learners aged 12-14 and discovered that the subgroup of dyslexic readers failed to portray any improvement in English. Ahmad et al (2018) state that the reading challenges faced by dyslexic learners can potentially result in an overall negative impact upon their achievement within school. Nevertheless, Ahmad et al (2018) found that within their study, ESL teachers revealed that some of their dyslexic learners performed more highly than their typically developing peers in the English language achievement test for the study.

2.3 What is Writing like for Dyslexic EAL Learners?

Dyslexia also causes many obstacles when trying to develop writing skills. This commonly results in the individuals being incapable of reaching age and competence-appropriate skills (Tariq & Latif, 2016). Specific writing difficulties which dyslexic learners may experience is issues with letter formation, capitalisation, writing paragraphs, spelling, punctuation and organising and sequencing information (Martínez-Marrero & Estrada-Hernández, 2008). Further to this, Lam et al (2011) has identified inadequate handwriting skills as one of the main challenges within dyslexia. Reid (2012) builds upon this by explaining that since dyslexic learners have poor writing skills, they will likely require assistance in spelling, sentence construction and even in their pencil grip. If the learner is incorrectly holding/gripping their pencil, this could lead to unnecessary fatigue and could diminish their motivation in learning how to accurately write and spell.

Moats (1996) carried out a study on the spelling deficits of dyslexic adolescent learners. The findings showed that the poorest spellers made an extremely large number of mistakes in nasal consonants, and the spellings of inflections such as '-ed' and '-s'. Even though these learners may improve their spelling of these errors, their spellings seem to be marked by constant and problematic difficulties.

Riddick et al (1999) cited in Unni (2020) discovered that learners with dyslexia tend to experience anxiety and feel that they are less capable of producing a high quality of written work in comparison to their peers within a school setting. Nevertheless, Miller-Guron and Lundberg (2000) found that some ESL teachers within Sweden witnessed dyslexic learners (who showed a preference for English) perform more highly within English spelling and writing tasks in comparison to dyslexic learners who did not portray a preference for English.

Unfortunately, a lack of attention has focused on how to support dyslexic children with their writing skills, even though this is an essential skill (Tariq and Latif, 2016). Van Setten et al (2017) adds to this by pointing out that spelling and writing deficits receive less attention and exploration in comparison to reading difficulties.

2.4 Dyslexia across the World

Daloiso (2017) explains that there are varying definitions of dyslexia, diagnostic procedures, and even various local estimates of its occurrence across populations. In English speaking countries, approximately 1 in 10 people have dyslexia, whereas in other non-English speaking countries, these statistics are much lower, for instance, only 1 in 100 people have been diagnosed with dyslexia in Japan. Furthermore, Unni (2014) points out that a mere 10% of children within India have been diagnosed with learning disabilities, however, this percentage is increasing due to parents' expectations and faster lifestyles. Additionally, since Pakistan is a developing country, they encounter many challenges in coping with dyslexia as the government support is not enough to tackle this on a country wide scale (Tariq & Latif, 2016).

Overall, Peer (2014) states that these varying statistics across the world could portray the disparities in countries' social perceptions, their knowledge/understanding, economic positions or how susceptible they are to learning differences.

2.5 Teachers' Training and the ELT Classroom

Various foreign language teachers are confronted with the challenge of teaching dyslexic learners. However, many feel that they do not have an adequate amount of knowledge, and experience of dyslexia. Therefore, more professional training is required so that the dyslexic language learners' educational needs are fulfilled (Nijakowska, 2019; Ahmad et al, 2018; Reraki, 2020; Atif, 2019).

Indrarathne (2019) claims that approximately 10% of the world's population experiences dyslexia related challenges. Subsequently, it is crucial that language teachers obtain a detailed understanding of this condition and how to implement suitable strategies to assist these individuals. Learners with dyslexia think differently in comparison to their typically developing peers. They need extra hard work and persistence from their ESL teachers (Unni, 2020; Ahmad et al, 2018).

Shaywitz (2003) believes that it is a priority to detect the first signs of dyslexia at a young age. Therefore, it is crucial that teachers have the ability to identify the most significant signs to a possible reading issue. However, Tariq and Larif (2016) unfortunately point out that within Pakistan, there is limited knowledge and remedial educational training to help support dyslexic learners at the initial stages. Additionally, Unni (2020) specifically points out that Indian ESL teachers need suitable training in how to effectively support their dyslexic learners as well as a better preventative model of intervention to help recognise and rebuild their reading ability.

For dyslexic learners who have already experienced many complications with their native language, special consideration will be required to boost or maintain their motivation and self-esteem when learning a second language. Ultimately, it is vital that ESL/EFL teachers receive everything needed to support their language learning and eradicate failure (Crombie, 2000). Nijakowska (2019) points out that dyslexic language learners make significantly more progress if their teachers possess a positive attitude and pay considerable amounts of attention towards their learning differences and difficulties.

However, Lopez and Campoverde (2018) point out that school institutions commonly fail to deliver a supportive learning environment for dyslexic learners. Most of the time these learners feel that they are not appropriately integrated within the classroom. Similarly, Kaihara and Shibata (2020) regrettably point out that many children with language learning disabilities are forced to study English with a lack of appropriate support and teaching strategies. Even though pedagogical studies have demonstrated the need for particular consideration and attention to be directed towards dyslexic learners in ESL/EFL classrooms, it is still the case that dyslexic learners are not receiving essential, personalised special educational needs support within mainstream settings (Daloiso, 2017). Consequently, it is crucial that more attention is paid towards children with language learning disabilities (Kaihara & Shibata, 2020). If this appropriate training is implemented, this will mean that dyslexic language learners will receive suitable support within secondary education as well as special aids and entitlements like exam time in examinations and spellcheckers (Van Setten et al, 2017).

2.6 Teaching Strategies

Since many dyslexic learners primarily experience difficulties with reading and writing, numerous modern language teachers believe that reading and writing aspects of language learning should be avoided and that they should instead focus mainly on speaking and listening in the early stages of learning a second language. Many teachers believe that this oral/communicative approach is a more natural way of communicating and will allow the learners to easily express themselves through verbal interaction within their desired language (Arries, 1999). However, due to dyslexic learners' "poor auditory discrimination, poor working memory, phonological processing difficulties and slow speed of processing information" this causes complications for an oral/communicative approach (Crombie, 2000, p.116).

Therefore, other strategies may be utilized to support and enhance the dyslexic learners reading and writing skills rather than completely avoiding it. Ahmad et al (2018) found that 'drilling' is a useful strategy for teaching reading and writing skills to dyslexic learners. Drilling involves the teacher repeatedly saying a word/phrase and the students repeating it until accurate pronunciation is achieved (Rahmani, 2017). However, in this case, the teacher may drill the correct spelling by writing a word and asking the student to repeatedly write what has been written. This will enable the retention of information (Ahmad et al, 2018).

Moreover, Nijakowska (2019) believes that a multi-sensory approach is beneficial for students with dyslexia as they can learn through the use of more than one sense at a time, whether this is use of visual, auditory or kinaesthetic learning. This can improve memory and their learning of written language.

Furthermore, Ahmad et al (2018) claim that many ESL teachers use differentiation in activities as a way to appropriately cater for each dyslexic language learners' individual needs. It is a strategy which aims to support all students to still learn well regardless of their learning differences (Iyer, 2015). "It is an acceptable fact that every learner is unique in the classroom and their approach to language learning differs across individuals. Thus, the classroom/teaching system needs to be remodelled to cater to these learners' requirements." (ibid, p.176). Ahmad et al (2018) specifically point out that some teachers use the same teaching materials to explain the lesson for all learners within the class, although, differentiation may take place during the activities, for instance: a reading or writing activity

may be slightly altered to make it more accessible for the learner with dyslexia. An example of this may be by adding more visuals to the dyslexic learners' resources to help support their understanding of the reading text. Crombie (2000) expands upon this by explaining that the teachers' written feedback/responses to the learners' work can also be appropriately altered to suit the learners' known abilities, for example: writing short and simple sentences. Incorrect spelling allowances in the dyslexic learners' work may also be approached in a sensitive manner and spelling mistakes may be allowed where appropriate. However, Ahmad et al (2018) found that certain teachers prefer to correct their pupils immediately when they notice a spelling mistake as this means that they will have a better chance of practising the correct form from the start.

Furthermore, Ahmad et al (2018) found that since dyslexic language learners require extra attention, it is beneficial to set up a buddy system/peer coaching as the teacher is not always available to pay continuous attention. This means that other students in the class will look out for the dyslexic student even though the dyslexic student is unaware of having mentors. With the help of their peers, they are capable of confidently completing the task. Additionally, in many mainstream settings, there will likely be an older student who has reached a high standard in their second language. Therefore, they could offer help when they have extra time to help the younger dyslexic learners (Crombie, 2000).

Lastly, Crombie (2000) mentions modelling as also being an effective teaching strategy for dyslexic learners. This means that learners are provided with a model of written work from which they can copy or check if needed. This could comprise of picture and word cards, where vocabulary is on one side and a picture to match is on the other side. The students can then put the cards in order and make a sentence, which they can then use as a model to copy from.

Gaps in Knowledge

As a whole, this literature review has established that little is known about dyslexia within an ELT context. There are many conflicting findings in relation to the reading proficiency of EAL dyslexic learners, especially when comparing dyslexic learners' reading ability to their non-dyslexic peers. Moreover, it was found that even though writing skills is extremely important within second language learning, there is still a lack of attention on how to support dyslexic children with their writing skills. Therefore, more research and exploration into EAL

dyslexic learners' writing and reading proficiency is necessary. Additionally, it is clear to see that further awareness and a greater understanding of dyslexia and other learning differences is required across various populations in order to appropriately cater for each individuals' educational needs. Lastly, it has been highlighted that there is a growing need for teachers to receive professional training within this area of study. Consequently, these gaps in knowledge have resulted in the overall reason for carrying out this study. The research questions below have been designed to directly target these gaps in knowledge:

1. What are ESL/EFL teachers' perceptions of dyslexic students' reading and writing challenges in learning English?
2. What are ESL/EFL teachers' perceptions of the effectiveness of teaching strategies used to support dyslexic students' reading and writing skills?
3. How confident do ESL/EFL teachers' feel when supporting dyslexic students' reading and writing skills?

Conclusion

Within this chapter, relevant past literature has been reviewed and discussed in relation to the research questions for this study. Intriguing discussions arose as well as establishing a clear need for further research.

Chapter 3: Methodology

Introduction

This methodology chapter delves into the research strategies utilized within this study. An overview of the research paradigms and the data collection instruments will be provided, as well as the rationale behind applying a purely qualitative research approach, semi-structured interviews and 'thinking aloud' interview sessions. Furthermore, an overview of the time scale and organisation of the research, the participants involved, and a pilot study will be explored. Lastly, a brief overview of the data analysis will be provided, as well as the ethical considerations and the reliability and validity of the overall study.

3.1 *An Overview of the Research Paradigms: Qualitative, Quantitative, and Mixed Methods*

Firstly, qualitative research is based predominantly on open-ended data and has an absence of statistical and mathematical techniques (Dornyei, 2007). "Qualitative research lies with the idea that meaning is socially constructed by individuals interacting with their world." (Merriam & Grenier, 2019, p.3). It focuses heavily on investigating the thoughts, perceptions, and feelings of their participants and how they "experience and interact with their social world." (Merriam, 2002, p.4). Hu (2009) defines qualitative research as a "naturalistic approach" (p.633) and one which concentrates on discovering the "participants' meaning and understanding of their own experiences" (p.634).

Qualitative research analysis is particularly labour-intensive and time consuming, however, the preparation process is considerably short as it is possible to begin the interview process soon after the initiation of the study. Furthermore, the qualitative research has a small participant size (Dornyei, 2007). Cohen et al (2007) believe that this makes the data more thorough and provides an in-depth exploration into each individuals' thoughts and feelings. It delves into the participants' exact words which makes it possible to create categories and themes. Therefore, this leads to meaningful, detailed, and vivid discoveries.

When current research is severely limited, qualitative research is extremely useful due to its exploratory nature. Its objective is to unearth new concepts, ideas, and understandings (Croker, 2009). Nonetheless, the qualitative researchers' own intellectual baggage, feelings, experiences, age, gender, religious beliefs etc… can have an impact upon their perceptions of the study. This is a significant concern within qualitative research and can lead to bias,

therefore it is paramount that researchers take this into consideration and ensure that their personal identity does not impact their overall results (Croker, 2009). However, Cohen et al (2007) argue that with careful consideration and a professional manner, bias can be eradicated.

Contrastingly, quantitative research consists of numerical methods in order to understand the data. It aims to examine or establish the relationship between variables (Paltridge & Phakiti, 2015). Dornyei (2007) emphasises that quantitative research is extremely focused and precisely measured so that it provides accurate and reliable data.

Furthermore, quantitative research commonly consists of large sample sizes. This means that it is easy to average out and generalise the participants' responses as a whole and establish commonalities. However, this implies that less interest is paid to each individual (Cohen et al, 2007). Quantitative analysis is usually summed up in just 1-2 small tables, which can be quite disheartening due to the amount of hard work that has been put into the study (Dornyei, 2007).

Dornyei (2007) explains how quantitative research has a prolonged preparation process which may take weeks or even months of thorough preparation and pilot testing to finalise the intended data collection instrument. Nonetheless, the actual research process is considerably fast since the data analysis can be statistically outlined through the use of innovative software.

Due to the limitations of both qualitative and quantitative approaches, some may adopt a mixed method approach. This seeks to intertwine both quantitative and qualitative approaches in an attempt to overcome the shortcomings of both methods (Almeida, 2018). Ivankova and Creswell (2009) explain that within a mixed methods approach, the researcher gathers both statistical information (for instance: through closed- ended questionnaires) and text (for instance: interviews) to help develop a better understanding of the chosen research questions. Qualitative and quantitative research can both positively complement and expand upon one another. When they are merged, this results in a more in-depth investigation (Bryman, 1992 cited in Flick, 2018). However, this approach does consist of downsides, Robson and McCartan (2016) state that a mixed approach is extremely time-consuming and requires a considerable number of resources. Additionally, Almashy (2016) warns that researchers may experience a conflict of results between the qualitative and quantitative methods, meaning that a further collection of data may have to be implemented.

3.2 Rationale for Chosen Research Paradigm

After evaluating the research paradigms and reviewing the nature of each, it has been decided that a qualitative approach is the most appropriate method for this study. As previously discussed, qualitative research revolves around exploring the thoughts, feelings and perceptions of the participants as well as investigating their life experiences (Merriam, 2002; Hu, 2009). Therefore, since the research questions are focusing on ESL/EFL teachers' perceptions and experiences, I believe that a purely qualitative approach would be the most suitable research method as this will accurately collect the participants' "perceptions, meanings and interpretations." and "detailed portrayals of the participants' experiences." (Flick, 2009, p.10 & p.13). Additionally, as previously mentioned, quantitative research tends to generalise the participants' responses and aims to find common features rather than focusing on each individual. Whereas qualitative research consists of less participants and allows us to home in on exact words that the participants have used (Dornyei, 2007; Cohen et al, 2007). As a whole, these points add to my reasoning for choosing a purely qualitative approach. I aim to investigate each ESL/EFL teachers' individual thoughts, opinions, and experiences, rather than generalising the results and missing out on unique and intriguing views. Ultimately, this should lead to more authentic and accurate results.

3.3 Rationale for Data Collection Instruments

The selected data collection instruments for this study are a combination of qualitative methods. Initially, semi-structured interviews will be carried out, following this, a follow-up 'thinking aloud' method will be utilized. The rationale behind these chosen methods will be discussed and reviewed below.

3.3.1 Rationale for Semi-Structured Interviews

Roulston and Choi (2017) explain that there are three main types of interviews: structured, semi-structured, and unstructured interviews. Structured interviews consist of a firmly structured arrangement of pre-prepared closed-ended questions which are asked in a particular order. According to Oppenheim (1992, p.66) "respondents get very little out of a standardized interview".

Semi-structured interviews comprise of pre-prepared open-ended questions and prompts (Dorneyi, 2007). Here, the role of the interviewer is to offer guidance and direction, but the interviewee is also encouraged to expand upon their responses (Alshenqeeti, 2014). Roulston

and Choi (2017) clarify that semi-structured interviews have more flexibility, and the order of questioning is participant led. During semi-structured interviews, follow-up questions/prompts are commonly asked in response to what the participant has answered. This establishes a free-ranging conversation and spontaneous questions; however, it is still based on the specific research topic and aims to keep it relevant to the research questions.

Lastly, unstructured interviews are loosely formatted. The topics are led by the participants and there is no pre-prepared interview schedule, this type of interview may pose a significant similarity to everyday conversations (Roulston & Choi, 2017).

Croker (2009) explains that interviews are an effective way of discovering the participants' personal encounters, and worldviews. They can elicit detailed responses and specific information (Croker, 2009). Similarly, Rose et al (2019) declare that interviews can capture participants' experiences, reflections, and behaviours. In contrast to questionnaires, interviews offer the researcher with the opportunity to gain a deeper, and richer understanding of the participants' perceptions, views, and emotions towards various topics (Kvale, 1996). However, Cohen et al (2007) claim that the participants will be disclosing a vast amount of detailed information. Therefore, it may be difficult to maintain anonymity. Whereas participants within questionnaires can easily be kept completely anonymous. Consequently, the participants' will be more inclined to share their thoughts (Gillham, 2008). Nevertheless, every effort has been made to maintain anonymity and confidentiality within this study, this topic will be discussed further within the ethical considerations section of this chapter.

Cohen et al (2007) critically point out that interviewee fatigue may hinder the interview process and lead to less detailed responses. Additionally, Gillham (2008) asserts that interviews can result in interviewer bias, whereas there is an absence of this within questionnaires. However, Dornyei (2003) asserts that even though questionnaires eliminate the likelihood of bias due to the lack of personal interaction, it is not possible to ask follow-up questions to the participants' responses. Therefore, this can lead to a lack of detailed information and maybe even a misunderstanding if the researcher is unsure of how to interpret the participants' written answer (Dornyei, 2003). Contrastingly, interviews offer the researcher with the chance to ask the participant to clarify any misunderstandings they may have in relation to the participants' responses and participants can ask the researcher to explain what a question means if they are unsure. Thus, this will lead to more accurate and

reliable responses (Oppenheim, 1992; Cohen et al, 2007). Lastly, the interview can be carried out at a suitable speed rather than participants hastily trying to complete a questionnaire (Cohen et al, 2007).

After evaluating the interview process and other possible data collection instruments, I decided that interviews would be best suited to the nature of this study. My reasoning for this was that interviews would be a highly accurate and effective way of gathering a deep-rooted insight into the ESL/EFL teachers' perceptions, experiences, views, thoughts, and feelings. I specifically chose semi-structured interviews as they give the participants the opportunity to explore their thoughts and opinions while also keeping it focused on the research topic/questions.

3.3.2 Rationale for 'Thinking Aloud' Interview Session

Robson (2002) and Ho (2006) cited in Alshenqeeti (2014) are of the idea that interviews are even more effective when they are combined with other methods as this will help provide an even richer and deeper understanding of the participants' perceptions. As a result, it was decided that a 'thinking aloud' method would be implemented in order to help enrich the data. According to Charters (2003), a 'thinking aloud' method aims to offer participants with the chance to speak aloud any thoughts or words that come to mind while completing an activity or task. Lundgrén-Laine and Salanterä (2010) explain that the 'thinking aloud' technique is not about judging the participants' thought process as either right or wrong, rather it is about discovering the development of the thought process and their rationale behind it. Likewise, Katalin (2000) emphasises that the key strength of this method is that it is extremely effective in discovering the thought process of the participant. Even though the 'thinking aloud' approach consists of a small sample size, this will still lead to rich and detailed results and hence provide reliable outcomes (Lundgrén-Laine & Salanterä, 2010).

Nonetheless, Katalin (2000) points out that unfortunately some participants may not verbally express everything that is going on in their mind, which could lead to inaccurate results. Additionally, Lundgrén-Laine and Salanterä (2010) point out that some participants may feel uncomfortable talking aloud so they may not provide full details. However, this downfall can be minimised by encouraging frequent communication and free interaction between the researcher and the participant as well as helpful prompts from the researcher.

Lundgrén-Laine and Salanterä (2010) found that in comparison to observations, the 'thinking aloud' approach is able to connect the participants' thought process with their existing perceptions, which will therefore uncover valuable information available in the working memory. Although, since teachers and students stick to repetitive routines and tasks within a school setting; they commonly have fixed beliefs, values, and assumptions about what goes on. Therefore, observations can provide a detailed insight into these field behaviours within an educational language learning setting (Cowie, 2009). However, Cohen et al (2007) interestingly points out that participants will likely act differently than normal when someone is observing them.

Within this study, several teachers were reflecting upon their past experiences, therefore, I felt that observations were not a suitable method as some of the teachers may not currently teach dyslexic learners. Thus, it would be impossible to observe reading and writing strategies being utilized. Contrastingly, with the 'thinking aloud' method, I can accurately gather what strategies the teachers would implement and how they would incorporate them. Kyale (1996) explains that if it is not possible to directly observe certain events, then talking to the participants would be the most effective way of investigating and collecting data.

Overall, I feel that the 'thinking aloud' method was a highly beneficial technique to incorporate. It was one which provided a comprehensive insight into the reading and writing strategies which ESL/EFL teachers use to support dyslexic learners. Furthermore, this method helped gather the teachers' thoughts on how effective they believe these strategies to be as well as their thought/decision-making process and rationale behind each strategy.

3.4 Design of Data Collection Instruments

3.4.1 Design of Semi-Structured Interview

In an attempt to effectively answer research questions 1 and 3, a semi-structured online interview was implemented. This interview was split into three areas, firstly, area 1 comprised of questions related to the general information about the participants. Area 2 was based on the reading and writing challenges of dyslexic learners and area 3 was centred around the teachers' confidence and how prepared they feel to appropriately support dyslexic students. The main objective was to help the teachers feel at ease so that they felt comfortable in sharing their experiences. It is fundamentally important that we keep in mind that interviews "require interpersonal skills of a high order (putting the respondent at ease)"

(Oppenheim, 1992, p.65). I attempted to do so by considering the sequencing of the questions, for instance; I eased the teachers in with straightforward general information about themselves, before moving onto more complex questions. Jacob and Furgerson (2012) state that it is crucial to begin with basic background questions as this will help build trust and warm them up for further questions.

Further to this, I endeavoured to keep the questions as simple as possible by avoiding complicated wording and overly sophisticated academic words. Kyale (1996) states that the questions should be uncomplicated and easy to understand and have an absence of academic language. Therefore, this promoted openness and developed a positive rapport with the teachers, which ultimately led to more detailed responses. Kitwood (1977) cited in Cohen et al (2007) states that if the interviewer creates a positive rapport, asks questions in a respectful and appropriate way, and if the participant is genuine and willing to help, this should result in valuable and reliable information being attained. Additionally, I aimed to provide a clear and carefully worded introduction to clarify the nature of the interview as well as reassuring the participant that there are no right, or wrong answers and that anonymity and confidentiality will be obtained. According to Jacob and Furgerson (2012) it is extremely important to have a simple pre-prepared script/introduction at the beginning of the interview, so that concerns about confidentiality can be reduced. To start the interview, I began with the phrase 'can you tell me about'. Jacob and Furgerson (2012) believe that this is a gentle but effective way to begin as it is a subtle way of prompting the participant to start talking.

Many of the questions were open-ended and began with 'what', 'can', 'which' and 'how' to help elicit thorough responses. However, some of the questions did begin with 'do', 'can', 'are', 'have' and 'is', which elicits a yes or no answer. Nevertheless, these questions were followed up with prompts such as, 'Why/why not?', 'If so, how?' 'Can you elaborate on that?' therefore this ensured that the responses still involved a thorough amount of information. Open-ended questions provide flexibility, as well as offering the interviewer with the opportunity to probe so that more in-depth information is elicited (Cohen et al, 2007). The order of the questions varied depending on the responses given by the participant, it was important to keep track of everything that the participant said in order to avoid asking a question which they may have already answered. Overall, this helped obtain the ESL/EFL teachers' perceptions of the reading and writing challenges they have observed their dyslexic learners facing, as well as how confident they feel in supporting these learners. This interview

elicited the ESL/EFL teachers' perceptions, knowledge, and experiences which helped collect relevant information in order to answer research questions 1 and 3.

3.4.2 Design of 'Thinking Aloud' Interview Session

In order to answer research question 2, a 'thinking aloud' online interview session was scheduled for a later date. The ESL/EFL teachers were given the option of either choosing two of their own reading/writing resources or activities which they are already familiar with, or they have previously used in their teaching. Alternatively, they could choose to be provided (by myself) with two pieces of TESOL teaching resources/materials, for example: a reading comprehension and a writing activity. If they chose the latter option, they were supplied with these TESOL teaching materials (and a few prompts to help them) at least 2-3 days before the 'thinking aloud' interview session took place. The teachers were provided with this option in order to make them feel at ease as well as the fact that the teachers work with a range of different learners from various contexts so they may prefer to use resources that suit them.

They were then invited to a one-to-one 'thinking aloud' online interview. Within this interview, each teacher was encouraged to discuss what reading and writing strategies they would implement/or have previously implemented upon these resources in order to support their dyslexic learners. The main aim was to simply gather their overall reflections, thought/decision-making process and their rational behind each strategy. Near the end of the 'thinking aloud' session, the teachers were asked about well-known/research informed strategies, for instance, drilling and a communicative approach. This enabled me to discover how effective they believe these strategies to be. Prompts/questions were asked to help elicit relevant information.

It was extremely important to note that this was in no way a test or an assessment, the teachers were frequently reminded of this. Before each session began, each teacher was offered ten minutes training (provided by myself) if they still felt unsure of what this method consisted of. Vandevelde et al (2015) cited in Bai (2018) considers suitable and sufficient training to be of a high importance when carrying out 'thinking aloud' protocols.

3.5 Time Scale and Organisation of the Study

This research study took place across a 4-month period, June – September 2021. The beginning of June comprised of extensive reading before leading onto composing the

introduction and literature review chapters. Ethical approval was granted at the end of June; therefore, I was able to begin recruiting suitable participants. During this time, a pilot test of the semi-structured interview and the 'thinking aloud' interview was carried out in order to establish how effective the questions were for gathering the data.

The month of July was used to collect the data. The semi-structured interviews occurred within the first two weeks of July and the 'thinking aloud' interview sessions took place in the last two weeks of July. Additionally, during this month, I began writing the methodology chapter. The beginning of August was then used to complete this chapter. The remainder of August consisted of analysing and discussing the data. Lastly, the month of September was used to reflect upon the overall study and compose the concluding chapter while also making any final necessary revisions and adjustments.

3.6 Research Site and Participants

This study involved 4 participants who either work in Northern Ireland, teach online or who live and work in other countries across the world. This provided a unique assortment of teaching/educational contexts and a diverse variety of perspectives. The essential criteria for these participants were that they had to be an ESL/EFL teacher who currently teaches or have previously taught secondary school aged (12-18) dyslexic students within mainstream educational contexts. Additionally, each ESL/EFL teacher had to have at least 3 years of teaching experience. There was no restriction upon the age or gender of the participants. All interviews occurred virtually through an online platform which best suited each teacher (e.g., Zoom). However, it should be pointed out that there was a difficulty in recruiting a large number of participants. Consequently, this qualitative approach was partially due to this constraint. Nevertheless, these interviews still provided a highly detailed, unique, and intriguing exploration into dyslexia within an ELT context.

3.7 Pilot Study

According to Dornyei (2007, p.75) pilot testing is "a dress rehearsal to ensure the high quality (in terms of reliability and validity) of the outcomes in the specific context." Meaning that this will verify whether the chosen data collection process is effective and allows for necessary alterations. Robson and McCartan (2016) explain that it is a valuable opportunity to filter out any confounding questions or language which may cause ambiguity. This certifies that accurate and realistic results are more likely to be obtained.

This pilot study took place online on the 23/06/2021 on the virtual platform 'Zoom'. The participant for this pilot study was a fellow colleague from the MA TESOL course at Ulster University. Although this participant did not have specific experience in teaching dyslexic EAL learners; they still possess valuable experience and knowledge of teaching EAL learners. Consequently, they were able to provide beneficial feedback on the effectiveness of my semi-structured and 'thinking aloud' interview schedules.

Overall, the participant responded well to both interviews and generally found them interesting and easy to comprehend. However, they did point out that question 3 of area 1 (semi-structured interview) was assuming that the ESL/EFL teachers have had professional training in dyslexia, even though the majority of them have likely not 'What training (formal/informal) have you had to help you teach dyslexic learners?'. Therefore, the question was revised so that it does not make assumptions, 'Have you had any training (formal/informal) in how to teach/support dyslexic learners? If so, what training have you had? If not, why do you think you have not had any training?'

Furthermore, my colleague noticed that question 3 of area 2 (semi-structured interview) was unnecessarily long and wordy "What do you think are the main common reading challenges and the most common writing challenges for dyslexic students learning English?", therefore, in order to improve the readability, it was changed to "What do you think are the most common reading and writing challenges for dyslexic students learning English?". Additionally, it was also highlighted that the first area of the semi-structured interview should find out more about the participants in general, such as how long they have been working as an ESL/EFL teacher. Jacob and Furgerson (2012) believe that it is necessary to begin interviews with basic background questions about the participants as this helps to ease the participant into the interview and make them feel comfortable.

Furthermore, Cohen et al (2018) points out that pilot studies enable you to ascertain the average running time. Therefore, it was discovered that both interviews lasted approximately 30 minutes each, which was longer than previously anticipated.

Lastly, the participant commented on the 'thinking aloud' TESOL teaching resources and suggested that they could be better suited to the age of the learners which this study is aimed at. The original TESOL teaching resources were more so geared towards younger learners rather than secondary school aged learners.

Based on the overall feedback, the interviews were altered, reviewed, and refined.

3.8 Data Analysis

Due to the purely qualitative nature of this study, I decided to employ narrative/content analysis. It specifically incorporated the useful narrative analysis guide which was explained by Renner and Taylor-Powell (2003). Firstly, the analysis began with reading and re-reading the collected data multiple times to ensure that I grasped a thorough understanding. Next, I focused precisely on my research questions and how this data answered them. I done so by choosing the most relevant information that best answered the research questions. Next, I began to categorise the information and identify relevant themes and patterns related to ESL/EFL teachers' perceptions of the reading and writing challenges for dyslexic EAL learners, the effectiveness of teaching strategies and how confident or prepared the teachers feel in supporting their dyslexic learners. These themes and patterns were collected through the use of coding, meaning that I assigned words or symbols beside the themes and ideas, this was then grouped into categories. As a result, I was able to establish patterns, connections and similarities and differences between each teachers' views to help interpret and understand the data and determine what has been uncovered (Renner & Taylor-Powell, 2003).

3.9 Ethical Considerations

Cohen et al (2007) warn that interviews can be perceived as being an invasion upon participants' lives due to the sensitivity of particular questions. Therefore, it is paramount that ethical concerns are taken into account through every stage of an interview procedure. In order to shield the participants' privacy, this study endured essential ethical evaluation and was granted approval from the Ulster University research committee. "The primary concern of most ethical review boards is that respect for persons and minimal harm are observed" (De Costa et al, 2019, p.247).

Furthermore, Dornyei (2007) urges the value of utilizing a consent form in order to provide each participant with the freedom to decide whether they are willing to participate. Consequently, I ensured that all participants received a consent form to sign, this confirmed that the participants were comfortable with their involvement. Participants were not allowed to take part in the interviews unless the consent form was signed. Moreover, I frequently reiterated that each participant has the right to withdraw at any stage without having to provide a reason.

Additionally, Alshenqeeti (2014) highlights that potential ethical issues may occur due to the openness of interview contexts, which could potentially lead to participants divulging sensitive information which they may later regret. In order to protect the participants, I made sure that all information collected was kept strictly confidential and anonymous. All teachers' names have been changed to protect their identity. Cohen et al (2007) state that for a participant to be deemed as anonymous, it is vital that they are unrecognisable from the information they have disclosed. Although I was aware of who had supplied the information, I in no way made this association known publicly. This was crucial, especially since the teachers discussed their thoughts and feelings towards the amount of dyslexic training they have received from their current or previous place of work.

This leads us onto another potential ethical concern, as the semi- structured interview could have resulted in the ESL/EFL teachers developing a negative view of their current workplace if they feel that it does not provide them with appropriate training. Nevertheless, fortunately this potential risk did not adversely affect the teachers and the view of their employment.

I understood that some teachers may have perceived the 'thinking aloud' interview session as a test or an assessment. Therefore, I endeavored to emphasise that this is not the case and made every effort to ensure that the teachers felt at ease.

Lastly, the participants were provided with a detailed information sheet, which discussed the nature of the study and what it will involve, this ensured that all participants had clear and accurate expectations.

3.10 Reliability and Validity of Study

According to Alshenqeeti (2014) validity relates to how precisely a study can measure particular areas of interest which it seeks to investigate, whereas reliability focuses on how coherent, dependable and repeatable the findings are from research methods. Cohen et al (2007) emphasise the need for validity and reliability within research, although unfortunately it is impossible to completely eliminate every possible risk that endangers validity and reliability. However, in an attempt to heighten validity and reliability within this study, two separate qualitative methods were intertwined: semi-structured interviews and the 'thinking aloud' method. Employing more than one data collection instrument will ensue stronger data which will enhance the validity and authenticity of the findings. Nevertheless, a downside of implementing interviews is that the participants may be apprehensive about sharing too many

details (Alshenqeeti, 2014). Subsequently, I made sure that any information was kept strictly confidential, and participants were not able to be identified. Thus, this improved validity and reliability as the ESL/EFL teachers were more willing to talk.

Conclusion

This chapter evaluated and identified research paradigms and data collection instruments for this study as well as the participants, data analysis, ethical considerations, and the rigour of the study. The careful consideration for each stage of the research has supported the overall data collection and findings which will be discussed in the subsequent chapter.

Chapter 4: Findings

Introduction

This chapter presents findings from the semi-structured and 'thinking aloud' interviews. It starts with a summary of teachers' profiles. It provides each teachers' thoughts, feelings, and experiences in relation to teaching dyslexic EAL learners as well as examining the similarities and differences between each teachers' perceptions. From these interviews, multiple themes emerged such as the reading and writing challenges of dyslexic EAL learners, effective teaching strategies, and the teachers' thoughts on training in dyslexia within an ELT context as well as some other interesting findings. These themes have helped provide insightful and valuable answers to the research questions for this study.

4.1 Teacher Profiles

Tom

Tom informs us that he "*began teaching in 1997 in Indonesia…. for 8 months".* However, "*in 1997/98…..I came back to the UK*". Tom then completed the "*CELTA course in London*" before gaining the opportunity to teach in Kuala Lumpur. However, "*in 2002 I returned to the UK…. I have been here ever since teaching English*" and "*passed the DELTA course in 2004*". Over the years, Tom has taught many different learners, for example, university foundation students, adults within a business context and secondary aged students. Tom now runs his own online teaching business.

Jane

Jane took part in this study. She "*graduated in 1992 and went straight into"* her *"PGCE*" in English. She has also achieved a "*masters in educational leadership*" and has completed "*TESOL modules*" and short courses. Over the years, Jane has gathered various EAL teaching experience within Northern Ireland and London, she has "*worked in a boarding school with a lot of international students*", "*worked in a grammar school*", "*high schools*", "*minority forums*" and in an "*international centre*" within a university. Jane is currently a substitute teacher within secondary schools.

Ronan

Ronan's first *"proper teaching experience was in 2016" when he did* his year abroad as part of his degree in two primary schools in Spain. However, *"the real bulk of teaching experience has been since graduating in 2018.....I moved to Canada… to a French speaking area"*, here, Ronan was a language/teaching assistant for one academic year. "*Since that I've been in Switzerland*" working with "*upper secondary*" aged students. Ronan's plan for the future is to continue working in Switzerland.

Michelle

Michelle describes her teaching experience, "*my first job in education was in 2017, I worked in a prison, I helped inmates to prepare for university applications or doing A levels*". Following this, Michelle worked in "*after school clubs, which were specifically for children who struggled with reading*". More recently, Michelle explains that "*a year and a half ago*" she "*started doing online teaching*", she works mostly with Chinese students and plans to relocate to China in the near future to continue teaching English.

4.2 ESL/EFL Teachers' Perceptions of Dyslexic Students' Reading and Writing Challenges in Learning English

4.2.1 Reading Challenges

All teachers named a range of diverse reading challenges which they have witnessed. Firstly, Tom and Ronan commented on the physical layout of reading texts. Tom exclaims that the "*font size, font style, presentation, organisation and paragraphing*" of the reading text can cause difficulties. Ronan adds to this by proclaiming that large "*chunks of text*" can be overwhelming for dyslexic learners and that they tend to experience "*an issue with how it is formatted, or the colour scheme*" and that "*just standard black and white*" text can be challenging. Kałdonek-Crnjaković (2021) observed that some EAL dyslexic learners find colour coding/highlighting beneficial as it helps them focus. Additionally, Schneider and Crombie (2003) cited in Kałdonek-Crnjaković and Fišer (2017, p.141) suggest that it is important to take the physical layout of teaching resources into account, such as "pictograms and graphics" as well as employing "tainted paper with an enlarged font and avoiding 'busy' pages".

Furthermore, Tom emphasised additional primary reading challenges, for instance, "*stumbling over words*", *"processing letters and letter combinations"*, "*skimming and scanning*" and "*slowness or inability to finish reading tasks within an allocated time*". Tom elaborates further upon these reading challenges,

> *"Difficulty understanding a different alphabet……Trying to learn Arabic or Chinese for us would be complex but if you have an issue with dyslexia, it may double that. Sight reading, of course, pronunciation and again dependent on linguistic groups, certain language groups have more problems with pronunciation than others, but dyslexia may well amplify that."*

Dal (2008) explains that dyslexic students will experience difficulties with the pronunciation of foreign words and acquiring the sound structure due to their weak phonological awareness.

Michelle expands upon these reading challenges by stressing that "*There's also the danger that if they're not reading words properly, they're going to end up mispronouncing it*". They tend to "*skip words when they read*" and "*if they see a long word that begins with a particular letter, they may just guess what it is*". Since "*they struggle with reading, then they spend all of their focus on making sure that they can say the words and get through it, rather than absorbing the information*". Hutchinson et al (2004) discovered that several dyslexic EAL learners tend to read words rapidly and confidently as if they know the word even if they do not. This implies that these learners are probable to disregard the context when reading a word they believe they already know.

4.2.2 Writing Challenges

As previously mentioned in chapter 2, there is a lack of attention paid towards how to support dyslexic children with their writing skills. Tom supports this by pointing out that "*Writing is the least practiced and the least popular in disciplines*". Furthermore, Michelle admits that she does not "*focus much on writing because they find it very difficult*". However, Ronan stresses that "*All four elements, speaking, listening, reading and writing all have equal importance.*"

Nevertheless, various writing challenges were still identified. All four teachers highlighted "*spelling*" as one of the major difficulties. Tom commented that the learners' work commonly consists of "*spelling errors or a consistency in error*". However, Jane found that instead of consistently making the same spelling mistake, they witnessed some dyslexic learners making "*13 different spellings of the same word*". Mortimore et al (2014) advises

that spelling needs to be continuously practised to improve and become more sustainable over time.

Moreover, Ronan highlights the challenge of "*silent letters*" while Jane comments that "*Punctuation issues can be a red flag for dyslexia*". Jane lists other dyslexic traits in written work such as problems with "*physically holding the pen*", "*word order*", "*letter formulation of the Roman alphabet*", "*moving from second person to first person to third person*" and "*reversing f's, d's and b's*". Jane elaborates further upon these writing challenges,

"Often, if they come from a Roman alphabet country, they will have been taught quite quickly to do cursive writing and then fitting that in with the speed at which we work in the secondary school classroom and being able to cope with it in another language can be difficult as well as actually being able to read their writing."

Additionally, Michelle declares that "*certain letters that look similar like a B and a D, they can get them mixed up*". Flora (2009) reveals that dyslexia can frequently be accompanied by dysgraphia, which is a learning disability that can lead to individuals writing words and letters backwards or struggling with letter formation.

Tom sheds light on the struggle to finish tasks within the "*classroom time restraints*", "*They may have the ideas but it's that translation of the ideas to paper or to screen that is the problem*". Ronan adds that "*Sentence forming is the biggest problem, not their ideas*". Furthermore, Jane comments that "*dyslexic learners struggle with time and crafting.*" Overall, Tom remarks that this results in "*a reluctance to write*". This study is in accordance with what Jin (2013) found in their study that dyslexic EAL learners will regularly acquire more time, structure, and practice when writing.

4.3 ESL/EFL Teachers' Perceptions of the Effectiveness of Teaching Strategies used to Support Dyslexic Students' Reading and Writing Skills

4.3.1 Teaching strategies

This section begins by outlining the EFL/ESL teachers' own strategies which they believe to be highly effective in supporting dyslexic EAL students. Subsequently, the teachers' views on well-known/research informed strategies will be discussed. The teaching strategies and activities which will be explored are as follows:

- One-to-one sessions

- Praise and positive reinforcement

- Easy to follow/simple instructions

- Pre-teaching vocabulary

- Grouping associated words activity

- Printing classic words dyslexic learners struggle with

- Altering presentational features

- Modelling strategy

- T.E.E.A (topic sentence, explanation, example, analysis)

- Drilling

- Multi-sensory approach

- Communicative approach

- Pair work

- Differentiation

4.3.2 EFL/ESL Teachers' Effective Teaching Strategies

Three of the teachers commented on the importance and effectiveness of one-to-one sessions with the learners. Firstly, Tom noticed that when there is a one-to-one lesson, "*students with reading issues are far more willing to share those problems…. A one-to-one is not my class, its theirs so we can then agree and shape the lesson to their needs*". Furthermore, Jane mentions that "*It would be really good to have one on one time with them. They need more time in class and attention*".

Moreover, Jane expresses the value of praising the student "*Often, a child with dyslexia hates writing but praise can help*". Similarly, Ronan is of the view that "*positive reinforcement….. gives them that confidence to go away and try and write their own sentence*". Jin (2013) believes that dyslexic learners will thrive from optimistic feedback and reinforcement.

Tom exclaims that is it helpful to use "*easy to follow, simple instructions."* when explaining the specific teaching material they were given for this study. According to the teaching material for this study Jane and Tom would "*pre-teach vocabulary*". Tom specifically states how he would do so,

"I would do a pre-reading activity, discuss a day at the beach, 'What do you enjoy? What do you not enjoy?'…… You could maybe put some key words on the board from the writing idea like, waves, children, seagulls, and get them to brainstorm adjectives, 'When you think of a

seagull what adjectives do you think?'…..So you are listing vocabulary, get it on the board, and that vocabulary which you have elicited will hopefully be presented in the text… then when they're doing the writing task, the students could choose those adjectives, which might be helpful for a dyslexic person because you've already went over them".

Furthermore, Jane openly discusses other useful activities which come to mind when focusing on the provided teaching materials,

"Get them to group the sorts of words you could write about water and the sort of words you could use to write about sand…..put verbs and adjectives in a box at the bottom (of the reading text) so they could use them in their writing or envelopes with your nominated beach words in them…. print a few of the classic words the dyslexic students struggle with and keep getting wrong, for example: laughs".

Further to this, Ronan provides valuable strategies to aid the teaching material provided, such as dividing the reading text into "*smaller chunks*", providing "*bullet points and hinters of what to write*", giving an example "*in italics.... with highlighting the adjective*" which indicates that *"that's where it goes in the sentence"*. Ronan briefly discusses a modelling strategy for writing by explaining that you could print out "*15 words that form a sentence, so, you know, you have a random sentence, and then they have to, if you know it is someone with a specific need like that, to get them to see "alright, what order they all go in"……You might have a printed-out piece of paper with 'I'….and then the next one is the verb like 'will go'…..and then they have to see the structure by doing it physically, they're not writing it initially"* this then provides them with that *"preparation to then write their own sentences"*.

Finally, as Michelle talked through various teaching materials of her own, she mentioned a unique strategy called "*T.E.E.A*" which she would implement upon these resources, "*it stands for topic sentence, explanation, example, analysis… it's a structure for them to answer questions in an academic format*". This would be a great structure for EAL dyslexic students to follow if they are writing or even orally speaking their answer.

4.3.3 Mixed Views on Drilling as an Effective Strategy

In relation to the strategy of drilling, the teachers had mixed opinions. Tom expressed that "*I think drilling would definitely work but from that sort of listening point of view, letter recognition and word recognition*". Likewise, Michelle believes drilling to be effective,

"I think that if they don't take in a word by reading it, then maybe you need to do some repetition…. So you know instead of them reading a sentence like 'What did you do on the weekend?' You would just take it off the board and say, 'What did you do on the weekend?' Repeat, 'What did you do on a weekend?' Repeat, they would pick it up better this way."

However, Ronan disagrees and believes that "*when it is just repeated, it kind of sticks but then students struggle to actually use it in a real context, especially if it's vocabulary learning*".

4.3.4 Multi-Sensory Approach being Beneficial

All teachers agreed that a multi-sensory approach is highly beneficial. Jane suggested engaging activities to enrich the teaching materials which were provided, such as "*acting out*" the new words and encouraging the learners to "*pick their favourite description and draw it*". Jane would also "*get sand on a tray and get them to experience it between their fingers.*" This sort of kinaesthetic teaching/learning style is advantageous when teaching dyslexic EAL learners as they may struggle to retain and remember what is being taught if the information is only being taught orally or visually (Kałdonek-Crnjaković & Fišer, 2017).

Additionally, Michelle refers to her own teaching materials and believes that it would be beneficial to,

"make story books…..have some visual element or recording podcasts……..they learn a lot through games or seeing props, pictures and videos….sometimes instead of having a question that they have to read and then answer, it's nice to have a picture, and with any opportunity that I have a photo, I always say, 'Oh what's happening in this picture?'"

Ronan has found that "*If there was a mix of those different elements, it could benefit not just the dyslexic learners but also all students in general*". Lastly, Tom thinks aloud specific strategies and activities he would implement in relation to the teaching material provided for this study,

"I would definitely do a pre reading discussion, try and gather the context, elicit vocabulary, create a mind map or brainstorm on the board of 'the day out at the sea', things that they enjoy about the beach… From a sensory point of view. Think of the five senses, 'What do you see at the beach? Smell at the beach? What can you taste? etc.'"

Knudsen (2012) claims that dyslexic students will have a better chance of successfully accessing the curriculum if they are taught through using all senses.

4.3.5 Communicative Approach Appreciated and Implemented

Most of the teachers tended to favour a communicative approach within their teaching. Tom claims that students were "*happier when they were in spoken conversation exercises or doing listening comprehension*". Ronan shares a similar view by claiming that when they are "*good at the oral element, then that should definitely be focused on, rather than reading, yes get reading and writing up as well through different ways ……but I think focusing on the stronger element of learning and communication could be more beneficial to the learner*".

Furthermore, Michelle is a strong advocate for this approach as she says that "*it's absolutely more beneficial. Especially when first accessing that language or that vocabulary by speaking it or listening to it.*" While Michelle was focusing on her own teaching resources, she provided a useful communicative strategy,

"Instead of asking them to read the definition of a word, I will tell them, and then I will put it into the sentence myself and then I will ask them a question, that contains that word, and ask them to answer and then create their own sentence, which again does take longer than just reading or writing something down, but that can help."

Reid (2012) recommends that it could be beneficial for ESL/EFL teachers to exploit the dyslexic learners' strong speaking and listening skills as this could promote their willingness to learn a new language.

However, Jane does not believe that a communicative approach is best for these students because "*for 14- to 16-year-olds, they're going to have to read and write*". Knudsen (2012) acknowledges that the communicative approach can be negatively viewed as it puts too much emphasis on speaking and not enough on other language aspects.

4.3.6 Positive Views on Pair Work

All four teachers presented positive views of pair work. Jane explains that in relation to the teaching material provided for this study, you could get the non-dyslexic pupil in that pair "*to do sentence starters for the dyslexic student….if you know that the dyslexic student will struggle to come up with adjectives then at least you know that they have the adjectives which their peer has provided*". Furthermore, Ronan tends to "*pair them with specific students that*

may find the content easier to pick up…. A student with a higher emotional intelligence and patience might then reinforce the learning of that student". Michelle further supports this by declaring that "*They do like to support each other*".

4.3.7 Advantages and Complications of Differentiation

All teachers tended to differentiate their activities in some way. In accordance with the teaching resources which were provided, Jane advised that it would be useful for dyslexic learners to use, "*highlighters and coloured pens to find the adjectives*", and Jane would "*double space the writing, maybe even double space between the words*" and provide "*sentence starters*". According to Zorzi (2012) extra space between letters help dyslexic learners when reading. This is due to dyslexic individuals being affected by crowding, which is a perceptual phenomenon that imposes negative effects upon letter recognition.

Ronan discovered that using "*bigger letters*" and "*highlighting*" within teaching resources is beneficial and that "*A lot of students would use a laptop rather than writing on actual paper with a pen for some activities*". Likewise, Tom reveals that "*Perhaps if you're dyslexic, you might find using a keyboard easier than handwriting*". Dal (2008) claims that the use of computers and modern computer techniques can significantly aid dyslexic students when learning a foreign language.

Tom explains that he would "*Give them the text first without any questions and say, in your own time, I want you to read this through to prepare yourself for the class.*"

Additionally, Michelle refers to her own writing resource and explains that a "*video homework*" would be highly beneficial,

"I will ask a question and it's the kind of thing you would normally expect to be like a written essay, but he is speaking his essay……Something like this is great for students who struggle with reading and writing…..they can write it down, if they want to, or they can speak it, it depends on how they learn".

Reid (2012) states that written homework frequently leads to anxiety about language learning. Michelle even explains how she differentiates her written feedback to make it more understandable for the dyslexic student, "*I won't just write a paragraph in response, I will underline a word in green if the article is missing, I will underline a word in purple if they need to change the tense…*"

However, Jane warns that we need to be careful when it comes to differentiating a teaching resource, "*It's important that all of the class do something that's a bit higher level. I don't really like differentiating a text*". Similarly, Ronan proclaims that this "*Could create complications in terms of that confidence of,* 'Well, w*hy am I getting a different text?'.....Unless they specifically asked for an easier text*". The following quote from Tom elaborates upon this issue,

"*You have got to be very careful about assumptions, to talk to that dyslexic student first and say, 'How do you feel about this?'…. They're not going to want to be seen as being weaker or not as good or getting a special advantage because of this problem…. So, I think as much as you can. You've got to try and keep it the same level, same activities, but give allowances, support, for the dyslexic student…… you need to be so adaptable and recognise when there may be problems.*"

Ronan points out that "*sometimes I have to re-organise activities to make sure everyone is comfortable. But I would never make it obvious*".

4.4 ESL/EFL Teachers' Confidence Supporting Dyslexic Students' Reading and Writing Skills

4.4.1 Lack in Training Leading to Less Confidence

Unfortunately, all four teachers expressed that they have received little or no training in how to appropriately support dyslexic EAL learners. Jane exclaims that "*I haven't had formal training.*". Likewise, Ronan states that "*Training has been very minimal*". Tom explains the possible reasons for why he has not received any training "*Firstly there is a perception that dyslexic students don't learn other languages, it's too difficult….and statistically, dyslexic students make up a very small percentage of students in EFL classes, organisations and schools. And so those organisations and schools might not feel justified in putting in additional resources… It's grossly unfair to the students who may be very capable and want to or need to (learn an additional language)….in order to progress*".

Michelle clarifies that "*We do quite a lot of training with Chinese companies but dyslexia is never mentioned*". Jin (2013) points out that numerous Asian countries have a Dyslexia Association, however, they may not have specific learning and training bases which provide tailored English and IT tutoring and assistance to aid dyslexic learners.

Furthermore, all teachers agreed that when teaching dyslexic learners, their methods came from their own experience/research rather than from professional training or research informed practice. Jane points out that "*its trial and error of my own methods.*" Comparably, Ronan comments that "*We had to basically just Google what activities you can do*".

Some teachers revealed that they find it challenging to support dyslexic learners and that they do not feel entirely confident. Tom states that "*It can be challenging and disruptive at times…. in those rare instances where you do come across somebody who's evidently dyslexic, it can create a minor panic, 'How do we help them?'*". Similarly, Jane believes that "*Yes, it is challenging*" to support dyslexic learners. Contrastingly, when asked if they find it challenging to support dyslexic learners, Ronan responded with "*personally, I don't think so, I would try my best with what I've been provided with*". However, "*in terms of formal help, 'Do I feel prepared to work with these students' I don't feel like I've ever been, it's been very much on the job*". Lastly, Michelle's confidence in supporting dyslexic learners depends on the context *"I think in a group context its difficult…… but in a one-to-one context, you can fit the lesson activities and techniques to fit that student and their needs."*

Jane stresses that "*EAL dyslexic learners slip below the radar*". Tom points out that "*There is an obvious gap that needs filling with teachers who are trained to recognise and to help those students.*" Michelle also emphasises this gap in knowledge by claiming that "*there is a lack of support, it certainly does need to be addressed*". Atif (2019) acknowledges a lack of dyslexia training for ESL/EFL teachers and stresses that it is paramount that these teachers are sufficiently trained so that they can firstly, identify if their learners are suffering from a certain learning difficulty and secondly, implement suitable teaching strategies.

4.5 Overcoming these Reading and Writing Challenges

All four teachers are positive that these reading and writing challenges can be overcome. Tom believes that these challenges can be conquered by the teacher providing "*great care, understanding and patience.*" Furthermore, Jane explains that "*They can be overcome but the system needs to change, and the system needs to prioritise and see where their needs are*".

Nevertheless, when asked if dyslexic EAL learners can still perform equally as well as their non-dyslexic peers, the teachers expressed varying views. Tom claims that "*in some cases students will outperform their peers in speaking and listening…… they realise that they have a weakness in one area and so they maximise their strengths in those areas*".

Likewise, Michelle believes that "*if you're following a lot of the frameworks of just the standardised tests and exams, you probably won't do as well because it does involve so much reading and writing*"; however, if the students are only focusing on speaking and listening then "*Yeah absolutely they can be just as good (as their non-dyslexic peers)*". Dyslexic EAL learners often experience reading and writing difficulties that remain problematic, despite efforts to relieve them. This commonly causes these learners to fall behind their peers in relation to their literacy development (Nijakowska, 2010).

However, Ronan interestingly shares that "*one student I taught last semester had dyslexia but he was one of the best in the class. I was shocked because it wasn't just a speaking activity, it involved writing on the board*". Siegel (2016) discovered that dyslexic EAL learners, (even though they were evidently dyslexic in English) performed better in their reading, writing, spelling, and phonological understanding in comparison to monolingual English dyslexic students. An explanation for this could be that having exposure to a native language that is not English can possibly improve dyslexic learners' language skills, which can then ultimately be transferred to their progress in their English reading and writing skills. It is feasible that their native language provides some shelter and protection against the impending unfavourable effects of their dyslexia. Therefore, bilingualism may be advantageous for dyslexic learners. Furthermore, Ronan states that "*By using a laptop or interactive technology, they can be at the same level as everyone else.*" Edyburn (2006) supports this by claiming that assistive technology can help overcome writing challenges.

4.6 Dyslexia from Varying Language Backgrounds

Tom intriguingly points out that "*Those who come from non-Latin alphabet linguistic groups struggle more than those who are familiar with Latin alphabet groups. So, if you've got a student who is dyslexic in Arabic, Chinese, or they use the Cyrillic alphabet, they may well find that a lot more difficult than somebody who's French or German, because of that letter recognition*".

Additionally, Jane explains that "*If you don't have a Roman script……..Europeans a's, b's, c's can be such a major problem, particularly with dyslexic Arab speakers*". Kałdonek-Crnjaković (2021) highlights how problematic English is for learners whose native language is not alphabetic, this difficulty is heightened even further if they are dyslexic. Moreover, Ronan mentions that "*In terms of speaking in Spanish, it's a more phonetic language unlike English. So, there tends to be less serious issues with dyslexic students*"; however, difficulties

tend to arise when dyslexic Spanish learners try to acquire English. Kałdonek-Crnjaković (2021) acknowledges that acquiring reading and writing skills within English can cause difficulties due to its low phoneme-grapheme connection.

4.7 Dyslexia across the World

The teachers reveal that there are different perceptions of dyslexia across the world. Firstly, Tom identifies that "*Perhaps, in other cultures, there isn't that development and recognition and acceptance of it*". Similarly, Jane states that "*In some cultures, the diagnosis won't necessarily mean what it does in this country (UK)*". Furthermore, Michelle discusses her thoughts her thoughts on dyslexia within China and Korea,

"It just seems to me like maybe it is almost something that's ignored….obviously it exists but it's different because they have a different alphabet, whereas children who are dyslexic in the UK are struggling to convert letters into sounds, they're trying to look at symbols and take meaning from it, I don't know if maybe that's lacking in the training because the people who create that (training) are Chinese, so they're approaching it in a different way".

Peer (2014) states that there are mass differences in the number of individuals diagnosed with dyslexia in the UK in comparison to China; however, it should be clarified that this does not mean that one country is dealing with it in a better way in comparison to another. It simply means that there are variations in awareness which can result in varying provisions and support for dyslexic learners.

4.8 Other

Other noteworthy themes which arose were in relation to the dyslexic learners' feelings towards having dyslexia. Tom found that they tend to have a "*fear of embarrassment in front of their classmates*". Correspondingly, Jane noticed that there is an "*emotional thing of embarrassment and a great desire to fit in*". Ronan states that they struggle with "*frustration*" as they may think "*I'm a bit different in the class*". Unfortunately, this leads to a "*lack of interest*" and as "*they think that they are no good*" and "*their motivation dips*". Sadly, dyslexic EAL learners commonly struggle with anxiety and low self-esteem due to their difficulties in reading and writing, which can then result in embarrassment and a lack of motivation to learn an additional language (Kormos et al, 2009; Reraki, 2014).

Nevertheless, Tom frequently reiterated that "*students who are dyslexic have no discernible lack of intelligence*". Likewise, Jane exclaims that "*Just because they have dyslexia, that*

doesn't affect obviously their cognitive function". Jin (2013) supports this and claims that there is "no necessary link between dyslexia and levels of intelligence and many dyslexics are seen to be creative and successful" (p.4).

Conclusion

This chapter has accumulated the data and provided unique findings and an in-depth insight into the various perceptions of each individual ESL/EFL teacher in relation to the topic of dyslexia within an ELT context. The next chapter will deliver an overall conclusion of this study.

Chapter 5: Conclusion

Introduction

This chapter will provide a brief overview of the main conclusions and findings which can be gathered from the data as well as examining other interesting findings. Additionally, limitations of this study and recommendations for further study will be discussed.

5.1 ESL/EFL Teachers' Perceptions of Dyslexic Students' Reading and Writing Challenges in Learning English

Overall, the teachers' perceptions highlighted that there are many reading and writing obstacles which EAL dyslexic learners may face such as the physical layout of the text, sight reading, pronunciation, processing letters/letter combinations, skimming and scanning, not being able to fully absorb the information being read, slowness of reading/writing, spelling, difficulties with silent letters, physically holding a pen, forming the letters, getting similar looking letters mixed up, reversing letters, and going from first, second and third person. Siegel (2016) explains that since dyslexia is a language disorder, it is probable that learners will encounter various reading and writing difficulties when learning an additional language, which can hinder the learners' language development.

Additionally, it was found that there tends to be a lack of attention paid towards writing, due to dyslexic learners finding writing so difficult. Tariq and Latif (2016) stress that little attention has been focused on improving writing skills, even though it is vital for young learners.

5.2 ESL/EFL Teachers' Perceptions of the Effectiveness of Teaching Strategies used to Support Dyslexic Students' Reading and Writing Skills

Throughout this data analysis, the effectiveness of many teaching strategies was discussed. The teachers portrayed mixed views of the effectiveness of drilling, a communicative approach, and differentiation. Whereas all teachers found pair work and a multi-sensory approach to be highly beneficial for dyslexic EAL learners. Dal (2008) mentions that a multi-sensory approach is one of the best ways for dyslexic EAL learners to acquire reading and writing skills.

Other effective strategies were suggested, for instance, one-to-one sessions and praise and positive reinforcement.

Schneider and Crombie (2012) comment that EAL dyslexic learners will likely perform much better if their teachers provide suitable teaching strategies.

5.3 ESL/EFL Teachers' Confidence Supporting Dyslexic Students' Reading and Writing Skills

All teachers agreed that there is a severe lack of formal dyslexia training available for ESL/EFL teachers and that any strategies or activities which they carry out are from their own research rather than from professional training or research informed practice. The teachers stress that there is an evident gap in knowledge.

Even though the teachers sounded confident in discussing teaching strategies, some teachers still do not feel entirely confident in supporting dyslexic EAL learners and some found it challenging. If formal training is implemented, this will enhance the teachers' confidence and allow them to gain research-informed practice to expand their repertoire. Reraki (2014) discovered that when ESL/EFL teachers receive adequate training, their dyslexic learners will likely become more confident, and eager to learn and its probable that there will be a positive change in their performance.

5.4 Other findings

Other intriguing findings were established. Firstly, all teachers believe that the reading and writing challenges can be overcome if they receive the right guidance. However, not all teachers are of the view that the dyslexic learners will be able to perform equally as well as their non-dyslexic peers in reading and writing, although they do believe that they can perform equally as well or even outperform their peers in speaking and listening. Nevertheless, one teacher has witnessed a dyslexic learner outperforming their peers in all language aspects.

Furthermore, it was highlighted that some dyslexic learners from non-Latin alphabets may struggle more with English compared to dyslexic learners from Latin alphabets. Additionally, there may be differences in awareness or perceptions of dyslexia across the world, and different ways in dealing with dyslexia. Lastly, it was concluded that dyslexic learners frequently suffer from embarrassment and frustration or may have a low self-esteem due to their dyslexia. Pirani and Sasikumar (2012) cited in Tariq and Latif (2016) commented that dyslexic learners regularly experience frustration or depression due to having such a negative view of themselves, which can result in poor academic progress. However, the teachers

within this study reiterated that dyslexia does not mean that the dyslexic learners have a low intelligence.

5.5 Limitations of the Study

This study implemented two different types of qualitative methods, which were beneficial in improving the validity of this research. However, there was a difficulty recruiting a larger number of participants. Ideally, more participants would have been favourable as it would have provided even more insightful and in-depth perceptions and findings. With more participants, a questionnaire may have been possible, which would have offered a quantitative and statistical perspective. Furthermore, it would have been beneficial to observe and gather first-hand experience of the way in which ESL/EFL teachers work with their dyslexic learners. However, this was not feasible as some of the teachers live in other parts of the world and several teachers were reflecting upon their past experiences of working with dyslexic learners, therefore, it would have been impossible to observe reading and writing strategies being utilized. Nevertheless, these interviews still provided a highly detailed exploration into dyslexia within an ELT context.

5.6 Recommendations for Further Study

It would be beneficial to investigate this topic from the dyslexic students' perspective in order to gather an even more in-depth understanding of exactly how they are feeling and what would be the most suitable support for them when learning English as an additional language. Moreover, it would be valuable to research dyslexic EAL learners at different ages/levels of education, for instance: primary school children, students at university level (English for academic purposes) and adults in general who would like to learn English for a specific purpose such as, employment or travelling opportunities. This would provide ESL/EFL educators with helpful knowledge on how to successfully accommodate learners of all ages.

Conclusion

Within this study, I investigated ESL/EFL teachers' perceptions of the reading and writing challenges and teaching strategies for dyslexic students learning English. This study resulted in many intriguing findings and helped contribute to the overall gap in knowledge of this topic. By attempting to raise awareness of this topic; it is hoped that dyslexic EAL secondary school aged students within mainstream settings will receive suitable support and equal educational opportunities to help them flourish in the English language and fulfil any future

goals. Dyslexic individuals tend to possess excellent visual-spatial and verbal skills, these skills are in great demand in today's world, especially as technology develops. "We need to support the dyslexic community, including those that speak more than one language. In this ever-changing world it will be people like them with innovative ideas who will lead the way." (Peer, 2014, p.3).

Words = 15,395

References

Ahmad, S., Ali, M.M. and Salehuddin, K. (2018) ESL teachers' experience in teaching pupils with dyslexia in mainstream classrooms. *Creative Education*, 9 (14), 2171-2182.

Almashy, A. (2016) Mixed methods in linguistics research: A critical methodological review. *International Journal of Information Research and Review*, 3 (7), 2602-2603.

Almeida, F. (2018) Strategies to perform a mixed methods study. *European Journal of Education Studies*, 5 (1), 137 – 151.

Alshenqeeti, H. (2014) Interviewing as a data collection method: A critical review. *English Linguistics Research*, 3 (1), 39-45.

Arries, J.F. (1999) Learning disabilities and foreign languages: A curriculum approach to the design of inclusive courses. *Modern Language Journal*, 83 (1), 98-110.

Atif, A. (2019) Lack of awareness in teachers about learning disabilities and its effect on ESL classroom environment. *Journal of Communication and Cultural Trends*, 1 (2), 17–26.

Bai, B. (2018) Understanding primary school students' use of self-regulated writing strategies through think-aloud protocols. *System*, 78, 15-26.

Bonifacci, P., Canducci, E., Gravagna, G. and Palladino, P. (2017) English as a foreign language in bilingual Language-minority children, children with dyslexia and monolingual typical readers. *Dyslexia*, 23 (2), 181-206.

Cardillo, R., Garcia, R.B., Mammarella, I.C. and Cornoldi, C. (2018) Pragmatics of language and theory of mind in children with dyslexia with associated language difficulties or nonverbal learning disabilities. *Applied Neuropsychology: Child*, 7 (3), 245-256.

Charters, E. (2003) The use of think-aloud methods in qualitative research an introduction to think-aloud methods. *Brock Education: A Journal of Educational Research and Practice*, 12 (2), 68 – 82.

Chung, K.K.H. and Lam, C.B. (2020) Cognitive-linguistic skills underlying word reading and spelling difficulties in Chinese adolescents with dyslexia. *Journal of learning disabilities*, 53 (1), 48-59.

Cohen, L., Manion, L. and Morrison, K. (2007) *Research methods in education.* 6th ed. New York: Routledge.

Cowie, N. (2009) Observation. *In:* Heigham, J. and Croker, R.A. eds. *Qualitative research in applied linguistics: A practical introduction,* Palgrave Macmillan, London, 165-181.

Croker, R.A. (2009) An introduction to qualitative research. *In:* Croker, R.A. and Heigham, J., ed. *Qualitative research in applied linguistics*, Palgrave Macmillan, London, 3-24.

Crombie, M.A. (2000) Dyslexia and the learning of a foreign language in school: where are we going? *Dyslexia*, 6 (2), 112-123.

Dal, M. (2008) Dyslexia and foreign language learning. *In:* Reid, G., Fawcett, A., Manis, F., and Siegel, L., *SAGE handbook of dyslexia*. SAGE Publications, 439-454.

Daloiso, M. (2017) *Supporting learners with dyslexia in the ELT classroom*. Oxford University Press.

De Costa, P.I., Lee, J., Rawal, H. and Li, W. (2019) Ethics in applied linguistics research. In: McKinley, J and Rose, H. eds. *The Routledge handbook of research methods in applied linguistics*, Routledge, 122-130.

Dornyei, Z. (2007) *Research methods in applied linguistics*. Oxford: Oxford University Press.

Edyburn, D. L. (2006) Assistive technology and mild disabilities. *Special Education Technology Practice*, 8 (4), 18-28.

Flick, U. (2009) *An introduction to qualitative research*. 4th ed. SAGE.

Flick, U. (2018) *An introduction to qualitative research*. 6th ed. SAGE.

Flora, S. B. (2009) *Cursive writing for right- & left- handed kids, grades 3-7: An effective developmental approach for all children.* Greensboro, NC: Key Education Publishing.

Gerlach, D. (2017) Reading and spelling difficulties in the ELT classroom. ELT. *Journal*, 71 (3), 295-304.

Gillham, B. (2008) *Developing a questionnaire.* A&C Black.

Hu, J. (2009) Discovering emerging research in a qualitative study of ESL academic writing. *The Qualitative Report*, 14 (4), 629 – 644.

Hutchinson, J.M., Whiteley, H.E., Smith, C.D. and Connors, L. (2004) The early identification of dyslexia: Children with English as an additional language. *Dyslexia*, 10 (3), 179-195.

Indrarathe, B. (2019) Accommodating learners with dyslexia in English language teaching in Sri Lanka: Teachers' knowledge, attitudes, and challenges. *Tesol Quarterly*, 53 (3), 630-654.

Ivankova, N.V. and Creswell, J.W. (2009) Mixed methods. In: Heigham, J. and Croker, R.A. eds. *Qualitative research in applied linguistics: A practical introduction*, Palgrave Macmillan, London, 135-161.

Iyer, M.S. (2015) Essentials for differentiated English as second language (ESL) instruction. *Language in India*, 15 (2), 176 – 200.

Jacob, S. and Furgerson, P. (2012) Writing interview protocols and conducting interviews: tips for students new to the field of qualitative research. *The Qualitative Report Journal*, 17 (42), 1 – 12.

Jin, L., Smith, K., Yahya, A., Chan, A., Choong, M., Lee, V., Ng, V., Poh-Wong, P., Young, D. and Sheehan, S. (2013) Perceptions and strategies of learning in English by Singapore primary school children with dyslexia–a metaphor analysis. *British Council ELT Research Papers*, 1, 13-34.

Kaihara, C. and Shibata, K. (2020) *Redefinition of language learning disabilities and the ways to learn English as a second language.* Pacific Rim International Conference on Disability and Diversity Conference Proceedings. Available at: https://scholarspace.manoa.hawaii.edu/bitstream/10125/69341/1/Redefinition_of_Language_ Learning_Disabilities_and_the_Ways_to_Learn_English_as_a_Second_Language_Kaihara.p df [Accessed 25 May 2021].

Kałdonek-Crnjaković, A. (2021) Fostering literacy skills and self-efficacy in a Chinese EAL learner with dyslexia. *Australian Journal of Learning Difficulties*, 26 (1), 1-20.

Kałdonek-Crnjaković, A. and Fišer, Z. (2017) 'Dyslexia-friendly' approaches in the teaching practice of Croatian English as a foreign language (EFL) teachers. *In:* Krevelj, S.L and Geld, R., U*ZRT 2016: Empirical studies in applied linguistics.* FF Press, 139 – 150.

Knudsen, L. (2012) *Dyslexia and foreign language learning.* Malmö Högskola Lärande Och Samhälle SOL. Available at: https://www.diva-portal.org/smash/get/diva2:1498521/FULLTEXT01.pdf [Accessed 30 May 2021].

Kolawole Waziri, O. (2008) The effects of dyslexia on language acquisition and development. *Scientific and Technical Reports of Faculty of Engineering and Resource Science Akita University*, 29, 23-27.

Kormos, J. and E.H. Kontra. (2008) Hungarian teachers' perceptions of dyslexic language learners. *In:* Kormos, J. and E.H. Kontra., ed. *Language learners with special needs: An international perspective,* Clevedon, UK: Multilingual Matters, 189 – 198.

Kormos, J. and Smith, A.M. (2012) *Teaching languages to students with specific learning differences*. Multilingual Matters.

Kormos, J., Csizer, K. and Sarkadi, A. (2009) The language learning experiences of students with dyslexia: Lessons from an interview study. *International Journal of Innovation in Language Learning and Teaching*, 3 (2), 115-130.

Kvale, S. (1996) *InterViews: An introduction to qualitative research interviewing.* Thousand Oaks, CA: Sage.

Lam, S. S., Au, R. K., Leung, H. W., & Li-Tsang, C. W. (2011) Chinese handwriting performance of primary school children with dyslexia. *Research in Developmental Disabilities,* 32 (5), 1745-1756.

Lama, A. (2019) Difficulties in English language learning for students with dyslexia. *In:* AAB College., ed. *Book of proceedings.* AAB College: Pristina Republic of Kosovo, 31 – 41.

Lopez, J. and Campoverde, J. (2018) Development of reading comprehension with graphic organizers for students with dyslexia. *JOTSE: Journal of Technology and Science Education*, 8 (2), 105-114.

Lundgrén-Laine, H. and Salanterä, S. (2010) Think-aloud technique and protocol analysis in clinical decision-making research. *Qualitative Health Research*, 20 (4), 565-575.

Martinez-Marrero, I., and Estrada-Hernández, N. (2008). An instructional tool to assist college students with written language disabilities. *TechTrends,* 52 (1), 56-62.

Merriam, S.B. (2002) *Qualitative research in practice: examples for discussion and analysis.* 1st ed. John Wiley & Sons.

Merriam, S.B. and Grenier, R.S. (2019) *Qualitative research in practice: examples for discussion and analysis*. 2nd ed. John Wiley & Sons.

Miller-Guron, L. and Lundberg, I. (2000) Dyslexia and second language reading: A second bite at the apple?. *Reading and Writing*, 12 (1), 41-61.

Moats, L.C. (1996) Phonological spelling errors in the writing of dyslexic adolescents. *Reading and Writing*, 8 (1), 105-119.

Mortimore, T., Hansen, L., Hutchings, M., Northcote, A., Fernando, J., Horobin, L., Saunders, K. and Everatt, J. (2012) *Dyslexia and multilingualism: Identifying and supporting bilingual learners who might be at risk of developing SpLD/dyslexia.* British Dyslexia Association and the Lottery Fund. Bracknell, UK: The British Dyslexia Association. Available from: http://www.nessy.com/us/files/2014/06/Dyslexia-and-multilingualism.pdf [Accessed on 02 June 2021].

Nijakowska, J. (2010) *Dyslexia in the foreign language classroom*. Multilingual Matters.

Nijakowska, J. (2016) Grasping dyslexia: Bridging the gap between research and practice. *Selected Papers on Theoretical and Applied Linguistics*, 21, 43-58.

Nijakowska, J. (2019) Foreign language teachers' preparedness to cater for special educational needs of learners with dyslexia: a conceptual framework. *European Journal of Special Needs Education*, 34 (2), 189-203.

Oppenheim, A. (1992) *Questionnaire design, interviewing and attitude measurement. 2nd Ed.* New York/London: Continuum.

Paltridge, B. and Phakiti, A. (2015) *Research methods in applied linguistics: A practical resource*. Bloomsbury Publishing.

Peer, L. (2014) *Multilingualism, literacy, and dyslexia: A challenge for educators*. Routledge.

Pilcher, H. (2004) *Chinese dyslexics have problems of their own.* Nature. Available at: https://doi.org/10.1038/news040830-5 [Accessed 28 June 2021].

Rahmani, E.F. (2017) The effective teaching strategies to encourage young adolescent learners to speak English. *Jurnal Pendidikan Bahasa*, 6 (1), 66-77.

Rao, P.S. (2019) The importance of teaching language skills to the second or foreign language learners of English: A comprehensive study. *ACADEMICIA: An International Multidisciplinary Research Journal*, 9 (4), 6-19.

Reid, G. (2012) *Dyslexia and Inclusion: Classroom Approaches for Assessment, Teaching and Learning.* Abingdon-on-Thames: Routledge.

Renner, M. and Taylor-Powell, E. (2003) *Analyzing qualitative data.* Programme Development & Evaluation, University of Wisconsin-Extension Cooperative Extension. Available at: http://thesummerinstitute.ca/wp-content/uploads/Qualitative-Methods.pdf [Accessed 1 June 2021].

Reraki, M. (2020) Dyslexia-friendly teaching in Greek EFL classrooms. *In:* Anastassiou, F. and Andreou, G., ed. *English as a foreign language: perspectives on teaching, multilingualism and interculturalism,* Cambridge Scholars Publishing, 211-237.

Reraki. M (2014) Classroom-based interventions for achieving 'Dyslexia-Friendly' classrooms in language education: pupils' and teachers' perspectives. *In:* Pixel., *Conference proceedings. The future of education*, 387 – 391.

Robson, C. and McCartan, K. (2016) *Real world research.* 4th ed. Chichester: Wiley

Rose, H., McKinley, J. and Baffoe-Djan, J.B. (2019) *Data collection research methods in applied linguistics*. Bloomsbury Academic.

Roulston, K. and Choi, M. (2017) Qualitative interviews. *In:* Flick, U., ed. *The SAGE handbook of qualitative data collection*, SAGE, 233-249.

Schneider, E. and Crombie, M. (2012) *Dyslexia and foreign language learning*. David Fulton Publishers.

Shaywitz, S. E. (2003) *Overcoming dyslexia: A new and complete science-based program for reading problems at any level.* New York: Knopf.

Siegel, L. (2016) Bilingualism and dyslexia: The case of children learning English as an additional language. *In:* Peer, L. and Reid, G., eds. *Multilingualism, literacy and dyslexia: Breaking down barriers for educators*, London: Routledge, 137- 147.

Sparks, R., Patton, J., Ganschow, L., Humback, N. and Javorsky, J. (2006) Native language predictions of foreign language proficiency and foreign language aptitude. *Annals of Dyslexia,* 56 (1), 129-160.

Tariq, R. and Latif, S. (2016) A mobile application to improve learning performance of dyslexic children with writing difficulties. *Journal of Educational Technology & Society*, 19 (14), 151-166.

Tosun, D., Arikan, S. and Babur, N. (2021) Teachers' Knowledge and Perception about Dyslexia: Developing and Validating a Scale. *International Journal of Assessment Tools in Education*, 8 (2), 342-356.

Unni, S. (2014) Language teaching methods to dyslexics acquiring English as a second language. *Language. Text. Society*, 4 (1), 12-22.

Unni, S. (2020) Experience of ESL teachers in teaching dyslexics in the mainstream classroom of UAE and India: A comparative case study. *International Journal of Linguistics, Literature and Translation*, 3 (10), 69-74.

Van der Leij, A. and Morfidi, E. (2006) Core deficits and variable differences in Dutch poor readers learning English. *Journal of Learning Disabilities*, 39 (1), 74-90.

Van Setten, E.R., Tops, W., Hakvoort, B.E., Van der Leij, A., Maurits, N.M. and Maassen, B.A. (2017) *L1 and L2 reading skills in Dutch adolescents with a familial risk of dyslexia.* PeerJ. Available at: https://peerj.com/articles/3895/ [Accessed 21 June 2021].

Zorzi, M., Barbiero, C., Facoetti, A., Lonciari, I., Carrozzi, M., Montico, M., Bravar, L., George, F., Pech-Georgel, C. and Ziegler, J.C. (2012) Extra-large letter spacing improves reading in dyslexia. *Proceedings of the National Academy of Sciences*, 109 (28), 11455-11459.

Appendices

Appendix 1 – Information Sheet

Information Sheet

My name is Cathy Madden and I am currently pursuing a Master of Education research dissertation at Ulster University. This research will take place across a 4-month period (June-September 2021). The research dissertation title is as follows:

ESL/EFL teachers' perceptions of the reading and writing challenges and teaching strategies for dyslexic students learning English

What is the purpose of this study?

There is an increased requirement to learn English as a foreign/second language within our rapidly evolving, multilingual, and globalised world. Therefore, learning English as a second/foreign language has become compulsory in many school curriculums. However, many learners with dyslexia may severely struggle with this requirement. Ultimately, this could result in these individuals being at a disadvantage within the global job market or in their personal life. Previous research has emphasised the lack of publications and awareness surrounding secondary aged dyslexic students learning English as a second/foreign language. The majority of research focuses primarily on the reading and writing skills of dyslexic students learning English as their native language, however it seems to overlook dyslexic adolescents learning English as a second/foreign language.

Consequently, the purpose of this study is to raise awareness of this topic by specifically focusing on EFL/ESL teachers' perceptions of the reading and writing challenges facing dyslexic students learning English as a second/foreign language. Furthermore, it will focus on EFL/ESL teachers' perceptions of the effectiveness of their current strategies and how confident/prepared they feel in appropriately supporting their dyslexic students. The ESL/EFL teachers' perceptions and experiences may potentially benefit other ESL/EFL teachers, school administrators, classroom assistants and parents in comprehending how to effectively support dyslexic students learning English. This should ultimately lead to equal learning opportunities for these dyslexic learners so that they can reach their full potential and will not be at a disadvantage in this multilingual and globalised world.

What is the nature of this study?

The first section of this study will involve a qualitative online semi-structured interview, which will consist of open-ended questions to gather your perceptions of the reading and writing challenges you have witnessed dyslexic students facing as well as how confident/prepared you feel to appropriately support these students. A collection of questions will be asked to help elicit your experiences and opinions surrounding this topic. This online semi-structured interview should last approximately 25- 30 minutes.

Following this, a 'thinking aloud' online interview session will be scheduled for a later date. The 'thinking aloud' method is one which provides participants with the opportunity to speak aloud any words and thoughts which come to mind while they are carrying out a task. To carry out this 'thinking aloud' method, you will be given the option of either choosing two reading/writing resources or activities which you are familiar with, or you have previously used in your teaching, or I can provide you with two pieces of TESOL teaching resources/material, for example: a reading comprehension and a writing activity. If you choose the latter option, you will be provided with these TESOL teaching materials (and a few prompts to help you) at least 2-3 days before the 'thinking aloud' interview session takes place. Please feel free to ask any questions/concerns you may have at this stage. Next, you will be invited to an online one-to-one 'thinking aloud' interview session where you will be asked to focus on these materials/resources (either your own chosen resources or the resources you have been provided with). You will be encouraged to talk through what strategies you may implement upon these materials/activities in order to support dyslexic students. The main aim is to simply gather your overall reflections, thought/decision-making process and your rational behind each strategy. It is extremely important to note that this is in no way a test or an assessment, the purpose is not for you to be tested or assessed. Before each session begins, you will be offered 5-10 minutes training (provided by myself) if you feel like this is necessary for you. This will ensure that you feel at ease and once again any questions/concerns you may have will be answered. The 'thinking aloud' online interview session itself should last approximately 25-30 minutes.

Both interviews aim to take place in June/July 2021.

Why have I been chosen?

You have been invited to take part in this research study as you are an ESL/EFL teacher who currently teaches or has previously taught secondary school aged (12-18) dyslexic students within mainstream settings. Therefore, I am intrigued to learn more about your experiences and feel that your involvement within this study would be highly beneficial.

Do I have to take part?

No, your participation within this study is completely voluntary and you are free to withdraw at any time without penalty. If you choose to take part, you will be provided with a consent form to sign to ensure that you are comfortable with your involvement.

Will the information I provide be kept anonymous and confidential?

All data will be kept strictly confidential, and every effort will be made to maintain anonymity. Pseudonyms will be utilized to cover your personal identity and the identity of any institution/employment which you currently or have previously worked for. All

data/material will be safely and securely stored on a password protected PC and will only be available to the researcher.

Thank you for taking the time to read this information sheet and for considering your involvement within this study. Your contribution is very much appreciated.

Contact Details:
If you have any further questions or concerns in relation to this research, please do not hesitate to get in contact:
Email: XXXXXXXXX
Telephone: XXXXXXXXX

Chief investigator details:
Name: Helen Hou
Email: XXXXXXXXXX
Telephone: XXXXXXXXXX

The outcome of this research will be available to you on request.

If you would like to participate in this study, please sign the attached consent form.

Appendix 2 – Informed Consent Sheet

<u>Consent Form</u>

Title of Project:

ESL/EFL teachers' perceptions of the reading and writing challenges and teaching strategies for dyslexic students learning English

_____

Name of Chief Investigator: Helen Hou

Please mark each statement with an X to confirm that you give your consent:

- I confirm that I have been given and have read and understood the   [   ]
  information sheet for the above study and have asked and
  received answers to any questions raised.

- I understand that my participation is voluntary and that I am free to   [   ]
  withdraw at any time without giving a reason and without my rights
  being affected in any way.

- I understand that the researchers will hold all information and data   [   ]
  collected securely and in confidence and that all efforts will be made
  to ensure that I cannot be identified as a participant in the study (except
  as might be required by law) and I give permission for the researchers
  to hold relevant personal data. Pseudonyms will be utilized to mask your
  identity.

- I give consent for the researchers to collect an audio recording and   [   ]
  written transcript of both interviews for the sole purpose of this
  research only.

- I understand that the data gathered will be retained for a period   [   ]
  of 10 years, before being securely destroyed.

- I agree to take part in the above study.   [   ]

Name of person taking consent: *Signature:*   *Date:*

Name of researcher: *Signature:*   *Date:*

Appendix 3 – Pre- Pilot Semi-Structured Interview Schedule

Interview Schedule

Date:

Location:

Interviewer: Cathy Madden

Interviewee:

To begin with, I would just like to thank you for your participation within this interview and your overall contribution to this study. Your willingness to help is very much appreciated.

My name is Cathy Madden and I am currently pursuing a Masters in TESOL at Ulster University. This interview aims to explore two different areas, firstly, it will focus on your views and experiences of the reading and writing challenges of dyslexic students which you have worked with. Secondly, I would like to gather your thoughts on how confident and prepared you feel to appropriately support these dyslexic students. I would like to remind you that even though you have signed the consent form to participate in this interview, you can still withdraw at any stage or refuse to answer certain questions. Please be aware that there is no right or wrong answer to the questions, I am only interested in exploring what you really think. Please do not hesitate to let me know if you do not understand any of the questions being asked.

Once again, I would like to reiterate that any responses will be kept strictly confidential, and you will not be able to be identified from the information provided. All information collected will be used solely for the purpose of this study.

This interview should last approximately 15 minutes. Would you like to ask any questions before we begin?

Area 1: General information about the participants

1. Tell me a bit about your teaching career (How long have you been teaching?)

2. Can you recall your first encounter with teaching dyslexic learners? What did you do?

3. What training (formal/informal) have you had to help you teach dyslexic learners?

4. Are there any commonalities shared by the dyslexic learners you have ever taught? If so, what are they?

Area 2: Reading and writing challenges of dyslexic learners

1. What reading challenges have you witnessed dyslexic learners experiencing when learning English?

2. What writing challenges have you witnessed dyslexic learners experiencing when learning English?

3. What do you think are the main common reading challenges and the most common writing challenges for dyslexic students learning English?

4. From the challenges you have mentioned, which do you believe causes the most difficulties for dyslexic students and why?

5. Do you believe these reading and writing challenges can be overcome? Why/why not?/How can they be overcome?

6. Despite these reading and writing challenges, do you believe that dyslexic learners can still perform equally as well as their typically developing peers? Why/why not?

7. Have you found that certain dyslexic students from particular native language backgrounds acquire reading and writing English skills easier than others? For example, maybe you have found that dyslexic German students acquire reading and writing English skills more easily than dyslexic French students?

Area 3:

1. Do you feel that you have received adequate training in how to suitably support dyslexic students learning English as an additional language? Why/why not? If yes, what training have you received?

2. Do you find it challenging to appropriately support dyslexic students learning to read and write in English? Why or why not?

3. In general, do you believe that there is a lack of guidance and support for ESL/EFL teachers who teach dyslexic students? Why/why not?

Ending:

- Is there any information you would like to add?

Prompts/probes:

- Can you elaborate on that?
- Can you give me an example of that?
- Why/why not?
- Why do you think this is the case?

Appendix 4 – Final Semi-Structured Interview Schedule

Interview Schedule

Date:

Location:

Interviewer: Cathy Madden

Interviewee:

To begin with, I would just like to thank you for your participation within this interview and your overall contribution to this study. Your willingness to help is very much appreciated.

My name is Cathy Madden and I am currently pursuing a Masters in TESOL at Ulster University. This interview aims to explore three different areas, firstly, it will focus on general information about you. Area two will then look at your views and experiences of the reading and writing challenges of dyslexic students which you have worked with. Lastly, I would like to gather your thoughts on how confident and prepared you feel to appropriately support these dyslexic students. I would like to remind you that even though you have signed the consent form to participate in this interview, you can still withdraw at any stage or refuse to answer certain questions. Please be aware that there is no right or wrong answer to the questions, I am only interested in exploring what you really think. Please do not hesitate to let me know if you do not understand any of the questions being asked.

Once again, I would like to reiterate that any responses will be kept strictly confidential, and you will not be able to be identified from the information provided. All information collected will be used solely for the purpose of this study.

This interview should last approximately 15 minutes. Would you like to ask any questions before we begin?

Area 1: General information about the participants

1. Can you tell me a bit about your teaching career? (How long have you been teaching?)

2. Can you recall your first encounter with teaching dyslexic learners? What did you do?

3. Have you had any training (formal/informal) in how to teach/support dyslexic learners? If so, what training have you had? If not, why do you think you have not had any training?

4. Are there any commonalities shared by the dyslexic learners you have ever taught? If so, what are they?

Area 2: Reading and writing challenges of dyslexic learners

1. What reading challenges have you witnessed dyslexic learners experiencing when learning English?

2. What writing challenges have you witnessed dyslexic learners experiencing when learning English?

3. What do you think are the most common reading and writing challenges for dyslexic students learning English?

4. From the challenges you have mentioned, which do you believe causes the most difficulties for dyslexic students and why?

5. Do you believe that these reading and writing challenges can be overcome? Why/why not?/How can they be overcome?

6. Despite these reading and writing challenges, do you believe that dyslexic learners can still perform equally as well as their non-dyslexic peers? Why/why not?

7. Have you found that certain dyslexic students from particular native language backgrounds acquire reading and writing English skills easier than others? For example, maybe you have found that dyslexic German students acquire reading and writing English skills more easily than dyslexic French students?

Area 3: ESL/EFL teacher training and confidence

1. Do you feel that you have received adequate training in how to suitably support dyslexic students learning English as an additional language? Why/why not? If yes, what training have you received?

2. Do you find it challenging to appropriately support dyslexic students learning to read and write in English? Why or why not?

3. In general, do you believe that there is a lack of guidance and support for ESL/EFL teachers who teach dyslexic students? Why/why not?

Ending:

- Is there any information you would like to add?

Prompts/probes:

- Can you elaborate on that?
- Can you give me an example of that?
- Why/why not?
- Why do you think this is the case?

Appendix 5 – Pre- Pilot 'Thinking Aloud' Interview Schedule

Thinking Aloud Interview Protocol

Interviewer: Cathy Madden

To begin with, I would just like to thank you for your participation within this 'thinking aloud' interview and your overall contribution to this study. Your willingness to help is very much appreciated.

The 'thinking aloud' method is one which provides you with the opportunity to speak aloud any words and thoughts which come to mind while you are carrying out a task. In this case, I will be encouraging you to focus on the reading/writing TESOL resources which you have been given in advance or to focus on your own reading/writing materials. While focusing on these learning materials I will encourage you think about what reading and writing strategies you would implement to support your dyslexic students when completing these learning materials. The main aim is to simply gather your overall reflections, thought/decision-making process and your rational behind each strategy. It is extremely important to note that this is in no way a test or an assessment.

I would like to remind you that even though you have signed the consent form to participate in this interview, you can still withdraw at any stage or refuse to answer certain questions. Please be aware that there is no right or wrong answer to the questions, I am only interested in exploring what you really think. Please do not hesitate to let me know if you do not understand any of the questions being asked.

Once again, I would like to reiterate that any responses will be kept strictly confidential, and you will not be able to be identified from the information provided. All information collected will be used solely for the purpose of this study.

This interview should last approximately 15 minutes. Would you like to ask any questions before we begin?

Below are two examples of TESOL reading and writing resources. The ESL/EFL teachers will be given these learning materials prior to the 'thinking aloud' interview or they can use their own reading/writing materials. In the interview, they will be asked to think about what reading and writing strategies they would implement to support dyslexic students in completing these learning materials.

Reading

Hello, I'm going to tell you about my family. We live in Edinburgh in a beautiful house in the suburbs of the city. I've got two brothers. Ricky is older than me and he is very intelligent. Oscar is younger and he is very funny. He has good humour. Lucy is my mom. She is thirty years old. Lucas is my dad and he is forty. Our garden isn't very big but there is a tree and some nice flowers. We sometimes clean it or sweep the fallen leaves. Guppy is our little dog. We haven't got any cat because we hate them. They can be very nasty.

I love listening to music. In my house we all love it. Mathew is my best friend. He was born in Amsterdam and I met him during a summer camp in England two years ago. We both like playing walking in the mountains. Maybe he will come to visit me in Rome next year. We send messages or talk on Skype. I haven't got any brothers or sisters. My grandfather is living with us because he is a widower. He takes me to school and cooks dinner too. My parents come late in the evening. He tells my stories. I love him.

writing

WRITE about your family, friends, your house and likes or dislikes.

LET'S READ AND WRITE ABOUT ... (3)

PEOPLE – FAMILY AND FRIENDS

Hi. My name's Luke. I'm eleven and I come from England. I live in Cambridge and I go to school there. I have a sister, her name is Dora. She's 2. She is very noisy. She gets up first, wants to eat first, always cries when she sees I've got something new. Oh, it's a horror!

My Mum, Claudia, is 34 and she is at home now. She looks after Dora but she also works when she has some free time, especially when Dora is asleep. My Mum is a translator. She translates books and articles from German into English. When she has a break she comes to my room and we talk, play board games or read books together.

My Dad is an engineer. His name is Mark. He programs machines and they do what he wants them to do. It's hard work but it's fun. He travels all over the world because the machines are everywhere.

My best friends are Harry and Noreen. We go to the same school together. Harry is tall and thin and wears glasses. He is a very good pupil and my best classmate. Noreen has blonde hair and is great at Maths. She always helps me with my homework when I'm in trouble.

I really like my family and friends very much!

From: Kompedium Szóstoklasisty, Papilon

1.Read and decide TRUE (T) or FALSE (F)

1. Luke is Scottish. ....
2. He is 11 years old. ....
3. His hasn't go any siblings. ....
4. Her mum doesn't work. ....
5. His mother write books. ....
6. His father is unemployed. ....
7. His father travels a lot. ....
8. Luke hasn't got friends. ....
9. His best friend is Harry. ....
10. He likes his family. ....

2. Answer the questions.

1. Where does Luke come from?

....

2. What is his sister's name?

....

3. How old is his sister?

....

4. What language does his mother know?

....

5. Who are his friend?

....

Prompts/questions to elicit decision making process:

What do you think dyslexic EAL learners will find challenging about this learning material?

Lesson planning:

1. What reading/writing strategies would you use to address these challenges? (in order to support the learners in accessing and engaging with this learning material)
2. What specific activities would you design to help engage them or support them?
3. What would you do to make sure that the dyslexic learners achieve similar, if not the same learning outcomes as their non-dyslexic peers?
4. How do you think these reading/writing strategies will benefit dyslexic EAL learners?
5. What do you think makes these strategies effective or ineffective?
6. Do you think that these strategies could be improved upon? If so, how?

Is there anything that you would also consider using if the materials were different from the above ones? Could you tell me a bit more?

Appendix 6 – The Final 'Thinking Aloud' Interview Schedule

Thinking Aloud Interview Protocol

Interviewer: Cathy Madden

To begin with, I would just like to thank you for your participation within this 'thinking aloud' interview and your overall contribution to this study. Your willingness to help is very much appreciated.

The 'thinking aloud' method is one which provides you with the opportunity to speak aloud any words and thoughts which come to mind while you are carrying out a task. In this case, I will be encouraging you to focus on the reading/writing TESOL resources which you have been given in advance or on your own reading/writing materials. While focusing on these learning materials I will encourage you think about what reading and writing strategies you would implement to support your dyslexic students when completing these learning materials. The main aim is to simply gather your overall reflections, thought/decision-making process and your rational behind each strategy. It is extremely important to note that this is in no way a test or an assessment.

I would like to remind you that even though you have signed the consent form to participate in this interview, you can still withdraw at any stage or refuse to answer certain questions. Please be aware that there is no right or wrong answer to the questions, I am only interested in exploring what you really think. Please do not hesitate to let me know if you do not understand any of the questions being asked.

Once again, I would like to reiterate that any responses will be kept strictly confidential, and you will not be able to be identified from the information provided. All information collected will be used solely for the purpose of this study.

This interview should last approximately 15 minutes. Would you like to ask any questions before we begin?

Below are two examples of TESOL reading and writing resources. The ESL/EFL teachers will be given these learning materials prior to the 'thinking aloud' interview or they can use their own reading/writing materials. In the interview, they will be asked to think about what reading and writing strategies they would implement to support dyslexic students in completing these learning materials.

The teachers will be informed that the teaching material is aimed at B2 on the CEFR level and the age group is 14-16 years old. The questions accompanying the reading comprehension and the writing activities were designed by myself.

Reading comprehension-
A Day at the Beach

The enclosed beach is silent. The sun is a golden coin which blinds you as it emerges; it rises like a yellow lollipop on the distant horizon. Crashing against the shore, small waves wash the night's debris onto the land. The untouched golden sand is like a blanket which stretches for miles. Soothing. A gentle sea breeze rustles through your hair.

Abandoned, nothing there apart from a few seagulls pecking at the rubbish left by yesterday's visitors. Empty crisp wrappers, chocolate wrappers, ice cream papers and half eaten cones scatter the yellow sand.

Young children stumble onto the moist sand, with small buckets and spades in their hands, they shout and talk in excitement. You can feel the damp sand being forced between your toes. Straight away, the young children put on their swimming costumes and are smothered with thick, white sunscreen, to protect them from the bright sun. Children running towards the shoreline; their parents struggle onto the sand, loaded like camels with everything they will need for their day. Sandwiches, cold drinks, windbreakers, towels all bagged up and slung over both shoulders.

A hot sea breeze hugs the visitor's hair, as you stand there you can taste the salt in the air. The sound of the waves crashing against the shore, seagulls swooping overhead and the strong scent of sunscreen surrounds the beach. The beachgoers spring as their feet hit the blistering sand. Sitting there for hours, playing with the sand; children giggle as their sandcastles are overtaken by powerful crashing waves.

Questions

1. What is the untouched golden sand compared to?
2. What did the children and their parents bring to the beach?
3. What strong scent is at the beach?
4. How many adjectives can you find? (Write them down below)

Writing Tasks –

Add in adjectives to make this paragraph more descriptive:

I can feel the waves crash against my legs and the sand between my toes. I can hear the laughs of children and the seagulls in the distance. I can smell the salt from the ocean and the sunscreen from those cautious of the sun. I see boats in the distance. I can taste the salt as I emerge from the water and the ice cream as I eat to cool off.

Write your own descriptive paragraph about the beach. It should include at least 7 different adjectives:

Questions may be asked to help elicit the teachers' thought process, for example:

1. What reading/writing challenges do you think dyslexic EAL learners will find difficult about this teaching material?
2. What teaching strategies would you use to address these challenges? (in order to support the dyslexic EAL learners in accessing and engaging with this learning material)
3. If you were to use this learning material to teach dyslexic EAL students, what activities would you design to help engage/support them?
4. What would you do to make sure that the EAL dyslexic learners achieve similar, if not the same learning outcomes as their non-dyslexic peers?
5. How do you think these teaching strategies will benefit the dyslexic EAL learners' reading and writing skills?
6. What do you think makes these strategies effective or ineffective?
7. Do you think that these strategies could be improved upon? If so, how?
8. Are the strategies which you have mentioned coming from your own experience or research informed practice?
9. Is there any other strategies or activities you would consider using if the materials were different?

Appendix 7: Semi-Structured Interview Transcript - Tom

Interviewer: Thank you so much for joining me today for this interview.

Tom: You're welcome.

Interviewer: And for your overall contribution to this study. It's very much appreciated. So, this interview today is going to be split into three different sections. So, the first section will look at the general information about yourself. The second section will look at the specific reading and reading challenges which dyslexic students learning English may experience. And the last section aims to gather your thoughts on how confident and prepared you feel in supporting these dyslexic learners. Before we begin, I just like to remind you that even though you have signed the consent form, you can still withdraw at any stage, or refuse to answer any question, if you wish. There's definitely no pressure whatsoever. There is no right or wrong answers to the questions. I'm simply just interested in gathering your thoughts and experiences, and if you don't understand the question, just let me know.

Tom: I've looked through all of your interview questions and I've actually written notes on them and I will happily send you that by email afterwards as well but I will sort of expand on anything I have written.

Interviewer: Perfect, perfect, thank you so much I really appreciate that. And just lastly, I'd like to remind you that everything will be kept strictly confidential, and you won't be able to be recognised from information that you provide. Okay, so do you have any questions before we begin?

Tom: No, no, I'm ready for yours.

Interviewer: Okay, great. Can you tell me a bit about your teaching experience, and how long you have been teaching?

Tom: Yes, I began teaching in 1997, in Indonesia. I was backpacking and previously I had been a manager in the railways, I had a lot of experience presenting, training. And I suppose it was one of those moments in life where you think, I need to find some work, I don't have any money and I met somebody who was an Indonesian English teacher, he allowed me to teach some of his classes. As things worked out there weren't a lot of opportunities, so I decided I would head home to the UK. But again, I met somebody in Singapore who worked at the school in Indonesia and long story short, I decided, well is it stick or twist? And I

bought a flight back to Indonesia and started teaching there, I taught for about eight months, and in 1997/98 there was a severe economic crisis, which forced a closure of many businesses. I had to make a decision and I came back to the UK and went back to the railway, but then I had an opportunity to do the CELTA course, so I did a one-month intensive course in London in the International House, and through them I got a position in Kuala Lumpur, which was in a technical university, doing foundation courses. A lot of the students were Chinese, Malay Chinese or Korean. In 2002, I returned to the UK with my wife, and I've been here ever since I've taught English ever since, and I was teaching at an adult language school and I took the Delta and passed that in 2004.

Interviewer: Okay, great, thank you so much. So, the second question is, can you recall your first encounter with teaching dyslexic learners, and what did you do?

Tom: Yeah so, I suppose it was an experience that I didn't realise at the time until perhaps we were talking in the staff room afterwards. Again, so I'll just read from my notes, it was a learner, probably pre intermediate level, the general English class, can't remember the student or the nationality but it was something that, as a teaching team we discovered or stumbled across because it wasn't disclosed to us. So, we've noticed that the student had difficulties in sight reading. So, they were trying but they were obviously having difficulties stumbling over words. So, they were much more competent and happier when they were in spoken conversation exercises or doing listening comprehension so their productive skills were much more accomplished or than their passive skills. So, when we were, we realised it was a problem we spoke to the Director of Studies, and they had a quiet word with the student. And they didn't want it made public, and I think there's a fear of embarrassment in front of their classmates. So, we had a skeleton timetable in the mornings where we would focus on the structure, grammar, reading, listening, and writing, whatever it might be and the afternoons were needs based, negotiated with the students. So, I basically changed my lesson plans and the objectives so we were lucky that we could have that flexibility, we didn't follow an actual curriculum, because they were very short intensive courses 2, 3, 4 weeks something like that, a rolling entry programme. So, I changed to mostly a focus on listening and speaking, information sharing and note taking and information sharing. So, if you think for many of the dyslexic students that reading is the problem, note taking, they might do it in their own shorthand in their own way and they might be able to interpret that, without having the difficulty of fully reading a passage. So, try to play on their strengths and build their confidence through their key skills like listening and speaking. When it came to reading or

writing perhaps what we tended to do was to drop a writing class and set that as a homework task so that they have more time to do it. If they did it on a laptop or something, then they could use a spell checker and things like that so again not publicly exposing the person's perceived weakness.

Interviewer: Yes, great, thank you. So next one is, have you had any training, whether it's formal or informal on how to teach or support dyslexic learners, if so, what training have you had?

Tom: Yeah, I thought that was a really interesting question. I've had none. It is not an issue that we were taught about either at CELTA or DELTA level. But of course, you know I'm well aware of the problem. So, I said, there seems to be an assumption that people with dyslexia, don't want to, or can't learn another language. Yeah, it's just a feeling, that they struggle with their own language so are they going to go learn another language? So, it's grossly unfair to the students who may be very capable and want to or need to as well in order to progress. So yeah, I think it is a glaring omission and there are reasons for that which I'm happy to expand on later but yeah, I didn't have anything, and I don't think any of my colleagues did either.

Interviewer: Yeah, yeah, that's perfectly fine. Okay, are there any commonalities shared by dyslexic learners you have taught, if so, what are they?

Tom: Yeah, I made a few notes. So, in my experience, most students who have dyslexia are reluctant to share this with other students or teachers. I believe there's still a stigma, perhaps an unconscious stigma that being dyslexic equates to a lesser intelligence and that's one reason why students are struggling and suffering in silence. Whereas there are people who, you know, take for example Richard Branson, he is a very well-known dyslexic, but he's one of the most successful entrepreneurs in Britain, so it's something that holds many people back for any number of reasons, but I think that's one of them, there's this perception that they are going to be seen as stupid. Those who come from non-Latin alphabet linguistic groups struggle more than those who are familiar with Latin alphabet groups. So, if you've got a student who is dyslexic in Arabic, Chinese, or they use the Cyrillic alphabet, they may well find that a lot more difficult than somebody who's French or German, because of that letter recognition. Some but maybe not all dyslexic students may be less willing to participate fully in a class, they may not volunteer an answer, or might fear being called upon to read something off the board or in a book. One to one lessons, students with reading issues are far

more willing to share those problems, because they build up trust and a rapport with the teacher. And also, because I always say, a one-to-one is not my class, its theirs so we can then agree and shape the lesson to their needs and I can take account of their dyslexic problems. Students who are dyslexic have no discernible lack of intelligence.

Interviewer: Yes definitely, great. So, the next one is, what reading challenges have you witnessed dyslexic learners experiencing when learning English?

Tom: Difficulty understanding a different alphabet but of course, that could be for anybody, trying to learn Arabic or Chinese for us would be complex but if you have an issue with dyslexia, it may double that. Sight reading, of course, pronunciation and again dependent on linguistic groups, certain language groups have more problems with pronunciation than others, but dyslexia may well amplify that. A lack of confidence when faced with reading out loud, slowness or inability to finish reading tasks within an allocated time. I think that's one as teachers we have to be, you know, when you make a lesson plan and you allocate 10 minutes for this reading exercise, and you set the task and they finish it in six or seven, but one student is still on the first paragraph, it evident that there is a problem. Do you then curtail the lesson plan at that point? Do you extend the reading exercise? Yes definitely. And a realisation that they know that word, or they know that phrase. They have heard it and they understand it. Its only that their inability to recognise it, as a cluster of letters as a recognised word that stops them from understanding it. So, it's actually it's within their vocabulary, they've learned it but it's a disconnect between the actual physical presentation of letters and their understanding.

Interviewer: Yeah definitely, that would be very frustrating for them as well. Okay so, what about the writing challenges you have witnessed?

Tom: Okay, a reluctance to write, yeah I think that, I mean that's across the board, I mean, writing is the least practiced and the least popular in disciplines. Many students would say it seems to be a bit of a waste of time. But again, it's that time element of how long do we need to do this, some of them will whizz through a writing exercise in five minutes and others will need a good half an hour or more for the same exercise. So, I think again, someone who is dyslexic is prone to taking a lot longer, they may have the ideas but its that translation of ideas to paper or to screen that is the problem. Other problems, an ability to produce cogent, relevant, and incisive ideas, to process and organise them orally, but a difficulty in translating that to the page or screen as I said. So, they can express, say "Here's the subject, talk about

that for two minutes", "Yeah, no worries" "Now write it down" That's when they are gonna have the problem. And then things, you know, in terms of the actual language itself, spelling errors or a consistency in error, making the same errors again and again and not recognising that. A failure to recognise and correct spellings, even when they understand, they keep making the same mistakes. Yeah, because it just looks right the way they do it or it looks wrong the way that we do it.

Interviewer: Definitely, definitely. So, what do you think are the most common reading and writing challenges for dyslexic students?

Tom: Processing letters and letter combinations into recognising words, connecting those into sentences, and then communicating that information accurately so the organisation, the spelling, the grammar and writing, pronunciation, reading and the speaking. Learning a different alphabet as we said, are the rules that go with the alphabet different to theirs? Overcoming shyness and an embarrassment to read in front of the class and to complete reading and writing tasks that are required, so it might be a case of "Right read this section, take some notes, and now I want you to work with a partner and exchange the information." Well, they could do that but they haven't had the time or the ability to process the first part of the task, so they are holding up other people. Being held back in their English progression by reluctance to study for and take formal qualifications in English. So, you know, "I'm dyslexic, how am I going to study for and pass TOEFL or IELTS or occupational English tests or Cambridge or Trinity exams?" And the one thing that might be holding them back is not their intelligence, it's their inability to read and process things. Yeah, so that's the last point, being prevented from career progression due to a perceived inability to read and write.

Interviewer: Yeah, yeah. Great. From the challenges you have mentioned, which do you believe causes the most difficulties?

Tom: It depends on the objective of the student. So, for example, if it's a young learner, it might be peer related, they are embarrassed or shy, they feel worried about reading and writing in front of their peers and it might lead them to giving up and not progressing with the language. If it's somebody older and a business professional, perhaps it's that challenge to produce accurate, mistake free reports and emails.

Interviewer: Yeah. Do you believe these reading and writing challenges can be overcome? If so, how might they be overcome?

Tom: Yes, with great care, understanding and patience, so the key is working with the student at their pace. So, it's more difficult to achieve in the class because you've got different levels and people have different ability often, even if it's all pre intermediate there is going to be a range of ability. But private one to one sessions can definitely build confidence and help and techniques to overcome their difficulties. We've said before, many people have achieved great success in life with the diagnosis of dyslexia, but as a teacher, what I believe and I think this is across the board for all students, whether dyslexic or not, is the clarity of message, that it is clear, easy to follow, simple instructions. That each lesson has an effective and purposeful objective as a rationale and a reason why we are studying this and that you teach the student and not just the lesson plan, so you're adaptable, and you recognise when there may be problems, and that you have the ability of backup. Always have an additional lesson or activity that I can fall back on if something's evidently wrong. Providing additional tuition after class if required to assist any student who's struggling and to find out the underlying cause. At our school we have lessons that would finish five, and then the school is open until six, and there was often a nominated teacher who would be on duty until six, to assist any students with anything, if they are doing extra study or they have a problem. Instilling confidence and self belief in the student, and not overloading students with writing and reading lessons and material.

Interviewer: Yeah, okay perfect. So, despite these reading and writing challenges, do you believe that dyslexic learners can still perform equally as well as a non-dyslexic peers?

Tom: Yes, absolutely and in some cases, students will outperform their peers in speaking and listening maybe because they focus on that and they realise that they have a weakness in one area and so they maximise their strengths in those areas. So, they compensate for that weakness by excelling in the other skills.

Interviewer: Yeah definitely. And the next question I think you touched on that before and you have pretty much answered. So, I'm going to move on to the last section now. So you did say at the start that you haven't received any training so do you feel like you haven't received enough support on how to teach these dyslexic learners?

Tom: Yeah, and maybe for two reasons, firstly there is a perception dyslexic students don't learn other languages, it's too difficult so we don't have them and statistically, dyslexic students make up a very small percentage of students in EFL classes, organisations and schools. And so those organisations and schools might not feel justified in putting in

additional resources. I don't think it needs a lot of investment, it just needs a little bit of, you know, I think it's a great marketing tool for a school to say we are inclusive and if a student has dyslexia, there shouldn't be obstacle or barrier for them learning English. So, this is what we do, we've got a dedicated teacher who's taken the training course in recognising dyslexia. And they will be given some extra tuition, it might be that they have to pay a little extra, but the company might well want to invest in them if they've invested enough in sending them or the private individuals invested enough then I think that would be a great opportunity for a school to do that.

Interviewer: Yeah, definitely. So, do you find it challenging to appropriately support dyslexic students learning to read and write in English?

Tom: Yeah, it can be challenging and disruptive at times. So if you don't know the student with reading difficulties and then you plan a vocabulary reading based lesson with a student with negotiated needs or a structured timetable, that class may be slowed down, and held back by the individual and that can cause tension or friction and you get other students coming up and saying, "he or she shouldn't be at this level, they're not good enough, they need to move down a level." And it may be the case if they don't declare that they have this problem, you do move them down and then they sit there twiddling their thumbs saying this is too easy for me. So yeah, it definitely can be very disruptive. I think what's needed is a culture where dyslexic students have an opportunity to declare that in a confidential way, and to be comfortable, that their needs will be taken account of.

Interviewer: Yeah, so just the last question then. In general, do you believe that there is a lack of guidance and support for ESL teachers who teach dyslexic students?

Tom: Yeah, and I think there are other issues as well that people may have, but certainly in terms of the mechanics of learning a language, the ability to recognise and read is fundamental. I think if somebody has a problem doing that but they have a willingness to learn, there is an obvious gap that needs filling with teachers who are trained to recognise and to help those students in particular. I think yes, I think there is a lack of awareness around the issue. It was something that really hadn't crossed my mind because you do go into each new class with the assumption that everybody can read and write and that everybody's fine. The problem for them is that they need to improve their English, so they've done the basics, they've got their foundation. So, in those rare instances where you do come across somebody who's evidently dyslexic. It can create a minor panic, "what we do? How do we help this

person?" We don't want to leave them floundering, we don't want to cause disruption in the class so there is definitely a need and there needs to be more guidance so anything that you're doing to promote that is fantastic.

Interviewer: Yeah, and from research, I have found that, it seems to be in English speaking countries, there sometimes tends to be more of an awareness of dyslexia in comparison to non-English speaking countries across the world.

Tom: Yeah, it may be a cultural thing, the taboo of dyslexia is certainly less in the English-speaking world than it used to be, say in the 70s. Whereas, perhaps, in other cultures, there isn't that development and recognition and acceptance of it. It's not a stupidity issue, it's not an intelligence issue, it's a physical issue in a way, the brain just not recognising letter combinations. And when I did the CELTA course in London, it was an excellent course and I enjoyed it. But I think there's an opportunity for CELTA courses maybe to have a half day a module on unexpected situations in the classroom, or problems that teachers are not aware of, something like that, dyslexia could be one of them or even managing different levels or that sort of thing so I think new teachers, even if they don't have a formal training, but should be aware that just because you're teaching English language students, doesn't mean they may not have other issues such as dyslexia.

Interviewer: Yeah, definitely, great. So, is there any information you would like to add?

Tom: The only thing, just in connection with the one before, is thinking about materials development, and I'm thinking, certainly the younger learners, because I know there are many parents, where I used to work in Asia who really want their children to learn English from a very young age and want to achieve, and they could be quite pushy and demanding, but if you then get a 7, 8, 9 year old in the class, who has obviously got problems with dyslexia and all that frustration there, having some materials that might specifically aid them, for example, que cards or whatever it might be, that certainly would be an area that could be useful for many people and then taking that into older learners as well. But again, that involves time, resources, and planning but it's something I think that if we as teachers have like a little resource box, you know, if somebody has got problems with reading, it may not just be dyslexia as I say, it might be an Arab student or a Chinese student who is really struggling to recognise letter combinations, pronunciation rules etc. That could be really useful. We did have something at our school which was pronunciation packs, and they were a series of lessons specifically tailored for students of linguistic groups, we had pronunciation for

Russian learners, for French learners, for Japanese etc, so it focused on the sounds, and the pronunciation problems, something similar maybe for dyslexic students with reading.

Interviewer: Yeah, definitely, well thank you so much. You have provided great information; it will be very helpful to me.

Tom: No problem, have a nice day, take care.

Appendix 8: 'Thinking Aloud' Interview Transcript – Ronan

Interviewer: Shall we get started?

Ronan: Yeah, no worries.

Interviewer: Okay, so this thinking like method is one that provides you with opportunity to speak aloud any words or thoughts that come to mind when carrying out a task. So, in this case, I'll be encouraging you to look at the reading and writing materials which I have given you, or if you want to use your own that's okay. And I'd like you to talk me through the different teaching strategies that you would use on these learning materials so that this can better support dyslexic students. The main aim is to simply gather your overall reflections, your thought process, your decision-making process, and the reasons for using these strategies and why you think they're effective, and beneficial for the students. It doesn't have to be a strategy which you have previously used before. It is extremely important to note that this is in no way a test or an assessment. There is no right or wrong answers to the questions and you can withdraw at any time. All responses will be kept strictly confidential and every effort will be made so that you're non-recognisable from the information which you provide, and please let me know if you don't understand any of the questions. Before we begin, would you like me to provide some training and give an example of a thinking aloud method, or would you like to get started into the questions?

Ronan: No, I think it should be alright thanks.

Interviewer: Okay, do you have any questions before we begin?

Ronan: No, no it should be alright.

Interviewer: Okay, no problem. I will now share the reading and writing resources on screen so that you can see them again. Can you see this okay?

Ronan: Yeah.

Interviewer: Okay, the first question is, what reading and writing challenges do you think dyslexic EAL learners will find difficult about this teaching material?

Ronan: Well, initially looking at it from the students I have had, I know it's done in, it's broken into some paragraphs which is, I definitely think it's beneficial, but it is a lot of chunks of text, and also it's very standard black and white, which I feel like most learners

would be reasonably comfortable with, but it might potentially intimidate or it might be maybe not broken up enough like yeah I'm saying it is, it is quite neatly laid out. But for that kind of learner, I think, even maybe just initially even smaller chunks, or maybe using like highlighting, maybe more challenging elements could be useful. I just feel like it's very, I know there are pictures as well, but they're not necessarily totally corresponding with every paragraph if that makes sense. Yeah, yeah, so that's my first initial thoughts.

Interviewer: Yeah, anything else or will we move done to the writing task part?

Ronan: Yeah, maybe move down a little bit there.

Interviewer: Okay, so these are the questions to go along with the reading comprehension, and then these are the writing tasks below as well.

Ronan: Yeah, I mean, I know the questions for example, are numbered so it is, it's definitely more clearly laid out, it's not blending into the text. I feel like there could be, as I said, a stronger maybe distinction, like for example the main body text and the questions and the writing task, maybe, like I remember one time I saw a document like this and one of the guys was a bit unsure, like, "Is this part of the text or is this now my questions?" If that makes sense, is this now the activity part, and not the comprehension part? So maybe, if there was like, a stronger barrier or a clear indicator that, okay, end of text, and these are now your questions or your things to do. Maybe I don't know, it could be more beneficial to the learner, I'm not 100% sure.

Interviewer: Yeah definitely, so what about the writing tasks, what do you think they might find challenging about these? If anything.

Ronan: Yeah, so I'm reading the part where it says, and you've put this in bold, which is useful, when it's talking about write down descriptive paragraph, "it should include at least seven different adjectives" It is a little vague maybe for students and learners that might be able to work on this totally by themselves and use their own initiative. I feel like the learner that I've worked with before might tend to ask more questions like, "So, my descriptive paragraph, how do I start this or what kind of style?" I feel like maybe if there was some more bullet points, maybe like a hinter of, you know, introduction, and main body. I know it's laid with "including at least seven different adjectives" which is good. But then they might struggle with, forming the sentence and kind of structuring it.

Interviewer: Yes, and do you think it would be beneficial to have maybe sentence starters and stuff like that?

Ronan: Yeah, like, even maybe I noticed, there's not many like examples, normally I would tend to write at least one, maybe, in italics or something with highlighting the adjective because I feel like that kind of learner, sometimes can't even distinguish in written form the adjective and the verb, and things like that. Speaking it, they could orally maybe tell you, "yeah, that's a descriptive word" but writing it might pose a different kind of challenge so potentially maybe if there was an example with even use of colour highlighters to indicate that's the adjective, that's where it goes in the sentence, and maybe underlining other elements of the sentence because the whole point is, you know, sentence forming is really the biggest problem, it's not the idea from what I've worked with before. It's just then getting that to pen and paper or getting not written on the screen so maybe potentially more examples that's very clear, indicated examples could be more beneficial than just "write your own paragraph, use adjectives" and that's it if that makes sense.

Interviewer: Definitely, yes, that's great and what teaching strategies would you use to address these challenges so that the dyslexic EAL learners are able to access and engage with this material?

Ronan: Well, as I mentioned before, definitely, of course using online resources and using formatting that they're familiar with. I'm just trying to think here, so previously, I mentioned that, maybe when they're initially writing it, whereas most other learners, kind of start writing, and don't need to distinguish, maybe it could be a good idea to specify that when they are using for example those 7 adjectives that you mentioned, that they're required to use, maybe to even use highlighters like a yellow or something, multicoloured highlighter when they're writing it to remind themselves that "I've used an adjective, okay, that's a descriptive word, done." And then maybe like the guy I worked with before, then he starts to see a pattern, because I think his issue is like not having that structure maybe or that natural structure to his writing or to his thought process when he's putting words to paper or on a screen. So perhaps you could maybe highlight the need when they're doing a plan or they are doing their draft of this, maybe to highlight the key elements of the text or anything they're required to insert and then they go back and see that "Oh actually I haven't used enough", or when they go back to see that word and they realise, "Oh wait, in fact, that's not an adjective" especially as an ESL learner and then they realise "Oh, in fact that was a verb", or "Oh that

was describing the verb so that's an adjective" it sort of gives them a visual reference if they highlighted as they go along. And of course, when it's the final version, maybe that can be removed if it, you know, has to be a certain format like this, but definitely in the process of writing it. I would always and I even give this advice to non-dyslexic learners, I've had students that I've told, I've asked them to do this and highlight as they go along so it's easier to correct, it's easier to see that kind of pattern if that makes sense.

Interviewer: Yeah, yeah definitely and so what activities would you think of designing based around this teaching resource?

Ronan: In terms of like writing like doing a writing task, what other methods you're saying?

Interviewer: Yeah, so would you think of doing any other activities before giving out the resource or activities after or anything else to help them engage and support them with this teaching material?

Ronan: Yeah, the only thing in terms of writing challenges beforehand, the only thing I can think of that has been useful in the past, is when you are doing, you know, the visual learning of seeing the sentence structure and what things you need to include. Sometimes, if you're doing physically like when I say physically for example one activity I have done before is print out, like, say for example, 15 words that form a sentence, so you know you have a random sentence, and then they have to, if you know it is someone with a specific need like that, to get them to see "alright, what order they all go in" if that makes sense. You might have a printed-out piece of paper with 'I' the word "I" and then the next one is the verb like 'will go' or you know something like that. And then they have to see the structure but doing it physically, they're not writing it initially. They're taking that piece of paper that's physically in their hand, seeing that that's the word and trying to piece together that 15 to 20 word sentence as a kind of build up or kind of preparation to then write their own sentences because for me as I said before, that structure and having that knowledge of structure is very important before they start just diving into writing their own sentences, if that makes sense. So that's one thing that comes to mind, but I can't really think of any other things I've done in advance in terms of students with that kind of need.

Interviewer: Yeah, that makes perfect sense and it's kind of like a modelling strategy because they make that sentence and then they're kind of using that to then copy down and write. So

what would you do to ensure that the ESL dyslexic learners, achieve similar or the same learning outcomes, as a non-dyslexic peers?

Ronan: Well, without even talking about just the type of activity, I feel like it's not distinguishing, like as I said before about using special methods and doing this but if they're in a class of, you know, mainstream students, they obviously don't want to be highly identified or they don't want me to have to do something different with them. So it's just for me, with not a huge amount of experience it's about definitely reassuring them and just keeping positive reinforcement for example, if we're doing that structural activity to prepare with, you know, if, if you're kind of always focusing on, "Oh you didn't get that right" or "You missed one or two words" that's kind of pessimistic focusing on the negative that they got wrong, then it lowers their confidence and kind of then doesn't reinforce what you're trying to do. Whereas I find it to be more useful in terms of prep, if they've got like eight out of ten, or even if it's like three out of ten right initially, and you say, "Oh, that's great, like those three you got, do you see how you did that?" And they're like, "Yeah, but I can't get the rest." And at least you're starting off with that positive reinforcement that you started somewhere, you're getting there, and then slowly but surely, if you keep that positive reinforcement of okay they get five words in the correct order or part of the sentence within the correct order or they identified an adjective, or they identified an adverb whatever it is and then eventually find, if it sort of clicks with them with that positive reinforcement, it then gives them that confidence to go away and try and write their own sentences. So, I suppose not talk about methods, like, sort of, proper scientific methods or anything, it's just positive attitude and really focusing on the things they can do, and not so much what they can't do initially if that makes sense.

Interviewer: Yeah, definitely, definitely. How do you think these teaching strategies will benefit the dyslexic, EAL learners' reading and writing skills?

Ronan: Well, in terms of reading anyway, after doing these kind of prep activities, it always seems to be easier then for them to identify that structure and stuff when they are reading initially, but then the hardest part of course is forming their own stuff, like for example in the document when it's talking about "Write your own sentences" that's always the more challenging part, whereas those kind of activities are kind of the base to, I feel like reading is maybe a slightly easier element when it kind of clicks, whereas then the writing does need a bit more practice. I feel like it's just a lot of practice and finding a system like I'm talking

about a system that has worked for me or benefited me in the past with these kinds of students, whereas it might not necessarily benefit or work for other learners, of course learning is so individual and unique for everyone. So, how it benefits is definitely just getting those baby steps, perhaps like just building that confidence, seeing the structure, because I feel that's one of the biggest issues, it's that structure that some other learners might have more naturally. Whereas when it's someone who maybe finds it a little more challenging or a little more difficult. You know it's just finding that system that works, and kind of sticking with it if you find something that works you're like, don't, don't switch it up maybe don't try loads of different activities or things to get them going, if something works, I think, use it, and I think that the biggest benefit for them, if they have something that works and they can work on.

Interviewer: Yeah, so from the strategies that you have mentioned, do you think that they could be improved upon in any way, or do you think that they're ineffective in some ways?

Ronan: Well in terms of definitely improving them, like I mentioned before the previous time like the training and the actual, maybe scientific or kind of actual official teaching methods could definitely be reinforced with people like myself who, you know, don't have a lot of experience like with these kind of tricks, let's say, or kind of methods or things to kind of reinforce learning, a lot of that has been done by my own initiative like just a Google search for example, whereas I feel like, if I had the starting point, I'm talking about actually teaching them how to improve that any useful kind of tools like that I feel could be reinforced by actual training, or actually someone to say, "Well, actually there is scientific evidence to back what you're doing, or, you know, reinforcing structure or methods to gain that structure could definitely be improved by someone telling me how to advance my methods and therefore, benefiting the students. If actually there's some backing from people who know what they're talking about really you know I'm no expert, of course, I haven't received that training so I feel that could benefit not just me the teacher, but also of course most importantly the learner.

Interviewer: Yeah, yeah, of course, and that covers my next question as well because I was going to ask if these strategies are from your own experience, or research informed practice but I'd it sounds like they are all from your own experience yeah?

Ronan: Yep.

Interviewer: Is there any other strategies or activities you would consider using if the teaching materials were different?

Ronan: Yeah, I think I mentioned before that a useful tool to use is an interactive whiteboards and things like that and if they're prepping stuff, sometimes doing something physically, not just individually like a lot of students are happy to start writing things on their own device, or on their own piece of paper whereas doing some examples with the class, but it's a mix of abilities, where we're writing things maybe on the board physically where it's bigger letters, bigger text. I know, the one guy I keep referring to, he definitely prefers bigger texts like when I come to his laptop he has enlarged his text and he says that works like I can see things more clearly. It's not about eyesight issues or anything, he just said it kind of works for him and I didn't really ask any more questions, because I was like "Well that's great". So I feel like maybe doing more activities, initially, maybe with the class with bigger letters instead of explaining the structure and then getting them to do it on their individual devices which we use of course, could be useful with students, not just students with dyslexia but for everybody I think so maybe doing more things with bigger text in front of the class in a no stress, no pressure kind of way.

Interviewer: Yes, so just before we finish off, I just want to gather your thoughts on a few different strategies. So, if you're using differentiation, for example, if you were doing a reading or writing activity or resource and you slightly altered it to make it a bit easier for the dyslexic learner to access, do you think that is an effective or ineffective strategy?

Ronan: For me, I think it depends how independent the activity is. If, for example, everyone else, the other learners, the other students were doing a text, and then you are giving an altered text, I feel that could create complications in terms of that confidence of, "Well, why am I getting a different text?" and then of course, with my style of learning, I don't really like them doing individual things, I like them at least working with a partner, or in a small group, because it sort of encourages the quiet, particularly the quieter ones or the less able maybe ones, if I can say that, at all levels to engage with other levels and other sort of students in general. It's a tricky one. Personally, no. I think I might dedicate more of my time when I'm walking around. Not like making it obvious but I think I would check in more and maybe give maybe different pointers orally to that student. But as to giving them an altered text, I personally don't think I would just for that, for that reason of confidence and making a student like that feel, not with the rest of the class, unless they specifically asked for maybe

an easier text. I think in that case because they have asked me, they're okay with knowing that everyone knows that they're wanting a different text if that makes sense but with taking my own initiative to do that, I don't think I would. Unless I really had to.

Interviewer: Yeah, I get what you mean, it's quite a sensitive subject. So, you mentioned pair work, do you think it would be beneficial, possibly pairing up another student, with the dyslexic learner, or even just have students in the class looking for them? Do you think that would be effective?

Ronan: Yeah, absolutely. It depends on the class but sometimes, without them knowing of course I've never tell a student, but sometimes I do pair them with specific students. If it's an activity where there's a weaker, just talking in general, a weaker student, sometimes I would pair them with, let's say, a student that finds the content easier to pick up or a more able student, but in some other cases, the small number of dyslexic students I have worked with, in fact their overall level of English, and their ability of English has been actually quite high, like in my experience, learning the language particularly orally and listening wise and also reading and writing has not been a major issue, but in terms of that, I would maybe pair, not so much that type of student with someone who has a higher academic mark, but also with someone who has a higher level of emotional intelligence, if that makes sense because I feel like sometimes with a student with a high mark, academically speaking as I said, sometimes they're not good at… everyone's different, of course…but sometimes it's not always a good idea, because some tend to be not helpful, or are kinda like "Well, I understand what this is, why don't you?" Whereas sometimes pairing, say for example a dyslexic student, with another student who is quite emotionally intelligent who understands that the student isn't picking up the structure or isn't able to identify certain elements of the text as quickly, and sometimes the student with that better understanding might say, "Oh I'll help you" for example "Do you see that word and do you see how it's connected to that one?" and it's maybe more gentle, but it also is beneficial, even if they are not the most academically able student, a student with that higher emotional intelligence and patience might then reinforce the learning of that student who is capable of learning English as a foreign language but just can't get the reading and writing a strongly.

Interviewer: Yeah, and do you think it's better to focus on the speaking and listening areas and adopt a more communicative approach rather than focusing very heavily on reading and writing?

Ronan: Well, that's what we always talk about in work, is that sometimes reading and writing, while it is very important, sometimes the oral element and the listening element is neglected, and that is the element I would focus on the most is kind of getting that everyday speaking element up, as well as reading and writing, but in terms of importance, all four elements, speaking, listening, reading and writing all have equal importance. But in my experience with, for example the dyslexic students, the oral communication seems to be a lot stronger, because it doesn't involve that written text all the time or doesn't involve as advanced written texts. Most of them that I've taught have been so able in terms of communication and even at home I've friends who are dyslexic and in terms of oral communication would be absolutely fantastic. So, for some of those students, definitely there could be a bigger focus, well, at the same time the reading and writing can be focused on but maybe in different ways but if they are good at the oral element, then that should definitely be focused on, rather than reading, yes get reading and writing up as well through different ways, as we talked about but I think focusing on the stronger element of learning and communication could be more beneficial to the learner.

Interviewer: Yeah, and what are your thoughts on a multi-sensory approach, so learning through more than one sense at a time, this may be your visual, your auditory, and kinaesthetic learning. Do you think this would be beneficial for dyslexic learners?

Ronan: Yeah, absolutely, because even not talking about just dyslexic students but we all learn in such different ways, you said there's so many different types of learning, and definitely I feel like, but I feel like we are moving away from that a traditional book learning of, you know, especially with learning a language for example, even when we were in school, I feel like it was a lot of learning vocabulary lists and learning grammar rules which for even a lot of people meant that they had these random things but couldn't put them together if that makes sense. Whereas I feel like, particularly for a dyslexic learner, if you're using more you know, doing more things that are audio based, listening or more physical activities like I talked about using pieces of paper or things that you have to move. There are more interactive elements rather than just listening to a teacher speaking, so definitely, I feel like if there was a mix of those different elements, it could benefit not just the dyslexic learners but also all students in general, in my opinion. Yeah, definitely. I feel like it's moving towards that, but I feel like it could move faster, especially learning a language, a foreign language. I think it could move a lot faster towards a sort of multi-approach not just a single track way of learning.

Interviewer: Yeah, and just before we finish, I would like to gather your thoughts on the strategy of drilling. So, I know that this strategy is used for improving the accuracy of pronunciation, but do you think this would be beneficial in writing as well? So, for example, repeatedly writing a word to get the spelling right?

Ronan: Personally, I detest the idea of drilling. As I said, it depends on the person, some people learn by repetition, by writing it 20 times or whatever. So, in terms of drilling something, yeah, it would have to be very much dependent on the learner. I feel like, if the learner, if you did something like that, and the learner, very quickly indicated that that didn't work, then I think that would have to be dropped. I feel like in modern, more modern language learning, it's tended to move away from drilling, like writing things over and over and over and more to a approach of dropping language into, when I said daily use, I mean if we're listening to something or reading something, we're highlighting things, we're throwing a lot of things in but having repetition in a way that is more interactive and not forcing a student to say, "I want you to learn these words, I want you to learn this thing, keep doing it, doing it and doing it" because sometimes, personally I feel when it is just repeated, it kind of sticks but then students struggle to actually use it in a real context, especially if it's vocabulary learning. If it's constantly, you know, writing, or even memorising like take NI oral exams for example, when you learn a text off or you learn a speech or something, you repeat it, you repeat it, you repeat it and as soon as the exams done, you forget it. Whereas if students have the opportunity to be able to use, not just repeating key elements, you're teaching them to throw in, things like that, but in useful context and not just reciting it for the sake of reciting it if that makes sense. I hope that's kind of clear but drilling I personally, I feel like we've moved away from that.

Interviewer: Okay great, thank you for your thoughts, that is now the end of this session and I would once again just like to say thank you so much for taking the time to help me with this study. I really appreciate it.

Ronan: No worries, no worries at all. I hope some of it might be useful.

Interviewer: Yes of course, it definitely has been.

Ronan: Good luck and if you need again if you need anything, like any follow up, just drop me a message.

Interviewer: That's great, thank you so much. No worries, bye, bye.

Ronan: Bye.