

UNIVERSITY OF PARDUBICE
FACULTY OF ARTS AND PHILOSOPHY

MASTER'S THESIS

2025

SIMONA VOSÁHLOVÁ

University of Pardubice
Faculty of Arts and Philosophy

Learning English Online:
Challenges for Learners with Dyslexia
Master's Thesis

Podklad pro zadání DIPLOMOVÉ práce studenta

Jméno a příjmení: **Bc. Simona Vosáhlová**
Osobní číslo: **H20432**

Téma práce: **Learning English online: challenges for learners with dyslexia**
Téma práce anglicky: **Learning English online: challenges for learners with dyslexia**
Jazyk práce: **Angličtina**

Vedoucí práce: **doc. PaedDr. Monika Černá, Ph.D.**
Katedra anglistiky a amerikanistiky

Zásady pro vypracování:

Diplomantka se ve své práci zaměří na procesy učení angličtiny žáků s dyslexií v kontextu online/korespondenční výuky realizované základními školami v době pandemie covid-19. V teoretické části nejprve představí specifické poruchy učení. Hlavní pozornost bude věnovat dyslexii a jejímu vlivu na procesy osvojování cizího jazyka. Dále diplomantka stručně charakterizuje online/korespondenční výuku a bude diskutovat její potenciál pro výuku angličtiny u žáků s dyslexií. Empirická část bude obsahovat vícepřípadovou studii žáků druhého stupně základní školy, jejímž cílem bude zjistit, jaké výzvy přináší žákům s dyslexií online/korespondenční výuka realizovaná příslušnými školami v době mimořádných opatření. V kvalitativně orientované vícepřípadové studii diplomantka využije pro sběr dat dotazovací techniky.

Seznam doporučené literatury:

- 1) Broomfield, Hilary, and Margaret Combley. 1997. *Overcoming Dyslexia: A Practical Handbook for the Classroom*. London: Whurr Publishers.
- 2) Daňová, Martina. 2008. *Metodika úpravy textů: pro znevýhodněné čtenáře*. Pedagogika. Praha: Grada.
- 3) Krejčová, Lenka, Zuzana Bodnárová, Kamila Šemberová, and Kamila Balharová. 2018. *Specifické poruchy učení: dyslexie, dysgrafie, dysortografie*. Praha: EDIKA.
- 4) Ott, Philomena. 1997. *How to Detect and Manage Dyslexia: A Reference and Resource Manual*. Oxford: Heinemann Educational Books.
- 5) Pumfrey, Peter D., and Rea Reason. 1991. *Specific Learning Difficulties (Dyslexia): Challenges and Responses*. London: Routledge.
- 6) Raymond, Sally. 2002. *Helping Children Cope with Dyslexia*. Rev. ed. *Overcoming Common Problems Series*. London: Sheldon Press.
- 7) Smutná, Jiřina, and Josef Novák. 1996. *Předpoklady k učení u dětí dyslektických a dysgrafických*. Litomyšl: Augusta.
- 8) Stephenson, John. 2002. *Teaching & Learning Online: Pedagogies for New Technologies*. London: Kogan Page.
- 9) Stowe, Cynthia M. 2000. *How to Reach & Teach Children & Teens with Dyslexia*. New York: Center for Applied Research in Education.
- 10) Zelinková, Olga, Monika Černá, and Helena Zitková. 2020. *Dyslexie – Zaostřeno na angličtinu*. Praha: Pasparta Publishing.

Podpis studenta:

Datum:

Podpis vedoucího práce:

Datum:

Prohlašuji:

Tuto práci jsem vypracovala samostatně. Veškeré literární prameny a informace, které jsem v práci využila, jsou uvedeny v seznamu použité literatury.

Byla jsem seznámena s tím, že se na moji práci vztahují práva a povinnosti vyplývající ze zákona č. 121/2000 Sb., o právu autorském, o právech souvisejících s právem autorským a o změně některých zákonů (autorský zákon), ve znění pozdějších předpisů, zejména se skutečností, že Univerzita Pardubice má právo na uzavření licenční smlouvy o užití této práce jako školního díla podle § 60 odst. 1 autorského zákona, a s tím, že pokud dojde k užití této práce mnou nebo bude poskytnuta licence o užití jinému subjektu, je Univerzita Pardubice oprávněna ode mne požadovat přiměřený příspěvek na úhradu nákladů, které na vytvoření díla vynaložila, a to podle okolností až do jejich skutečné výše.

Beru na vědomí, že v souladu s § 47b zákona č. 111/1998 Sb., o vysokých školách a o změně a doplnění dalších zákonů (zákon o vysokých školách), ve znění pozdějších předpisů, a směrnicí Univerzity Pardubice č. 7/2019 Pravidla pro odevzdávání, zveřejňování a formální úpravu závěrečných prací, ve znění pozdějších dodatků, bude práce zveřejněna prostřednictvím Digitální knihovny Univerzity Pardubice.

V Pardubicích dne

Simona Vosáhllová

Acknowledgments

I would like to thank my supervisor, Doc. PaedDr. Monika Černá, Ph.D., for her guidance and mentoring. I would also like to thank my parents, my sister, and my friends for all the emotional support. A special thanks goes to my husband for the unconditional love, patience, and support he has provided me with throughout these difficult times.

Annotation

The paper is dedicated to documenting experiences and challenges of dyslexic learners during the COVID-19 pandemic and the shift in education towards online teaching and learning format. The aim of the study is to provide insight into the issue of special needs learners and their situation during the lockdown and social distancing in relation to their education and learning process. The data for the research is collected via semi-structured interview in a multi-case research method. The experiences, emotions, and perspectives the paper deals with are to provide a deeper understanding of the issue as well as aspire to spread awareness among its readers.

Keywords

Learning Difficulties, English as a Foreign Language, Dyslexia, Online Schooling, SEP, Supportive Measures

Název

Výuka angličtiny v online prostředí: výzvy pro žáky s dyslexií

Anotace

Tato práce se zabývá zdokumentováním zkušeností a výzev žáků diagnostikovaných s dyslexií během pandemie COVID-19, která měla za následek přechod z prezenční výuky do distančního prostředí. Cílem práce je poskytnout detailní vhled do problematiky distanční výuky dětí se speciálními potřebami skrze výpovědi dvou dyslektických žáků. Za použití semistrukturovaného rozhovoru ve vícepřípadové studii práce nabídne detaily za účelem hlubšího porozumění. V zaměření na proces učení a vzdělávání těchto dětí v tomto období si práce dává za cíl rozšířit povědomí a přitáhnout pozornost k tomuto problému.

Klíčová slova

Poruchy učení, angličtina jako cizí jazyk, dyslexie, online výuka, ŠVP, podpůrná opatření

Table of Contents

Introduction	1
Theoretical part	2
1. English Language Teaching and Learning	3
1.1 English Language Teaching and Learning; Czech Republic	5
1.2. SEP – School Education Programme	8
2. Learning Difficulties	9
2.1 Specific Learning Disabilities	10
3. Dyslexia	11
3.1 Neurological Factors of Dyslexia	13
3.2 International Definition	15
3.3 Czech Definition	17
3.4 Inclusive Education and Supportive Measures	17
3.4.1 Supportive Measures for Dyslexic Children	19
4. Dyslexia and Foreign Language Learning	21
4.1 Impact of Dyslexia on FL learning	21
4.1.1 Phonetic Skills	22
4.1.2 Reading Skills	24
4.1.3 Writing Skills and Spelling	26
4.1.4 Listening Skills	29
4.1.5 Speaking Skills	30
4.1.6 Memory and Internalization	32
5. Online Schooling	34
5.1 Online Schooling; Czech Republic	35
5.2 Challenges and Potential of Online Schooling for Dyslexic Learners	36
5.3 Supportive Measures for Dyslexic Children during Online Schooling	39
Empirical part	42
6. Research Aim	43
7. Methodology	44
7.1 Multi-case study	47
7.2 Semi-structured interview	47
8. Data collection	49
8.1 Creating the Semi-structured Interview	50
8.2 Piloting	52
8.3 Modifications	54
8.4 Final Data Collection	56
9. Data Analysis Methods and Interpretation	57
9.1 Learner A	61
9.1.1 Learner A – Links to SEP and SEdP	62
9.2 Learner B	63
9.2.1 Learner B – Links to SEP and SEdP	65

10. Results and Findings	66
Summary	70
Conclusion	72
Resumé	74
Bibliography	77

List of Pictures and Graphs

Figure 1 – CEFR Companion volume 2020	3
Figure 2 – English Language “1. stupeň, 5. ročník”	6
Figure 3 – English Language “2. stupeň, 9. ročník” – Reception	6
Figure 4 – English Language “2. stupeň, 9. ročník” – Production	7
Figure 5 – English Language “2. stupeň, 9. ročník” – Interaction	7
Figure 6 – English Language “2. stupeň, 9. ročník” – Mediation	8
Figure 7 – Inclusion in Education	18

List of Abbreviations

CA – Communicative Approach

CC – Communicative Competence

CLT – Communicative Language Teaching

CEFR – Common European Framework of References

EFLA – English Foreign Language Acquisition

ELT – English Language Teaching

ELL - English Language Learning

EFL – English as a Foreign Language

ESL – English as a Second Language

FEP - Framework Educational Programme

FEP PE - Framework Educational Programme for Elementary Education

FLA – Foreign Language Acquisition

LD – Learning Difficulties

LL – Language Learning

L-L Interaction – Learner-Learner Interaction

L-Ls Interaction – Learner-Learners Interaction

Ls-Ls Interaction – Learners-Learners Interaction

PPCC – Pedagogical-psychological Counseling Centre

SEP – School Education Programme (ŠVP – Školní vzdělávací program)

SEdP – Special Education Plan

SLA – Second Language Acquisition

SLD – Specific Learning Disabilities

ŠPZ – Školská Poradenská Zařízení (SCC – School Counseling Centers)

T-L Interaction – Teacher-Learner Interaction

RD – Related Disorders (to SLD)

Introduction

This thesis explores the experiences of dyslexic learners within the Czech online schooling system during the COVID-19 pandemic, with a specific focus on their English language learning. The primary aim is to gain a deeper understanding of how these learners experienced online instruction, how supportive measures were or were not implemented, and how these factors impacted their motivation, emotional well-being, and academic performance. The research seeks to give voice to learners whose needs are often overlooked during systemic shifts, particularly in digital environments where individualization becomes more difficult to sustain.

The motivation for this research stems from the growing concern about inclusivity in education and the recognition that official supportive frameworks, although formally established, may not always be effectively implemented in practice. As such, the study is guided by the following preconception: that dyslexic learners may have experienced a significant reduction in support during online learning, and that their lived experiences can reveal not only systemic shortcomings but also offer direction for more inclusive educational strategies moving forward.

This research is grounded in both theoretical and practical considerations. The theoretical part introduces key terminology and concepts such as foreign language learning, the cognitive and neurological underpinnings of dyslexia, and the function of supportive measures and educational policy in the Czech context. The empirical part then applies these concepts to real-world data gathered through qualitative semi-structured interviews with two learners, whose voices and narratives serve as the primary data source.

Through a careful thematic analysis of their responses, supported by their SEPs and observable emotional cues, this study aims to identify both common and individual challenges faced during online schooling. In doing so, it contributes to a deeper, more personalized understanding of inclusive education in times of crisis.

Theoretical part

The theoretical part of the paper focuses on the research theoretical background – defining and elaborating on key terminology such as; English language teaching and learning, as well as the difference between language learning and language acquisition. Also, the question of defining dyslexia as a learning difficulty within the context of a neurological disorder is essential for the paper’s purposes, similarly to the discussion about supportive measures and appropriate accommodation for dyslexic children in school. Narrowing down these key aspects and terminology to the Czech Republic is of most importance as well, as the research focuses on the investigation of Czech dyslexic learners within the Czech online schooling system established during the COVID–19 pandemic and subsequent lockdown.

In Chapter 1, the English language is defined as a foreign language in the Czech context, as well as the importance of communicative competence within the educational system is discussed. The chapter narrows down the field of language education for the specific purposes of the paper.

In Chapter 2, learning difficulties and specific learning disabilities are defined and discussed with the intent of applying the system to the context and environment of Czech dyslexic learning.

In Chapter 3, dyslexia is discussed in great detail, beginning with the historical development of dyslexia and its eventual classification and recognition within the field of learning difficulties and specific learning disabilities. It explains the neurological factors of dyslexia as well as defines the disability in the international and Czech context. Lastly, it discusses the supportive measures available to Czech dyslexic children; including the legislation and other official means which ensure accommodations are present.

In Chapter 4, dyslexia is further discussed and narrowed down to the effects it has on learning language, specifically English as a foreign language. The chapter focuses on explaining the different areas of language learning that are affected by the disorder and how it influences individual dyslexic learners.

And lastly, in Chapter 5, online schooling is elaborated on and applied to the context of Czech Republic and the legislation and official guidelines given by MŠMT during the

COVID-19 pandemic and lockdown. It provides areas of potential but also possible challenges of online schooling for dyslexia learning.

1. English Language Teaching and Learning

English language teaching and learning represent a dynamic interplay of linguistic exploration and cultural immersion (Jasim et al. 2021). As a global lingua franca, English holds an essential role in fostering cross-cultural communication, facilitating international business, and enabling access to a wealth of information and opportunities (Wallin 2019). The process of learning and teaching English includes the **acquisition** of grammar rules, vocabulary, phonology, and cultural nuances (Jasim et al. 2021, Zelinková et al. 2020, 41-46) as well as development of the **communicative competence**.

Communicative competence, an idea originally developed by Dell Hymes (Hymes 1968, and 1972), refers to a speaker's ability to use a language effectively and appropriately in various real-life situations. The term was later on challenged by Noam Chomsky, arguing that communication is not only about competence but also about performance. Nowadays, communicate competence is defined by CEFR and is divided into three categories; linguistic competence, sociolinguistic, and pragmatic and multiple subcategories (figure 1).

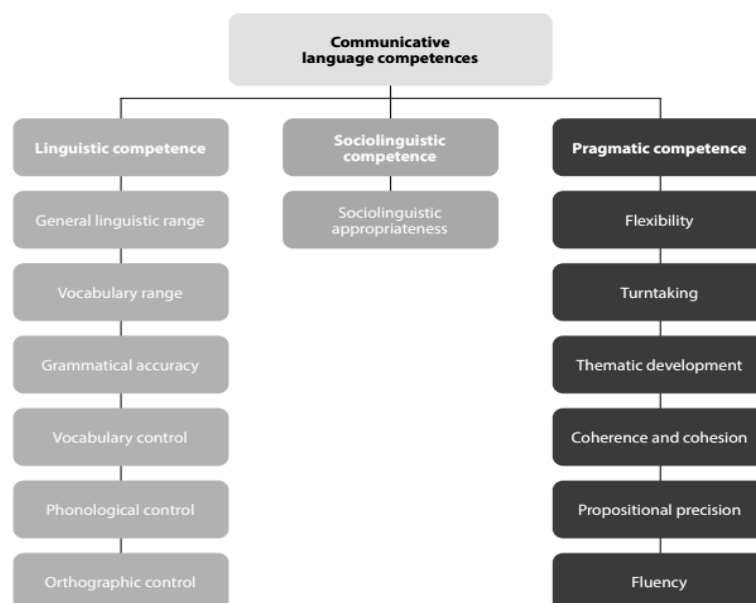


Figure 1 – CEFR Companion volume 2020

CEFR defines the requirements and expectations of each category based on a level system (from A1 to C2). For the purposes of this paper, levels A1 – A2 are the most crucial. Based on the RVP ZV (FEP for elementary education of the Czech Republic) and ŠVP (SEP of the Czech Republic), the expected level of elementary education is A1 for the end of 5th grade and A2 for the end of 9th grade. The subjects of this paper's empirical part are 11 (6th grade) and 14 (8th grade), which makes both levels relevant. The RVP has a clearly defined expectation of each level (more in Chapter 1.1).

English is often thought as a second language (SL) or a foreign language (FL) in many European countries (including the Czech Republic). Teaching and learning English is a fast evolving field of education. English language education continues to evolve, developing and applying new methods and tools to individualize the process of learning as well as aspiring to make LL as effective and authentic as possible. Recently, EFLA and ESLA has been exploring and utilizing the newly accessible technologies, digital resources, and communication platforms (online and offline). This ongoing evolution emphasizes the dynamic nature of English language teaching and learning, as both educators and learners contribute to its rapid and ever changing development.

It is important to elaborate on the differences of the labels “foreign” and “second”, as these are not synonyms in the context of teaching and learning English. Foreign language (FL) refers to a language that is not commonly spoken in the country it is taught in (ex. English in the setting of the Czech Republic), while second language (SL) refers to a language that is one of multiple language commonly spoken in a country it is taught in (ex. English in South Africa) (Håkansson and Norrby 2010, 629). For the purposes of this paper and in the context of the Czech Republic, the first one applies – English is considered a foreign language and therefore is also handled as such within the school environment.

Another important difference in the field of English language education is the difference between the terms “learning” and “acquisition”. *Language acquisition* (LA) is an artificial process of acquiring a foreign language made to mimic the natural process of language acquisition (mother tongue) – the term foreign language acquisition (FLA) emerged in eventually in many studies (ex. *Input Hypothesis* by Stephan Krashen, *Interlanguage Theory* from 1972 by Larry Selinker, and Rod Ellis with his extensive work on the topic of SLA and FLA). The word natural refer to the same

process that children are exposed to during their childhood. Children acquire their mother tongue through the environment they inhabit and interactions with people around them (Hoque 2020, 61), being driven by the growing frustration of a desire to communicate, to share emotions and thoughts, and to be understood by others. LA focuses on interaction, exposure, and authentic production of the language (the process usually involves little to no exposure to the mother tongue). *Language learning* (LL) on the other hand is an artificial process of learning a language that is not aspiring to mimic the natural conditions and environment of acquisition of the mother tongue – it is more focused on teaching grammar rules, practicing established phrases, building sentences, drilling vocabulary, and similar, often taught with the help of the mother tongue.

The key difference between these two approaches is that acquisition is less focused on how correct the production and understanding of the language is, treating the language more as a means of communication (focused heavily on the ability to express oneself and understand social situations and cues), while learning is less focused on the authenticity and internalisation, treating the language as a set of rules to be remembered and reproduced (focused heavily on the ability to understand grammatical phenomena, and understanding the language as a field of study).

1.1 English Language Teaching and Learning; Czech Republic

The Czech Republic education system is dictated by the FEP and SEP (more in Chapter 1.2), which detail the requirements and sometimes also content of English as a foreign language education. English is considered a **foreign language** in the context of Czech education, as it is not commonly spoken outside of school environment and therefore the learners do not come in contact with the language on a daily basis. Unlike secondary language, which is often a language that is spoken outside of school on a regular basis. For some learners, English can be their second language (due to mixed ethnical background, bilingual household, etc.). In the context of the Czech Republic, language slowlearning is significantly more prominent in comparison to language acquisition, and although it slowly changing, most schools still value understanding of grammar rules and rich vocabulary in a highly controlled error-less setting rather than authentic natural exposure. Therefore the Czech education system approached English strictly as a *foreign language learned* exclusively in schools.

FEP is a general document, based on CEFR requirements and directions for education, it is provided by the state and applied broadly across all educational units. For the elementary education it is the FEP EE document, which details the expected outcomes of education in all school subjects, including English taught as a foreign language within the content of Czech Republic. For the **upper-elementary** (1st to 5th grade) the expected outcomes are as follows;

Reception

JJK-AJA-001-ZV5-001

Understands specific information in simple, slowly and clearly spoken texts.

JJK-AJA-001-ZV5-002

Understands simple short written texts.

Production

JJK-AJA-002-ZV5-003

They speak in simple sentences about the topics they are learning.

JJK-AJA-002-ZV5-004

Writes a short text using simple sentences and phrases from the range of topics learned.

Interaction

JJK-AJA-003-ZV5-005

They will engage in simple conversations regarding learned topics.

JJK-AJA-003-ZV5-006

Write a short message.

Figure 2 – English Language “1. stupeň, 5. ročník” (prohlednout.rvp.cz, 2025)

While for the **lower-secondary** (6th to 9th grade), it is as follows;

Reception

JJK-AJA-001-ZV9-001

Can understand the main ideas of spoken language on familiar topics when guided by standard language.

JJK-AJA-001-ZV9-002

Can understand the main ideas of media content on familiar topics when the speaker speaks relatively slowly and clearly.

JJK-AJA-001-ZV9-003

Understands simpler audiovisual stories.

JJK-AJA-001-ZV9-004

Understands instructions and directions from everyday life.

JJK-AJA-001-ZV9-005

Understands the content of texts from everyday life and finds the necessary information in them.

JJK-AJA-001-ZV9-006

Can understand the main ideas and some specific information in simple professional texts in his/her field of interest.

JJK-AJA-001-ZV9-007

Understands the content of simple artistic texts.

Figure 3 – English Language “2. stupeň, 9. ročník” - Reception (prohlednout.rvp.cz, 2025)

Production

JJK-AJA-002-ZV9-008

Describes things, people, places, situations and events.

JJK-AJA-002-ZV9-009

They will express and justify their opinions and actions.

JJK-AJA-002-ZV9-010

He will describe his feelings, ideas, wishes and ambitions.

JJK-AJA-002-ZV9-011

Tells or describes one's own or someone else's experience.

JJK-AJA-002-ZV9-012

He presents a topic from his area of interest.

JJK-AJA-002-ZV9-013

Writes a short, coherent text on the topics being learned.

Figure 4 – English Language “2. stupeň, 9. ročník” - Production (prohlednout.rvp.cz, 2025)

Interaction

JJK-AJA-003-ZV9-014

He participates in a direct conversation about topics that interest him.

JJK-AJA-003-ZV9-015

Communicates about his needs and finds the necessary information.

JJK-AJA-003-ZV9-016

Writes a simple message or email asking for information or providing it himself.

JJK-AJA-003-ZV9-017

Expresses his/her feelings and responds appropriately to the expressed feelings of others.

JJK-AJA-003-ZV9-018

He/She expresses his/her personal opinions on topics that interest him/her, responds to the opinions of others and discusses them with them.

Figure 5 – English Language “2. stupeň, 9. ročník” - Interaction (prohlednout.rvp.cz, 2025)

Mediation

JJK-AJA-004-ZV9-019

Takes written notes of key information during a lecture on a familiar topic.

JJK-AJA-004-ZV9-020

It conveys partial information presented in spoken and written text and in visual materials.

JJK-AJA-004-ZV9-021

Summarizes the content of spoken and written text.

JJK-AJA-004-ZV9-022

Facilitates simple interaction and group activities.

Figure 6 – English Language “2. stupeň, 9. ročník” - Mediation (prohlednout.rvp.cz, 2025)

These outcomes have recently been updated with the current development in the understanding of language skills and subskills. Recent definition and categorization of language skills (**writing, listening, speaking, and reading**) have been replaced by categories which are less oriented on the type of activities and more of the type of competence and performance skills necessary. **Interaction, production, reception and mediation** are the current categories, which dictate the expected outcomes of elementary education in the Czech Republic (and abroad). However, for the purposes of this paper, the old categorization is used, due to the change being rather recent, the individual SEP documents the paper relies on for comparison of expected outcomes of education of the the research subjects not yet being updated accordingly.

1.2. SEP – School Education Programme

The SEP document is a narrowed and more detailed version of FEP, which each school formulates based on its individual needs and requirements. It must be in alignment with FEP general expected outcomes and directions, however, it often elaborated more in depth on the content (topics, vocabulary, projects, etc.), medium of learning/acquisition process (classroom, online sources, online school app, etc.), and sometimes also visual and auditory aids (ex. textbooks, CDs, workbooks, dictionaries, etc.).

2. Learning Difficulties

Learning difficulties (LDs) is an umbrella term that stands for a common concept of conditions affecting the process of learning (LDA 2023, Hardie and Tilly 4, 2012). They occur “due to genetic, environmental, and/or neurobiological factors” (LDA 2023) and they “alter brain functioning in a manner which affects one or more cognitive processes related to learning” (LDA 2023). They are not to be confused with learning problems (LP), which are conditions that are a “result of visual, hearing, or motor handicaps; of intellectual disability; of emotional disturbance; or of environmental, cultural or economic disadvantages” (LDA 2023).

LDs refer to challenges or obstacles that individuals might face in the process of acquiring and applying knowledge and skills. These difficulties can range from mild to moderate and may be temporary or persistent (LDA 2023). LDs can be caused by various factors, including environmental factors, teaching methods, cognitive differences, or personal circumstances. This, however, does not apply to all LDs, as there are LDs that can only be caused by neurological dysfunctions (such as dyslexia) or genetic inheritance (such as ADHD). Hardie and Tilly (3-5, 2012) name examples of LDs including struggle with certain subjects, needing more time to grasp certain concepts, or facing difficulties due to distractions or inconsistent learning environments. They also mention that there are three levels of severity of LDs - profound, severe, moderate, and mild (Hardie and Tilly 7, 2012), in which dyslexia and disorders associated usually fall under the moderate category. Learning difficulties can often be addressed and managed with appropriate instructional strategies, support, and accommodations (Hardie and Tilly 6, 2012). They do not necessarily indicate a permanent condition but may require targeted interventions to help individuals succeed in their learning pursuits.

Learning difficulties are also often referred to as *hidden disabilities* (LDA 2021) similarly to mental disorders (depressive disorders, anxiety disorders, et cetera). The term *hidden* is used to describe the contrast between the person’s physical appearance, which is not affected, and the person’s mental performance, which is. Hidden disabilities can make one’s life almost as difficult as physical disabilities. Plus, the absence of physical symptoms can cause further issues for the affected individuals. One

of such issues is e.g. disbelief and doubt from not only the teachers' and parents' side, but also - eventually - the person themselves.

Learners with LDs are more likely to encounter situations in which they are called or referred to in an inappropriate manner in relation to their performance or academical achievements. Unfortunately, LDs being unobservable at first and requiring longer and more attentive observation to spot affected learners tend to be perceived as educationally slower, even lazy or inept, especially during the time before they are able to get their diagnoses.

Although it could be argued whether or not is a diagnosis a sufficient force to change such prejudice towards learners with LDs. Studies (Byrd 2020, Graham 2017, et cetera) have shown that a significant number of pedagogical professionals do not possess necessary knowledge to understand the special needs a learner with ID requires. And if they do, they are often incapable of implementing necessary supportive measures due to limited knowledge in the area.

2.1 Specific Learning Disabilities

Specific Learning Disabilities (SLD) is a broad term used to describe a group of disorders that affect an individual's ability to learn and use academic skills (IDEA 2023). These disorders are specific to certain areas, such as reading, writing, math, or language, and they are not caused by other factors like intellectual disabilities, lack of instruction, or socio-economic status. Common types of SLD include dyslexia, dysgraphia, and dyscalculia.

In essence, SLD refers to difficulties in acquiring and using skills related to listening, speaking, reading, writing, reasoning, or mathematical abilities. These challenges can impact a person's academic performance and often require targeted interventions and support to help individuals overcome these obstacles and succeed in their educational endeavors.

LDs further divide into subcategories, one of them are specific learning disabilities (SLDs) which cover LDs such as dyslexia and dysgraphia (LDA 2021 and Thompson 1997). SLD is defined as “a disorder that interferes with a student’s ability to listen, think, speak, write, spell, or do mathematical calculations” (IDEA, 2004).

The subcategory of LDs has two reasons, the first one is that SLD focuses specifically on learners with reading, writing, speaking, or listening disabilities (excluding physical disabilities such as deafness or anacusis) while LD covers also attention issues and attention related disorders (such as ADHD). The second reason is that “the term ‘*specific learning disability*’ is commonly used in federal and state law, the Diagnostic and Statistical Manual of Mental Disorders (DSM), and by many private and public schools” as a way to recognize disorders related to a) learning specifically and disorders related to b) other (even if overlapping with the area learning) areas of learner’s life.

One could propose that the current system exhibits certain imperfections, particularly evident in the manner by which Specific Learning Disabilities (SLDs) extend their impact into various facets of a learner's life. For instance, an individual with dyslexia may consistently encounter challenges in spelling, irrespective of whether these challenges pertain to the scholastic milieu or beyond. Nonetheless, this system possesses merit in its delineation of Learning Disabilities (LDs) into distinct categories: a) those predominantly influencing cognitive learning processes, and b) those exerting an impact on learning processes albeit not predominantly so. Furthermore, from a legal standpoint, the differentiation of these categories becomes imperative, given that each category qualifies for distinct accommodations denoted as supportive measures (SMs).

LDA (2021) notes the worldwide recognized SLDs as follows;

- Non-verbal Learning Disabilities
- Oral/Written Language Disorder and Specific Reading Comprehension Deficit
- Dyscalculia
- Dysgraphia
- Dyslexia

3. Dyslexia

Dyslexia is a learning disorder that affects a person's ability to write, listen, read, and spell. It's characterized by difficulties in processing language-related tasks, often due to differences in how the brain processes written words and symbols (LDA 2023 and Lyon et al. 2003, 2). People with dyslexia may have trouble recognizing and decoding words, but their intelligence and cognitive abilities are not affected. It's a common condition that can vary in severity and impact individuals differently (LDA 2023, Hardie and Tilly 7, 2012).

The history of dyslexia as a recognized learning disability is notably long compared to other LDs. Yet, despite its historical presence, dyslexia is still a relatively recent concept that remains only partially understood, especially in terms of its neurological causes (Norton et al. 2015, 73). Still, it is among the most common and well-known LDs (Norton et al. 2015, 73–74; Vandermosten et al. 2016, 155).

References to dyslexia-like symptoms appear in medical literature as early as the late 19th century, including works by Kussmaul (1877), Berlin (1887), Wagner (1973), and Hansard (1987). Despite growing recognition in educational and clinical fields, dyslexia remains a complex condition affecting cognitive, neurological, and educational development. Scholars agree that continued research is essential for full understanding and effective support strategies (Norton et al. 2015; Vandermosten et al. 2016).

In 1877, German neurologist Adolf Kussmaul coined the term "word-blindness" to describe patients who could not read despite normal vision, intellect, and speech (Kussmaul 1887, 770–778). This marked a foundational moment in recognizing reading difficulties as distinct cognitive phenomena, influencing future diagnostics and interventions.

A decade later, Rudolf Berlin introduced the term "dyslexia," defining it as severe difficulty in interpreting written symbols. This shift introduced a more specific framework for understanding the condition. Another major milestone came in 1963, when Samuel A. Kirk first used the term "learning disability" at a Chicago conference. His broader categorization acknowledged a spectrum of cognitive challenges, moving beyond dyslexia alone.

In 1969, the Children with Specific Learning Disabilities Act was enacted, later incorporated into the 1970 Education of the Handicapped Act. This marked the first legal recognition of LDs, affirming affected students' rights to educational support. That same year, Critchley's *The Dyslectic Child* emphasized the urgency of research and intervention.

Building on this, the 1975 Education for All Handicapped Children Act mandated inclusive education for all students, fundamentally reshaping how disabilities were approached in schools. By 1990, the term "handicap" was replaced with "disability," autism was formally recognized under LDs, and ADHD followed in 1997.

Today, dyslexia (along with dysgraphia and dyscalculia) is officially recognized as a specific learning disorder (SLD) under the IDEA's 13 disability categories.

Dyslexia is the most common learning disabilities to occur, especially in children (Hussherr 2018) and they affect the learner's cognitive processes which commonly interferes with learner's ability to perform skills such as reading, writing, speaking, listening, and/or math to the same degree as learners that are not affected (LDA 2021, Zelinková et al. 2020, 8). Thus, dyslexia is recognized as a *disability*. This is essential to point out as learning difficulties were in the past (and often still are) understated and trivialized.

Disability refers to the significant and often severe impact that a condition has on a person's ability to perform everyday activities, engage in work, participate in social interactions, and maintain a good quality of life (CDC 2023). A disabling disorder is one that impairs physical, mental, cognitive, sensory, or emotional functions to the extent that it substantially limits a person's ability to function independently and effectively (NCBI 2023).

Based on this it is fair to argue that classifying dyslexia as a learning difficulty might be insufficient as it proposes an idea that dyslexia is only disabling learners in school environments. However, learning is not bound to schools and educational institutions only, it is an everyday activity and continues throughout a person's life, affecting them quite commonly for the rest of their life.

3.1 Neurological Factors of Dyslexia

Dyslexia is a complex neurodevelopmental disorder that primarily affects reading, spelling, and writing abilities (Zelinková et al. 16, 2020). While the exact underlying neurological factors of dyslexia are not fully understood, research suggests that there are several potential contributing factors (Verhoeven et al. 227-438, 2019 and Zelinková et al. 10-13, 2020):

- **Brain Structure and Function Differences:** Neurological studies have reported that individuals with dyslexia often show differences in brain structure and function compared to non-dyslexic readers. Among the most commonly reported findings are atypical neuromuscular activation patterns and responses in regions of the brain involving reading. These differences could be the cause

(or significant aspect in) the processing of phonological information (the sounds of language) and the integration of visual and auditory information (symbols, sounds, tones, etc.).

- **Phonological Processing Deficits:** As mentioned above, the processing of phonological information refers to the ability to recognize and decode sounds (phonemes). Many individuals with dyslexia may struggle with encoding and decoding of phonemes, which can hinder their ability to understand, pronounce words (associate letters with their corresponding sounds) and spell accurately - this becomes especially challenging in case of languages that have multiple sounds assigned to one letter/symbol (ex. English).
- **Rapid Automatized Naming (RAN) Deficits:** RAN refers to the ability to quickly name a series of familiar items, such as letters or colors (Powell et al. 2007, 2-8). Individuals with dyslexia often have difficulties with RAN tasks, which may be related to problems with processing visual information efficiently and linking it to language processing centers and memory centers in the brain.
- **Genetic and Hereditary Factors:** Dyslexia has been recognized as a possibly hereditary condition, suggesting a genetic component. Multiple genes have been implicated in dyslexia, but no single gene has been identified as a sole cause. Genetic factors likely interact with environmental influences to increase (or decrease) the risk of dyslexia.
- **Brain Connectivity and White Matter Abnormalities:** Diffusion tensor imaging (DTI) studies have revealed differences in white matter pathways (bundles of nerve fibers) that connect different brain regions in individuals with dyslexia (Norton et al. 2015, 73-78). These differences may have an impact on the communication between brain regions involved in language processing and reading.
- **Visual Processing Differences:** Some research suggests that dyslexia may involve visual processing deficits, such as difficulties differentiating between similar visual symbols (letters or words). These deficits could affect the perception and recognition (decoding) of written language. Dyslexic learners are often struggling with the internalization of certain symbols from a very early age.

It's important to note that dyslexia is not caused by a lack of intelligence or effort; rather, it arises from complex interactions between genetic, neurological, and even environmental factors. Genetics and neurology play a big role in the severity of dyslexia, while environment factors usually do not affect the disorder as prominently, but can be the cause of future issues (ex. poor environment and lack of help with coping mechanisms can have negative effects on the learner's ability to handle their dyslexia in the future). Early intervention, specialized teaching methods, and support can help individuals with dyslexia overcome challenges and develop effective coping and accommodating mechanism to improve their daily life. Research in this field is ongoing, and further insights into the neurological basis of dyslexia may continue to emerge (Verhoeven et al. 227-228, 2019).

3.2 International Definition

The current international definition of dyslexia, as defined by Lyon et al. (2003, 2), is that “dyslexia is a specific learning disability that is neurobiological in origin [...] characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities”. Lyon and his colleagues (2003, 2) also say that primary symptoms of dyslexia as understood by the scientific community are “a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction, [...] problems in reading comprehension”, and “reduced reading experience that can impede growth of vocabulary and background knowledge” (Lyon et al. 2003, 2). This definition is considered the most up-to-date and generally accepted description of what dyslexia is and how the scientific community understands it (IDA, 2023).

As Lyon et al. (2003, 2) suggest, “result from a deficit in the phonological component of language” and therefore dyslexia can also be defined as a deficit in the base components of communication. This supports the theory that dyslexia does not exactly affect “reading and writing” but more likely the subskills that reading and writing are composed of; however, that still inevitably means that the abilities to read and write are impaired. Of course, it is important to keep in mind that our “understanding of dyslexia is a work in progress and will continue to be just that” (Lyon et al. 2003, 10) due to the fact mentioned above. Dyslexia is a very complex disorder, and we as a society are yet to understand all about it.

Thus, with this definition to be the closest we can get, it is clear that dyslexia is proven and understood as a disability that affects one's ability to perform certain tasks or take part in certain activities in the same manner as a non-dyslexic person. As Hettiarachchi (2021, 531) explains, this is especially true in school, where often the lack of variety and individualistic approach is results in a homogenous class and minimal variety in forms of organization used throughout the lesson. Homogeneity can have a devastating effect on learners with dyslexia, because it can be perceived (through the learner's eyes) as a demonstration of why he or she is not good enough and cannot keep up with the rest of the class (Hettiarachchi 2021, 533). It might lead to low self-confidence, poor self-image, and even social separation from the rest of the class. However, it does not apply to all dyslexic learners. As with any LD, every learner experiences living and coping with their disorder differently and acquires different coping mechanisms and learning strategies, as well as goes through different stages of self-acceptance.

And, as explained by Lyon and his colleagues (2003, 2), dyslexia affects multiple areas of learning. However, learning is a life-long process, and it is not limited to the school environment only, therefore, it is not out of the question to say that dyslexia affects one's daily life just as much. Hettiarachchi (2021, 533) advocates for the idea that learners (and people in general) suffering with dyslexia experience difficulties and struggles connected to their disorder every day in basic daily chores and activities. It is not a disorder that only exists inside the wall of one's school institute, it does not fade away once the bell rings and it's time to go home.

Plus, it is also estimated that dyslexia occurs in 5% to 17% school-aged children (Shaywitz 1998, 338), which, in comparison to the percentage of children with other LDs, makes dyslexia the most common learning disability. This leads Hittiarachchi (2021, 533) to a conclusion that dyslexia affects one's life to a degree that highly overgrows the school environment and with high numbers of children suffering with it, the disorder deserves high level attention from the scientific circles.

To conclude, dyslexia is a learning disability that the educational system and government recognize and that requires and qualifies for compensation in the academic fields and within the school environment. In academic texts and law documents, these compensations are referred to as supportive measures (SM).

3.3 Czech Definition

Lyon et al. (2003, 2) define dyslexia as “neurobiological in origin [and] is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities”. Therefore, it is important to note that dyslexia affects not only reading but also writing and spelling, speaking, and listening. A person suffering from dyslexia is affected in these areas of life regardless of their education or intelligence (Matějček 1995, 19).

Zelinková et al. (2020, 7) refer to the same definition as stated above, the one by Lyon et al from 2003. On the 1st of January of 2020 according to the ICD-10 – the International Statistical Classification of Diseases and Related Health Problems (in Czech MKN-10 – Mezinárodní klasifikace nemocí) dyslexia was finally included and officially classified, which means that the context of the Czech Republic, dyslexia is identified as a specific learning disability (Zelinková et al. 2020, 8), a term that stand for a group of learning disabilities, among which is also dysgraphia and dyscalculia.

The 2020 inclusion of dyslexia in MKN-10 is rather late in comparison to the international *Individuals with Disabilities Education Act* (IDEA), which has classified dyslexia as an SLD back in 2004. IDEA also defines dyslexia as a disorder. However, in the Czech context, terms such as disorder or handicaps are not operated with in relation to inclusive education. Zalinková et al. (2020, 8) explain that it would be more suitable to operate with terms such as difficulties or differences rather than disorders. She and her colleagues are concerned about the unclear line between mild or minor difficulties and severe difficulties that require accommodations – supportive measures.

3.4 Inclusive Education and Supportive Measures

Inclusive education refers to an educational approach that seeks to provide equitable and supportive learning environments for all students, regardless of their diverse abilities, backgrounds, or learning needs (Ainscow and Booth 2003, 2-4). The goal of inclusive education is to ensure that every student, including those with disabilities or special educational needs, can fully participate in all aspects of the educational experience (Ainscow and Booth 2003, 2-4). This approach goes beyond mere integration, aiming to create an environment where students of varying abilities learn side by side, fostering mutual understanding, respect, and cooperation (IDA 2023).

In the Czech Republic, this is covered by the order n. 248/2019, which states what supportive measures different learning difficulties qualify for.

In inclusive education, teaching practices, curriculum design, and classroom environments are adapted to accommodate the diverse learning styles and needs of all students (IDEA 2022, IDA 2023). This might involve providing additional support, modifying instructional materials, offering alternative assessment methods, and implementing assistive technologies. Inclusive education also emphasizes the importance of social interaction, promoting the idea that diversity enriches the educational experience for everyone and prepares students for active participation in a diverse society (Ainscow and Booth 2003, 2-4).

The ultimate objective of inclusive education is to promote a sense of belonging, encourage positive relationships among students, and empower every learner to reach their full potential academically, socially, and emotionally (Ainscow and Booth 2003, 16, IDEA 2022). It embodies the principle that education should be accessible to all and that each student's unique strengths and challenges contribute to the overall strength of the educational community.

***figure 1* Inclusion in education**

Inclusion in education involves:

- Valuing all students and staff equally.
- Increasing the participation of students in, and reducing their exclusion from, the cultures, curricula and communities of local schools.
- Restructuring the cultures, policies and practices in schools so that they respond to the diversity of students in the locality.
- Reducing barriers to learning and participation for all students, not only those with impairments or those who are categorised as 'having special educational needs'.
- Learning from attempts to overcome barriers to the access and participation of particular students to make changes for the benefit of students more widely.
- Viewing the difference between students as resources to support learning, rather than problems to be overcome.
- Acknowledging the right of students to an education in their locality.
- Improving schools for staff as well as for students.
- Emphasising the role of schools in building community and developing values, as well as in increasing achievement.
- Fostering mutually sustaining relationships between schools and communities.
- Recognising that inclusion in education is one aspect of inclusion in society.

Figure 7 – Inclusion in Education (Ainscow and Booth 2003, 3)

As Figure 7 suggests, there are multiple factors to inclusion in education - these are just the main points that Ainscow and Booth (2003) mention as they elaborate on another important factor, which is participation. They consider participation to be one of the core goals as they define it as an alongside activity, which means that all learners are learning alongside each other, strengthening the idea of community belonging.

As already mentioned, Czech inclusion started in 2009. However, due to issues in applying the legislation in practice, the inclusion was officially implemented seven years later on the 1st of September 2016 (NPI 2021).

"Školská poradenská zařízení" (ŠPZ) is a Czech term that translates to "School Counseling Centers". These centers are educational institutions in the Czech Republic that provide various forms of educational, psychological, and special needs support to students, parents, and teachers (NUV 2023). School Counseling Centers offer services aimed at addressing students' academic, emotional, social, and behavioral needs, with the goal of ensuring that all students have equal access to quality education and the support they require to succeed (NUV 2023).

These centers often collaborate closely with schools to identify and address learning difficulties, behavioral challenges, special educational needs, and psychological concerns that students may face. They provide assessments, consultations, counseling, and guidance to help students overcome academic or personal obstacles (NUV 2023). Additionally, they assist teachers in implementing effective teaching strategies to accommodate diverse learning styles and needs. The ultimate aim of Školská poradenská zařízení is to provide inclusive education and help to create an environment where all learners, regardless of their individual needs or disabilities, can achieve academic success.

3.4.1 Supportive Measures for Dyslexic Children

Supportive measures for dyslexic students are strategies and accommodations designed to help them succeed in their educational settings. Fred Miller and Judith Katz (2002) and Bdadyslexia (2023) offer examples:

- **Multisensory Teaching:** Using visual, auditory, and kinesthetic methods to reinforce learning, such as combining seeing, hearing, and touching when teaching a new concept.

- **Assistive Technology:** Providing tools like text-to-speech software, speech-to-text applications, and audiobooks to aid reading and writing.
- **Extended Time:** Allowing extra time for reading, writing, and test-taking to accommodate slower processing of written information.
- **Preferential Seating:** Placing the student where they can best see and hear the teacher's instructions and visual aids.
- **Chunking and Breaking Down Tasks:** Dividing assignments and instructions into smaller, manageable parts to prevent overwhelming feelings.
- **Individualized Instruction:** Tailoring teaching methods to match the student's learning style and pace.
- **Oral Assessments:** Allowing students to verbally explain their understanding of a topic rather than relying solely on written assessments.
- **Use of Color and Visual Aids:** Incorporating color-coding and visual aids to assist with organization and comprehension.
- **Structured Language Programs:** Implementing specialized programs that focus on phonics, decoding, and spelling to address dyslexic challenges.
- **Encouraging Self-Advocacy:** Teaching students to communicate their needs and advocate for themselves when seeking necessary support.

Supportive measures can vary depending on the individual's needs and the educational context. It might be impossible for educators to tell what exact supportive measures a dyslexic learner classifies as, because this part is not stated or regulated by the law, a dyslexic learner can classify for any of the existing suggestions of supportive measures.

Therefore, it is important to collaborate with educators, specialists, and parents to create an effective support plan for each dyslexic student. Most dyslexic learners are evaluated by a school psychologist in collaboration with ŠPZ (mentioned in Chapter 3.4) and given a document that details their specific needs and supportive measures granted to them. Based on the levels of severity, the school psychologist, the special education teacher, and the ŠPZ, decide on what supportive measures each of the diagnosed learners qualifies for. This document is referred to as the *Special Education Plan* (SEdP) throughout the paper and its research. These document detailing supportive measures can be granted to undiagnosed learners as well, usually primarily regulated by the special education teacher and the education institution the learner attends.

List of supportive measures for dyslexic learners commonly used within the context of Czech education;

- extended time limit for tasks, tests, oral examinations, and other classroom work
- modified tests, tasks, and oral examination
- extended waiting period (for response, written or spoken)

However, most of these supportive measures are being applied within the context of individual work, especially when it comes to fill-in tasks, games, or such. It is also a common practice that tasks from exercise books are not altered in any way. Therefore, it is possible to argue that the educational system is not fully capable of perfect compensation for the dyslexic learners. But, it is also unfair to classify existing supportive measures and their implementation as unsuited.

4. Dyslexia and Foreign Language Learning

The impacts of dyslexia on learners of foreign languages are numerous (IDA 2023). Some of them are directly linked to the disorder itself, while others are a result of broader and general learning issues dyslexic children deal with on a daily basis, both at school and outside of it. Dyslexia handicaps the learner's ability to learn and/or acquire a language, regardless of the language being the learner's mother tongue, second language, or foreign language (Nijakowska 2012, 351; Sparks et al. 1995 and 2006). This chapter focuses on the impacts dyslexia has (or may have) on learners within the process of FLA and narrows these impacts to EFL learning, providing examples relevant when speaking about Czech-native learners specifically. It draws parallels between what is typically considered common for Czech-native learners when acquiring and/or learning English.

The process of learning a language being affected by dyslexia is expected and logical, however, it is an important topic to discuss as dyslexia broadly affects not only parts of language learning but also broader skills, such as communication itself.

4.1 Impact of Dyslexia on FL learning

The impact of dyslexia on EFL learners is very broad and affects all parts of language learning to some degree (such as; cognitive processes, phonological awareness, short-term and long-term memory, etc.). It is widely believed that the most affected

areas of LL when it comes to dyslexia are reading (Graham 2018; Hayes 1996) and writing (Hebert et al. 2018, 843-863); sometimes, these two areas are discussed to a degree that other areas are easily overshadowed by (bdadyslexia 2025). These stereotypes about dyslexia are harmful and often cause a lot of damage to the process of language learning and/or acquisition in learners with dyslexia (bdadyslexia 2025).

As mentioned in Chapter 1.1, there is a new type of classification of language skills (production, interaction, mediation, and reception) being incorporated, replacing the old system of four language skills (reading, writing, listening and speaking), however, for the purposes of this paper, the only system will be the main template of discussion when it comes to areas of language learning dyslexia affects.

4.1.1 Phonetic Skills

Phonetics generally refers to the science and classification of speech sounds. However, for the purposes of this paper and in the context of EFL learning and acquisition, *phonetic skills and phonological awareness* represent the ability to recognize and decode sounds (understand speech), replicate and produce sounds, and use sounds to code messages (form speech) as used in Nijakowska's paper (2012) and CEFR (2001).

Learners with dyslexia often struggle with phonological awareness, which can significantly affect both pronunciation, the ability to remember the differences between written and spoken form of words, as well as issues with reading out loud (Boets et al. 2010, 8-10; Nijakowska 2012, 532; Sparks and Miller 2000). Dyslexia affects the ability to decode, but also code, sounds, as well as, phonetic memory and efficiency (Boets et al. 2010, 8-10). Dyslexia is also associated with issues related to the learner's mother tongue, however, Nijakowska (2012, 531-533) explains that "awareness and phonological processing abilities are believed to be transferred between languages".

Usually affecting the learner's mother tongue first. But, eventually, also all foreign or second languages. This also implies the notion that strong communicative competence (CC) in a mother tongue projects into the possible ability to acquire a strong language competence in a foreign language. And vice versa, poor native language competence can affect the ability to acquire any other language. Nijakowska (2012, 531) explains that a dyslexic learner's CC in his/her mother tongue is indicative of the possibility of mastering other languages.

While words are part of phonological awareness, speech formation and decoding of speech clusters (words, sentences, etc.) are more commonly connected with speaking skills rather than simply phonological awareness, which is more concerned with individual sounds rather than their meaning. This chapter focuses on the effects of dyslexia on phonological awareness and related discussion (sounds and their production as well as decoding of sounds), while effects of dyslexia on speaking skill (learner's ability to code messages, form speech/utterance, decode messages, and react appropriately) are discussed in chapter 4.1.5.

This being said, dyslexic learners often struggle with the ability:

- to pronounce words that are significantly different from their written forms (ex. queue, colonel) – a phenomenon referred to as *phoneme-grapheme correspondence*, where the sounds are not represented (ex. silent letters commonly cause a lot of issue to dyslexic learners). This is an enhanced problem for dyslexic Czech-native learners specifically due to the nature of the English language and its difference in comparison to Czech language and the difference between phoneme-grapheme correspondence consistency (ex. okolo = /ɔkɔlɔ/ x deceased = /di'si:st/, where all three letters O in the word “okolo” are pronounced the same, but in the word “deceased” all three letters E are pronounced differently)
- to pronounce words with complicated spellings (ex. acquaintances, necessary) or words that look very similar to a different word (ex. appealing x appalling).
- to pronounce words with similar sounds represented by different symbols (the /s/ sounds is often associated with letter S, letter C, and even letter T).
- to pronounce sounds that are not represented in their mother tongue (ex. /θ/ and /ð/ are commonly very difficult for Czech-native speakers as Czech language lacks these sounds entirely) .

These words cause a lot of confusion and are often a source of significant frustration.

Phonological awareness is also closely connected to reading skills, especially during reading out loud. Dyslexic learners have a tendency to try to “guess” what the word is based on the first syllable or two. This phenomenon is also referred to as “**word**

anticipation”, and it is related to top-down processing and miscuing as described by Pugh (Pugh et al. 2005, 24-30). And while not exclusively occurring in dyslexic learners, Pugh and his colleagues (2005, 24-30) linked word anticipation to dyslexia in their research on LDs as one of the very common symptoms of dyslexia in learners.

4.1.2 Reading Skills

Reading skills are very often associated with dyslexia as one of the two most prominent problematic areas of LL (bdadyslexia 2025). The process of reading is a very complex one with many aspects that play a role in the correct execution of said skill. From decoding written symbols (word recognition) and understanding and deriving the meaning of words, sentences, and whole texts (vocabulary knowledge, reading comprehension), to fluency.

There are different types of categorization of reading skills; Nuttall (1996, 44-124) describes three major categories – efficient reading skills, word attack skills, and text attack skills, eventually elaborating on these skills and creating a list of seventeen different categories. Eventually, a number of scientists and researchers narrowed it down to four (as discussed in Maija 2018, 1-2); **skimming, scanning, intensive reading, and extensive reading**.

Intensive reading, defined by Brown (1986, 1994) as a “zoom lens” strategy that is used to help teach and practice reading strategies and skills, it is a detail-oriented reading strategy. This strategy can help improve the overall reading strategies and skills in terms of understanding, reading comprehension, and fluency (Brown 1989).

Rababah (2020, 779-795) in his research on the effectiveness of intensive reading on dyslexic learners draws the conclusion that, regardless of certain struggles learners might face due to their LD, the strategy proves a highly effective intervention (2020, 791) for enhancing underdeveloped reading abilities in dyslexic learners. There is no further research into how dyslexia affects the ability to perform intensive reading, only its benefits on improving reading abilities in dyslexic learners (2020, 791).

Extensive reading is identified by Long and Richards (1971, 2016) as a strategy of reading a large amount of materials, focusing on the meaning and overall concept of the text rather than detail-oriented. Extensive reading strategy can be very demanding for dyslexic learners, especially due to common symptoms of dyslexia that make extensive

reading significantly more difficult than other forms of reading (Sarkar 2024, 1-3). The biggest challenge of extensive reading that learners with dyslexia face is the time restriction of most of the reading assignments (Sarkar 2024, 2), and despite the aim of the extensive reading technique lying in kindling motivation and interest in learners (Long and Richards 1971, 216) the opposite is often true.

Learners with dyslexia find the demand of extensive reading too challenging due to the common symptom of dyslexia known as “visual tracking difficulties” or “saccades” – which, for the purposes of this paper will be referred to as “re-reading” symptom of dyslexia, as both of these phenomenon come down to a rapid and unorganized eye movement during reading which causes learners to skip over parts of the text or miss some parts entirely (Prado 2007, 2523).

Scanning, as defined by Abidin, is “glancing rapidly through the text either to search for a specific piece of information” (2020, 28). Scanning is one of the reading types (Aritonang et al. 2018, 103), often considered a *reading technique* (Harmer 2007, 100-101), which is used to “improve students reading comprehension” (Abidin 2020, 28). This technique is taught to help students (including dyslexic students) to look for specific information or keywords in order to navigate long texts more easily. This is especially a useful technique for dyslexic learners as most dyslexic learners struggle with any text considered long (the definition of what a “long text” is differs based on age and the degree of issues caused by the LD for each learner). Long text may evoke feelings of frustration, tiredness, demotivation, discouragement, and sometimes even hopelessness (IDA 2025). Having this skill “skill means that they do not have to read every word and line; on the contrary, such an approach would stop them scanning successfully” (Aritonang et al. 2018, 103), which can have very positive effects on the motivation and success of a dyslexic learner during reading activities and exercises (eventually becoming a life skill and helping the person in their day to day life as well).

Scanning is, however, not an easy skill to acquire and many dyslexic learners struggle with it due to other issues connected to their LD; for example, the *rapid eye movement*, which is often associated with reading out loud plays a significant role in scanning skill performance as well. It is more challenging for dyslexic learners to look for specific information if their eyes and attention are unfocused and uncoordinated (Franzen et al. 2021, 5-8).

Skimming, as defined by Aritonang and colleagues (basing their definition on Maxwell 1969), is a technique which enables “getting the main idea or gist of a selection quickly in a written text where the student develop powers of inference through systematic practice which encourages them to anticipate of a text” (2018, 103). It is a technique used in situations where the overall concept of a text is more important than details (could be identified as the opposite of scanning, where the details or specific information is the focus). Skimming is very useful for dyslexic learners, similarly to scanning, as it can improve the overall motivation and success of performing reading activities and exercises – unfortunately, is also a skill that is much harder for dyslexic learners to obtain due to issues with attention and rapid eye movement (Franzen et al. 2021, 5-8) as mentioned above.

Dyslexic learners tend to skip over important parts of the text if they are captivated by a different part of it (also occurs in non-dyslexic learners, especially during childhood years), which can annul the benefits of using the skimming technique in the first place.

4.1.3 Writing Skills and Spelling

To define *writing skills*, it is best to look into a definition from Quvanch and Si Na (2020, 42) who explain that writing skills are a “mental activity involving formulating ideas, considering how to express them, and arranging them in a way to be clear [...], as a means of communication in which one can convey their message to readers”. They highlight the importance of writing skills as a tool to producing “coherent, concise and readable text” based on Richards and Renandya’s (2005) definition of the importance and complexity of writing skill.

Although incomplete, the definition summarizes the core aspect of writing skills – means of communication, which requires coherence, cohesion, and readability to successfully convey a message or convey a meaning. The term “readability” here refers to orthography – the system of symbols (letters) and the rules for combining them, such as spelling, punctuation, and grammar. This is important to mention as it links writing skills to both reading skills and spelling (chapter 4.1.2), which are two other major language skills categories affected by dyslexia. Indeed, writing skills are closely intertwined with reading skills, as they share related underlying processes mentioned above (Graham and Hebert, 2010).

An essential part of writing is also the language subskill of *spelling*. Spelling is defined as “the forming of words from letters according to accepted usage” (Cambridge Dictionary 2025). Spelling is often referred to as *orthography*, which is the science of language studies as well as the art of writing words properly (based on established rules and standards). Spelling can be summarized as a skill that heavily relies on visual memory and muscle memory. It is also a skill that is very commonly associated with dyslexic learners, acknowledged as one of the most problematic areas for learners with dyslexia across all age groups (Roitsch and Watson 2019, 81-83).

For dyslexic learners, the most commonly occurring issues related to their LD during writing are **spelling errors (misspelling)** and **word omission** (Lefly and Pennington 1991, 141-142).

Spelling errors are considered one of the most prominent symptoms of dyslexia (Roitsch and Watson 2019, 81-83) and usually occur in learners of all age groups – interestingly enough, spelling errors have been linked to phonological awareness – also referred to as the *phoneme/grapheme correspondence* (mentioned in chapter 4.1.1). This issue is also enhanced by the visual and muscle memory issues (known as internalization or automatic processing) commonly prominent in dyslexic learners (Marsh et al. 1980). Internalization (also known as automatic processing) refers to the ability to make sub-skill-related processes and procedures in language acquisition internalized – in other words, the idea that tasks become effortless and automatic over time (ex. when spelling, one’s hand automatically slides over the paper in the correct way to spell the word with little to no effort, remembering the correct spelling or having to think thoroughly or searching memory to access this knowledge). Commonly, the biggest issues for foreign language learners are word that are;

- false friends (ex. “syrup” in English x “sirup” in Czech)
- words with silent letters (ex. “colonel” is often misspelled as “cornel”; “hour” is often misspelled as “our”; “castle” is often misspelled as “casel” or “casle”)
- borrowed words (ex. “comics” in English x “komiks” in Czech)
- words with letter doubling (ex. “necessary” is often misspelled as “nesesary” or “neccessary”; “disappear” is often misspelled as “dissaper” or “dissappear”; “appropriate” is often misspelled as “apropriatte” or “approppriate” or “apropriate”)
- words with complicated spelling (ex. “distinguished” is often misspelled as “distingish” or “distinwish”; “acquaintances” are often misspelled as “actuintances” or “aquintences”)
- words that sound the same (ex. “their” is often misspelled as “they’re” or “there”; “your” is often misspelled as “you’re”; “cereal” is often misspelled as “serial”, etc.)

Aside from spelling errors, the omission of words is also a significant issue. It commonly occurs in text of any length. In this context, word omission refers to the phenomenon where a learner leaves out a whole word within a sentence, usually without realizing it ex. “I really chocolate” or “see you later if have time”. Some of these could be assign to the tendency to shorten words or sentences when texting (ex. c u later = see you later), however, word omission occurs in long non-conversational text

as well. This issue is sometimes associated with lack of attention or attentional problems (Wong 2020, 31-34) rather than dyslexia itself; however, many researchers argue that attentional issues are a symptom of dyslexia and should not be dismissed (Sigurdardottir et al. 2021; Wong 2020; Mishra 2015, etc.)

4.1.4 Listening Skills

Listening skills are not as often linked to dyslexia as other skills. Reading and writing are two skills that are mostly associated with dyslexia, while speaking is sometimes mentioned as well due to mispronunciation and lack of phonological awareness that reflects on (or is influenced by) spelling. To define *listening skills*, it is important to first make the distinction between listening and hearing. Hearing refers to the sounds a living being can receive and process as existing noise; on the other hand, listening refers to a conscious process of acquiring information through hearing. Listening is a process of converting phonemes into meaning and images in one's brain, which enables understanding of messages conveyed through sounds (Nwankwo 2008, 118). Wolvin and Coakey (1996) define listening as “the process of receiving, attending to, and assigning meaning to aural stimuli”, which circles back to the basic understanding of the difference between the process of hearing and the much more complex process of listening.

Listening has many types based on the participation of the listener as well as their reaction to the messages identified; however, regardless of the degree of activity or type of reaction, all listening comes down to the ability to decode the coded messages that the speaker is sending to the listener. Although it is not as common as issues in other areas of LL, dyslexic children might struggle with these skills to a certain degree based on the severity of their LD symptoms. Dyslexia, especially in combination with attentional issues, can make it very challenging for learners to properly and correctly decode messages in spoken form (Wong 2020, 32). However, this area does not seem to be either a prominent nor researched topic in any greater detail, which is supported by the lack of resources on this topic. Many scientists (Kormos et al. 2019; Yalçınkaya et al. 2009) link listening skills to dyslexia using phonological awareness (and its lack) as a link. DysTEFL Booklet Trainer (Nijakowska et al. 2013) also stresses the importance of supportive measures for dyslexic learners within listening exercises, arguing that the

length of a recording during listening practice can be overwhelming due to the dyslexic learners' short memory issues (more on this in chapter 4,1,6).

Dyslexic learners might potentially struggle with the ability to decode utterances if their attention is not focused on the topic or they struggle with other subordinated issues, however, there is no research to support this claim.

4.1.5 Speaking Skills

Speaking skills enable a person to communicate effectively verbally. This definition of speaking skills is very broad and general; however, it captures the general goal of speaking and utterance production without much effort – it should come naturally (Nunan 2004, 48, Harmer 2001, 269) . Speaking is one of the four language skills; it is an active skill that is characterized by spoken utterance. The subskills related to speaking are fluency, accuracy, using functions, appropriacy, turn-taking skills, expanding and initiating, repair and repetition, range of words, and discourse markers (Lackman 2010). In this chapter, the subskills of fluency, discourse, and comprehension will be the focus when speaking about the effect of dyslexia on speaking.

According to the LDA (2025) the impairment dyslexia causes in learners in terms of speaking and speech is most clearly linked to pronunciation, phonological awareness, recalling of sounds and sound patterns, and phonological memory. These aspects of language are referred to as “components of oral language” by LDA (2025). The affection of these components is what causes dyslexic learners to “have problems in language development and demonstrate impairments in their use and/or understanding of spoken language” (LDA 2025).

According to many studies (Kormos 2012, Stanton 2019) and claims about dyslexic effect on language skill, “speaking and listening abilities in L1 (mother tongue) and FL on the other hand seem to be less affected by dyslexia than literacy based skills such as reading and writing” (Forghieri 2017, 37), however, Forghieri (2017, 37-39) goes on to explain that regardless of these findings and claims, many dyslexic learners find speaking challenging. Stanton (2019, 66-67) explains that speaking and speech can be affected in dyslexic learners if they are under pressure or experiencing anxiety. She highlights the need for an appropriate amount of time to be given to dyslexic learners to minimize the stress and anxiety learners might experience (66-67).

What is important to mention is also the pressure. The pressure that comes from misunderstanding is rather significant. Spoken interaction is harder than oral production. Speaking itself might not pose a great problem, but interaction (including reaction time, proper reading of cues, as well as relevancy of responses) can cause anxiety, demotivation, and stress (Stanton 2019, 65).

Dyslexic learners can confuse two words and their pronunciation (ex. conversation vs. conversion), mispronounce words if they are similar to their mother tongue (ex. spaghetti /spə'geɪ.i/ vs. špagety /ʃpaɪɛtɪ/), and they might struggle to recall a word/term (this can be different for different dyslexic learners; it is usually tied to association or other underlying issues with sounds or patterns ex. the learner finds the sequence of letters/sounds difficult to remember), they get lost in their sentences (they go back and repeat parts of sentences or might make more broken or fractured sentences in their speech), they might skip/omit words or articles (ex. “I’d like that” → “I’d that”). The areas of speaking that are most affected by this are;

- **Fluency** - Fluency can be affected more severely in dyslexic learners due to the issues in phonological awareness, plus recollection of sounds and general memory issues (more in chapter 4.1.6) can affect the fluency of a dyslexic speaker.
- **Discourse** - Discourse can be imperfect due to attention deficit related to rapid eye movement (in visual learning type of dyslexic learners, this can be more pronounced), memory issues, and sometimes also because of the increased amount of fractured, incomplete sentences or backtracking. The flow of the utterance can be fractured or more “chaotic”.
- **Comprehension** - Comprehension is often affected due to other underlying issues, such as issues with attentive listening or rapid eye movement causing inattentiveness to the utterance reception (can occur as asking for clarification, confused reaction, misunderstanding, and/or unresponsiveness to vocal stimuli from the other speakers) and production (can occur as random pauses, changes of topic, and/or sped up speech). (odkázat na čtení a poslech + mluvím o interakci a ne jenom o produkci)

In summary, speaking skills seem to be linked predominantly to phonetics and phonology (pronunciation, phonological memory, etc.) rather than the concept of pragmatics or communication as a whole. Speaking can be affected in dyslexic learners, but it is not a majorly discussed or researched area of LL to claim any specific impairments on a broad spectrum of dyslexia.

4.1.6 Memory and Internalization

Memory and internalization are a vital area of LL that is affected by dyslexia. Memory, for the context of this chapter, refers to the ability to memorize new elements of language (vocabulary, grammar points, etc.), save memories (long-term and short-term), and recall memories from long-term and short-term memory. Internalization, on the other hand, refers to the process of internalizing these memorized concepts. For example, during a lesson, a new topic is discussed (ex. past simple), dyslexic learners are exposed to this topic, expected to memorize its rules, and eventually also memorize the table of past simple verb forms - this is related to memory and internalization, but in a different sense to each.

Memory is responsible for the process of memorization, saving the information in the learner's brain as well as recalling the information once necessary, while **internalization** is responsible for the process of making the memorized (learnt) information automatic (ex. when a learner who doesn't have the knowledge internalized is asked to say the verb "make" in past tense, they use their memory to search for this learnt memorized information and say "made" vs. if a learner who has the knowledge internalized is asked to say the verb "make" in past tense, they are able to quickly without greater effort answer "made").

Memorization is a complex process that starts with sensory memory, which involves "temporary storage of information received" (Atkinson and Shiffrin 1968 in Alsulami 2019, 3). Then the information is stored in short-term memory (approx. 20-30 seconds), which is significantly affected in dyslexic learners (Hachmann et al. 2014, 126-127). Eventually, the information retained in short-term memory for a longer period of time is transferred to long-term memory (Tulving and Schacter 1990 in Alsulami 2019, 3). This process is commonly much longer in dyslexic learners than it is in neurotypical learners (Menghini et al. 2010, 217-219). Alsulami (2019, 5) also mentions so-called "working memory", which he describes as a partner to short-term memory that is responsible for

enhancing the ability to retrieve information – stressing that “the most critical role of working memory is that of temporarily holding information that will then be transferred into long-term memory”. This means that working memory is, while operating, partially simultaneously with short-term memory, sort of a link between short-term memory and long-term memory. Alsulami (2019, 5-6) explains that working memory is commonly observed as underperforming (below average) in dyslexic learners, which could explain the claim (Menghini et al. 2010, Kimel et al. 2024) that dyslexic learners struggle to transfer acquired information/skills from short term memory to long-term memory, therefore needing longer to internalized said skills or knowledge.

Internalization is tightly linked to memory, it is, however, not only based on visual or auditory memory inputs, but also motor and muscle memory. This is, for instance, why spelling is often associated with memory and internalization – some words are easier for a learner to remember and use automatically, while others are harder and not internalized yet, which requires the learner to search all available memory types (visual, muscle, motor, and, although not as useful in English due to the grapheme-phoneme mismatch, also auditory).

Memory has been heavily departed as a problematic area for dyslexic learners for a long time (Vogel 2003, 73), and although usually more connected to ADHD, many dyslexic learner struggle with the process of memorization and following internalization of memorized information/skills (Youman and Mather 2013 in Alsulami 2019, 1). Nijakowska (2012, 354) explains that a typical symptom of dyslexic learners in an FL environment is “poor memorization of nursery rhymes, short poems and songs” as well as an issue with “remembering names and common sequences (e.g. alphabet, days of the week, months of the year)”. Spelling is one of the most affected areas when it comes to poor memory and internalization issues in dyslexic learner, remembering of the correct sequences, especially in longer or more complex words, is a difficulty, as well as, “gross motor skills (arms and legs)” (Nijakowska 2012, 354-355) which also reflects on fine motor skills such as writing. The handwriting can often be illegible due to this (Nijakowska 2012, 354).

To summarize, the impacts of dyslexia on memory and internalization make it harder for learners to memorize and retain new language elements and to eventually use them automatically. Difficulties with short-term and working memory, in particular, slow

down the process of transferring information into long-term memory, which in turn delays internalization – meaning dyslexic learners often need more time and support to effectively acquire and apply new knowledge.

5. Online Schooling

Online schooling during the COVID-19 pandemic refers to the implementation of digital platforms and technological tools to support remote learning when in-person attendance at educational institutions was deemed unsafe due to the global health crisis. It involves the process of education, content, lessons, assignments, and assessments through virtual mediums such as video conferencing (MS Teams, Google Meets, etc.), learning management systems (Google Classroom, online school programmes, etc.), and online collaboration tools (shared documents, excel sheets, online powerpoint presentations, etc.). Similarly to *online education*, it utilized online software for the purposes of learning and teaching, however, online education refers to both structured (official) and unstructured (unofficial) types of education in various fields (onlineschools.org 2025, Akpen et al. 2024, 1-2), while *online schooling* is defined as a structured form of education – including the, although temporary, situation during the COVID-19 pandemic (Zheng et al. 2021, 2), as it merely replaced F2F teaching/learning method, while expected to continue with the same content and follow the pre-established curriculum (Bird et al. 2022, 1) . The primary objective of online schooling during this time was to ensure educational continuity while minimizing the risks of viral transmission (Zheng et al. 2022, 2, and Bird et al. 2021, 2).

This transition marked a substantial shift in the conventional classroom environment, introducing both great opportunities and significant challenges. Online schooling also offered increased flexibility with respect to learning location and individual pacing. On the other hand, it raised critical concerns regarding equitable access to necessary technology, the varying levels of digital literacy among users, and the diminished social interaction traditionally associated with in-person education.

Consequently, educators, students, and caregivers were compelled to rapidly adjust to new instructional and communicative modalities (order n. 349/2020). The experience of online schooling during this period has highlighted the potential of technological integration to enrich the learning experience, while simultaneously emphasizing the

importance of preserving a balanced approach that incorporates both digital and face-to-face pedagogical strategies.

5.1 Online Schooling; Czech Republic

Online schooling during the COVID-19 pandemic in the Czech Republic is defined as a transition from traditional classroom-based education to remote learning using digital tools and platforms (order n. 349/2020). With the outbreak of the pandemic, schools faced temporary closures to ensure public safety, prompting educational institutions to swiftly adopt online methods to continue teaching. This approach involves the delivery of lessons, assignments, and assessments through various online platforms and virtual classrooms. While allowing students to continue their education from home, online schooling in the Czech Republic also highlighted certain challenges. These included disparities in access to technology and the internet among students, concerns about maintaining student engagement and motivation in a virtual setting, and the need for teachers to rapidly adapt their instructional methods to suit the online environment. The experience of online schooling in the Czech Republic prompted discussions about the importance of digital literacy, the role of technology in education, and the potential for hybrid models that combine in-person and online learning. As the situation evolved, schools navigated the complexities of online education, emphasizing flexibility, collaboration, and creative solutions to ensure students' academic progress during these exceptional circumstances.

On the 23th of August in 2020, MŠMT (Ministerstvo školství, mládeže a tělovýchovy; Ministry of Education, Youth and Sports [MEYS] in official translation) published a document “Metodické doporučení pro vzdělávání distančním způsobem” (free translation by Simona Vosáhlová 2024; “Methodological Guidelines for Distance Education”). The document aspires to provide the methodology for distance learning and teaching.

The methodology summarizes the legal, organizational, and pedagogical aspects of distance education. The obligation to educate through distance methods presents a significant challenge for all schools. However, the experiences gathered during the spring period of the epidemic form a solid foundation upon which to build in case the ban on children's in-person presence in schools is repeated. This manual is intended to assist schools in

establishing rules for distance learning. (MŠMT 2020, 3, free translation by Simona Vosáhlová 2023)

Therefore, the document builds on the information, requirements, and established accommodations for learners with special needs and provides a new and online-schooling-related version of the previously discussed supportive measures. Chapter 5 of the document Methodological Guidelines for Distance Education (MŠMT 2020, 15-16) focuses on learners with special education needs in detail.

It states that all currently required accommodations and supportive measures shall apply to the online schooling situation as well. It goes on to explain that all supportive measures, including the assistants (a person assigned specifically to a child with severe special education needs), isto be applied regardless of the change in learning environment. However, it does not elaborate on any specific ways to apply the supportive measures in online schooling. The PPCC is required to provide its services online – something that is mentioned for other institutions as well (MŠMT 2020, 15), however, the document does not state in what ways the learner should be accommodated specifically.

In conclusion, the document requires teachers and other pedagogical workers to provide required supportive measures during online schooling, but it is not elaborated on in detail in terms of what is expected from educators and how the transition of supportive measures to the online environment should be done.

5.2 Challenges and Potential of Online Schooling for Dyslexic Learners

Online schooling holds significant potential but also challenges for dyslexic learners due to its flexibility, accessibility, and customizable features (Pang and Jen 2017, 1023). Here are some ways in which online schooling can **benefit** dyslexic learners:

- **Customizable Learning Experience:** Online platforms often offer customizable features such as font styles, sizes, background colors, and audio options. Dyslexic learners can adjust these settings to suit their individual needs, making the learning experience more comfortable and effective (Richardson 2015, 323).
- **Multimodal Learning Resources:** Online schooling typically provides a variety of multimedia resources, including videos, interactive simulations, and

audio recordings. Dyslexic learners can benefit from these multimodal resources, which cater to different learning styles and help reinforce concepts through visual and auditory means (Richardson 2015, 324-325).

- **Self-Paced Learning:** Many online courses allow learners to progress through the material at their own pace. This flexibility is particularly beneficial for dyslexic learners, who may require more time to process information or revisit concepts multiple times for better understanding (Pang and Jen 2017, 1027-1028).
- **Assistive Technologies:** Online schooling platforms often integrate assistive technologies such as text-to-speech and speech-to-text tools, screen readers, and spell-checkers. These tools can help dyslexic learners with reading, writing, and comprehension tasks, empowering them to overcome some of the challenges associated with dyslexia (Janokar et al. 2023, 653–664), but also assigned assistance can be highly beneficial during the remote lessons (MŠMT 2020, 16).
- **Structured Learning Environment:** Online courses typically provide a structured learning environment with clear instructions, organized modules, and consistent formatting. This can be advantageous for dyslexic learners, who may struggle with disorganization and benefit from a well-structured approach to learning (Richardson 2015, 328).
- **Reduced Social Anxiety:** For some dyslexic learners, traditional classroom settings can be intimidating and exacerbate feelings of social anxiety. Online schooling offers a more comfortable and less socially demanding environment, allowing dyslexic learners to focus on their studies without the added stress of social interactions (Alsudais et al. 2022, 8189-8190).
- **Access to Specialized Support Services:** Many online schooling platforms offer specialized support services for learners with disabilities, including dyslexia. These services may include tutoring, counseling, and accommodations for assessments. Dyslexic learners can access these support services remotely, ensuring they receive the assistance they need to succeed academically (MŠMT 2020, 16).

Overall, online schooling has the potential to level the playing field for dyslexic learners by providing them with the tools, flexibility, and support they need to thrive in their academic pursuits.

On the other hand, online schooling during the COVID-19 pandemic has presented itself with a unique set of **challenges** for dyslexic learners that might not have been anticipated.

- **Lack of Individualized Support:** Despite the presence of SEPs outlining specific accommodations, both learners reported that supportive measures were not applied during online learning. Instructions were not differentiated, emotional reassurance was absent, and tasks were not adapted to their diagnosed needs. This aligns with broader research highlighting the risk of neglecting vulnerable learners during systemic disruptions (MŠMT 2020, 15–16).
- **Decreased Teacher Contact and Feedback:** One of the most significant barriers was the lack of individual communication with teachers. Both participants described minimal or no teacher-initiated check-ins during the pandemic, leading to confusion, demotivation, and emotional disengagement. Learner A, in particular, expressed uncertainty about instructions and missed the chance to ask clarifying questions, suggesting that feedback loops essential for dyslexic learners were broken.
- **Social Isolation and Loss of Peer Interaction:** Dyslexic learners often rely on peer collaboration for both emotional and academic support. The abrupt end of in-person interaction deprived them of this crucial scaffold. Learner A described missing friends as one of the hardest parts of remote learning, which impacted her motivation and sense of belonging, important affective factors in successful learning (Kormos 2017, 95).
- **Increased Emotional Distress and Anxiety:** The absence of clear support structures led to a rise in negative emotional self-perception. Terms such as “dumb” and “stupid” were used by Learner A when describing her performance. Learner B described school as “useless” and emotionally disengaged altogether. These expressions reflect internalized failure and loss of academic identity, amplified by the impersonal nature of remote education.
- **Disruption of Routines and Memory Recall:** Both learners experienced declines in memory and task completion. Assignments were often forgotten or left unfinished, not necessarily out of defiance but due to reduced significance, routine, and oversight. These issues mirror known difficulties with working

memory and executive function in dyslexic learners, which are exacerbated when structure and consistency break down (Franzen et al. 2020).

- **Inaccessibility of Formal Support Tools:** Although many online platforms provide assistive technologies, the learners in this study did not report access to or use of such tools during remote learning. Learner B, who had previously received modified lessons and oral assessments, was given no alternative formats, despite his SEP entitling him to them. This demonstrates a failure to operationalize accessible technology in practice.
- **Rigid Task Formats and Performance Anxiety:** Timed activities like online quizzes or games were sources of anxiety rather than support. Learner A reported stress during timed Kahoots and preferred non-timed visual games. Such inflexible formats failed to accommodate processing speed deficits, leading to feelings of incompetence despite motivation.

However, it's essential to recognize that individual experiences may vary, and ongoing research and development are necessary to further optimize online learning environments for learners with dyslexia.

5.3 Supportive Measures for Dyslexic Children during Online Schooling

Order n. 349/2020 is the modification and update in relation to online school to the regular law order n. 561/2004. However, this order does not provide any details on supportive measures for learners with special needs to be implemented or modified during the distant learning experience. Therefore, it can be assumed that the regular details and guidelines for supportive measures stand.

ČOSIV (2020) had requested that the Ministry of Education of the Czech Republic ensure that supportive measures are available to learners with special needs. The supportive measures ČOSIV finds essential are:

- Ensuring the provision of support measures in the home environment
- Informing families about the activities of the school counseling unit
- Ensuring information, resources, and assistance
- Lending school supplies and textbooks
- Providing support through pedagogical assistants
- Avoiding overburdening / slowing down

However, there were no requirements established during the online schooling period, not via the legislation itself. There were no legal requirements on what must be included in the form and content of the lessons during the pandemic, therefore, it remained in the hands of individual school institutions to establish.

This might be perceived as a right, which would be a valid consideration of the situation, as many school institutions might simply not consider enforcing the availability of supportive measures for their special needs students as a part of the list of priorities. The COVID-19 pandemic was an extremely stressful time for everyone, but it has undoubtedly negatively influenced children's social lives and mental health. The school institutions were put into a position where every child became a special needs child, in a sense.

The absence of official rules meant schools could take any action they deemed suitable. As mentioned, the COVID-19 pandemic was a difficult time for every learner, and many learners found themselves in a position of needing extra attention. Therefore, it was not only the children with special educational needs but also every other learner in the class. That increased the stress and pressure on the teacher to find ways to accommodate everyone, not to mention the fact that teachers were mentally challenged by the lockdown rules and new restrictions and regulations as well. This has created a unique puzzle that school institutions and educators have had to solve.

The teacher found themselves in a position where they needed to adapt their teaching methods and content to this completely new and unexpected situation. Plus, treat each student's learning journey in an individualized way that seems to exceed their skills and possibilities. In such a situation, it is unsurprising that learners with special needs were not offered appropriate and sufficient conditions that would even their chances. Furthermore, it is possible to argue that the majority of learners were not offered appropriate conditions to maintain the standard of education. This also caused an issue with SEdP as the school psychologist lacked the time and sometimes proper resources to update the documents according to the new situation many dyslexic learners found themselves in.

Empirical part

The empirical part of this paper is focused on providing insight into the experiences of two dyslexic learners (learner A and learner B) during online schooling due to the COVID-19 lockdown. This research paper aims to offer a comprehensive and authentic insight into the challenges and potential of online schooling that the two subjects (learner A and learner B) experienced during the COVID-19 lockdown. The paper aspires to highlight the importance of proper awareness about the dyslexic experience during those times, as well as bring attention to the issue that supportive measures and proper accommodation for dyslexic learners have perhaps been moved down on the list of teachers' priorities during the online lessons.

The preconception of this paper is outcomes and findings of a negative nature, as prior knowledge on this topic has been overall unsatisfactory. The paper aspires to offer an in-depth look into the often neglected side of education that is assumed to have been of even lower priority during the unexpected events of the COVID-19 pandemic. Providing support and appropriate conditions for learners with special needs has been of great concern to many educators and researchers, but it remains one of the aspects of education that is regardless of public attention and overall awareness still often neglected and overlooked. The paper expects to find proof of insufficient support of dyslexic learners during the online schooling, as well as record negative experiences and opinions on how the online school lessons were handled in regards to the implementation of obligatory supportive measures and providing individualized and equal chances to the learners.

In Chapter 6, the research aim is clearly defined, along with the main research questions that guided the investigation. The chapter outlines the motivation for selecting the topic and justifies the focus on dyslexic learners in the Czech primary school system during the pandemic.

Chapter 7 introduces the research methodology, explaining the choice of qualitative research and the rationale behind using semi-structured interviews as the main data collection tool. The process of preparing and conducting the interviews is described in detail, with attention to ethical considerations and the need for age-appropriate, accessible language.

In Chapter 8, the data collection process is discussed, including an overview of the two participants and the conditions under which the interviews were conducted. The chapter also briefly presents the coding and labeling approach used during transcription.

Chapter 9 presents the data analysis and interpretation. The interviews were examined thematically, with codes and themes grounded in both the learners' speech and their non-verbal cues. This chapter offers a detailed narrative of each participant's experience, focusing on their emotions, perceptions of support, and changes in motivation before and during COVID-19 lockdown online schooling. Each case is compared against the learner's SEP (Special Educational Plan) to assess the consistency of applied support with official recommendations.

Finally, Chapter 10 summarizes the core themes that emerged across both interviews, identifying shared struggles such as emotional disengagement, lack of teacher feedback, and insufficient accommodations. The chapter also highlights distinct individual needs and preferences, offering insight into how dyslexia manifests differently in different learners and why a one-size-fits-all approach may be insufficient in supporting them, especially during crisis-driven online instruction.

6. Research Aim

The aim of the research is to understand the experiences of students with dyslexia in online English learning during the COVID-19 pandemic, to identify the main challenges they faced, and to describe the ways they coped with these situations. The main research question to be answered is: *How did students with dyslexia perceive online English lessons during the COVID-19 pandemic?*

The objectives of the research are to collect authentic data based on experience, opinion, perceptions, and emotions of the interviewed subjects and to analyse the data in a qualitative manner to offer valuable in-depth experience to evoke understanding of the issue to answer the question on how did dyslexic learners perceive the online schooling experience as well as explore the challenges they experience during that journey. The research also anticipates that the lack of applied supportive measures during the unexpected online school situation is a crucial aspect in the learner's increased educational challenge. The paper hopes to provide authentic insight into the situation the learners went through during the COVID-19 pandemic and subsequent

online schooling situation to spread awareness among readers of both pedagogical and non-pedagogical background.

7. Methodology

Methodology refers to the systematic and organized approach or set of methods used to conduct research, investigations, studies, or any systematic inquiry (Cambridge Dictionary 2023). It outlines the procedures, techniques, and tools that are employed to gather, analyze, and interpret data or information in order to achieve specific goals, answer research questions, or solve problems (Murthy & Bhojanna 2009, 32).

Methodology is a critical component that guides the process of conducting experiments, surveys, observations, and analyses (Murthy & Bhojanna 2009, 67). It ensures the research's reliability (Murthy & Bhojanna 2009, 176) and validity (Murthy & Bhojanna 2009, 177).

Data Collection Methods

Data is to be collected via a semi-structured interview, which is considered a balanced tool for researching the experience of dyslexic learners (2) during the COVID-19 pandemic, as it provides both structure and flexibility. The interview has key themes to discuss and explore, but also space for exploration of unexpected and/or unanticipated insight. The data is to be collected via an audio recorder and transcribed for proper analysis.

Data Analysis Techniques

A case study (multi-case study) is the selected tool for the data analysis of the paper. A case study is a relevant and suitable tool for a qualitative in-depth study (Průcha 1995, 63). This technique is to offer a deeper understanding of the experiences of the interviewed learners that are relevant to the aim of the paper. The data analysis is based on the responses of the subjects, drawing a picture based on established underlying themes of the interview, and aspires to offer the answer to the paper's aim as well as an overall insightful conclusion drawn from the opinions and experiences reported by the interviewed learners.

Sampling Techniques:

The technique used for subject selection was the *convenience non-probability sampling*. Non-probability techniques refer to techniques where the subjects are not selected randomly (Stratton 2023, 147). Stratton's also elaborates on the meaning and details of convenience sampling. He explains that this form of sampling is that "the selection of study subjects" (2023, 147) is based on how accessible they are "for one reason or another to the researcher" (2023, 147). The subjects were selected based on their relevancy to the topic of the paper as well as their potential benefit towards the aim. Preferences were towards one male and one female subject, possibly of similar or same age, that however, proved quite complicated and therefore two subjects of different age groups were selected. Another important aspect of selection was a requirement of dyslexia diagnosis being older than 2 years – this was mostly done to avoid any issues with SEDP, as it often takes quite long for the school responsible organs to create and implement the document. Both subjects were recommended for the research by their teacher (current for Learner A and former for Learner B).

Piloting:

Initial piloting is to be conducted on one dyslexic (1) learner in order to identify and correct possible errors in the data collection technique as well as the tools. After piloting and necessary modifications, the final study is to be conducted on two (2) dyslexic learners who were randomly selected. Both students are to be from different schools and possibly of different backgrounds, such as gender, age, personality, social status, learning techniques, level of English, et cetera. More on this in Chapter 8.2.

Ethical Considerations:

Permission was collected from the legal guardians of every learner interviewed (including the piloting session) as well as from the children. Interviewed learners are not legally liable to give legal consent, but it was of great importance to maintain the ethical standards of the researcher to obtain consent from the children interviewed in an official manner as well. They were given their own contract to sign to grant permission to use the information provided for research purposes.

Throughout the interview session, the subjects were allowed to leave or ask for breaks. It was advised to finish the interview within one session, but it was communicated that if it is not possible for the learner, the interview can be split in half. A friendly

atmosphere was high on the priority list as well as the subject's comfort. A legal guardian was invited to oversee the interview but discouraged from intervening, as well as familiarized with the possibility of the data being corrupted/biased due to the emotional shift in subjects due to the presence of their legal guardian.

Limitations:

Sociological and pedagogical studies are not exact sciences. Any field that operates with humans is full of variables that can have minor or major effects and influence on the final results and findings (Mareš 2015, 116-117 and 129). Variables are aspects of human nature that can alter the results of any form of study. The shifting factors must be taken into account for the case as well as it is impossible to collect all data without the possibility of additional information completely altering the outcomes of the data analysis.

As for a case study, the qualitative one(or more)-case focused research is not always reliable (Mareš 2015, 116-117). The reliability is impossible to achieve as the aim of the study is to record and analyse personal experience, opinions, and memories. Elements analyzed are deeply personal and individual to every subject studied, therefore, the research could never come to the same findings and conclusion if replicated. There is also a factor of a single researcher conducting both the data collection and data analysis, therefore, the possibility of personal biases is to be considered.

The validity of the research was maximized via attempts to obtain the most authentic data possible, nonetheless, it is unattainable to ensure the absolute authenticity, regardless of steps taken, as there might be hidden factors and aspects that decrease the legitimacy of the data collected. The research validity can also be negatively affected by the researcher's own personal biases and situational variables that affected the analysis during the study.

Another limitation of the study is the data interpretation. As already mentioned, not only can personal biases and alterations of the reliability and validity of data collection and data analysis occur, but also the data interpretation might vary depending on the conditions, interpreters' mood, personal opinions, et cetera.

7.1 Multi-case study

A multicase study is a one of the most common research approaches used in qualitative research (Mareš 2015, 114) to gain an in-depth understanding of a phenomenon by examining multiple individual cases within a specific context (Průcha 1995, 63). Unlike a single-case study that focuses on a single subject (Mareš 2015, 119), a multicase study involves the investigation of several cases, often to identify common patterns, differences, and unique aspects across the cases.

In a multicase study, researchers select multiple cases that share certain characteristics or traits relevant to their research question. These cases can be individuals, groups, organizations, events, or any other units of analysis (Mareš 2015, 115-116, and Yin 2009, 237) that provide a window into the phenomenon being studied. The researcher collects and analyzes data from each case using various qualitative methods, such as interviews, observations, document analysis, and participant interactions (Yin 2009, 237-238).

The primary aim of a multicase study is to achieve a deeper understanding of the complexity, context, and variations of a phenomenon. By comparing and contrasting multiple cases, researchers can uncover patterns and relationships that might not be evident in a single case (Mareš 2015, 135). Multicase studies are particularly valuable for exploring the diversity of experiences, contexts, and perspectives related to the research topic, enhancing the generalizability and richness of the findings (Yin 2009, 237).

Multicase study is often complemented by an analysis of another type of data (ex. didactic aids), however, due to the paper aim, which is concerned primarily with the experiences and feelings of the interviewed learners, the paper concludes its findings based on the reported experiences and opinions of the subjects only while using the official SEP documents and assigned supportive measure documents as a secondary source of insight into the situation.

7.2 Semi-structured interview

A semi-structured interview is a qualitative research tool or method used to gather information and insights from participants in a flexible yet focused manner (Průcha 1995, 61). In a semi-structured interview, the researcher prepares a list of open-ended

questions and topics to guide the conversation (Young et al. 2018, 10-12), but there is also room for the interviewer to ask follow-up questions, useful for deeper understanding, and explore unanticipated avenues of discussion. This approach allows for a balance between structure and flexibility, enabling participants to share their perspectives and experiences in their own words while still addressing specific research objectives (Ruslin et al. 2021, 24-26).

Key characteristics of a semi-structured interview include:

Guiding Questions: The interview begins with a set of predetermined questions or topics that guide the conversation. These questions are designed to elicit detailed and descriptive responses from participants.

Flexibility: While there is a predefined set of questions, the interviewer has the flexibility to adapt the conversation based on the participant's responses, asking follow-up questions to explore interesting points or seeking clarification when needed (Ruslin et al. 2021, 24 and Braun and Clarke 2013, 121 and 123).

Participant-Centered: Semi-structured interviews prioritize the participant's voice and perspective, allowing them to express their thoughts and experiences in a natural and unrestrained manner. This enabled the researcher to go deep and gain valuable insight (Megaldi and Berler 2020, 4826).

Exploration of Themes: Alongside the guiding questions, the interviewer may have a set of themes or areas of interest that they aim to cover during the interview. These themes help structure the conversation while still allowing for organic exploration (Ruslin et al. 2021, 25).

Rich Data: The open-ended nature of semi-structured interviews often yields rich and detailed data that provides insights into participants' emotions, beliefs, motivations, and experiences (Průcha 1995, 61).

Qualitative Analysis: The data collected from semi-structured interviews are typically analyzed using qualitative research methods, such as thematic analysis or content analysis, to identify patterns and themes (Mareš 2015, 121).

Semi-structured interviews are widely used in various fields, including social sciences, psychology, anthropology, and education, to explore complex topics, understand

participants' viewpoints, and gain a deeper understanding of phenomena from the participants' perspectives .

8. Data collection

The data was planned to be collected to use for further analysis to provide insight into the issue of dyslexic learners and their challenges during the distant learning (online lessons). The data is to be analyzed individually and then in a context of comparison with one another. The reason for this is not to quantify the data and make general assumptions or claims. The objective of the analysis is to provide qualitative insight that is authentic and unbiased. The result is to propose a collection of experiences of the interviewed subjects to educators in order to prompt a deeper reevaluation of the mistakes and errors made during the online schooling period in 2020-2021.

Data was gathered from a sample of two (2) randomly chosen lower-secondary learners with dyslexia, each of a different age (one 11-year-old and one 14-year-old). These individuals have both been officially diagnosed with dyslexia for a duration exceeding three years, ensuring the validity and relevance of their experiences to the study. One male and one female were selected in order to paint a broader and more cohesive picture about the issue, as male dyslexic experience is often quite different from the female one.

To ensure the authenticity of the data acquisition process and to minimize any potential subject-related biases, a deliberate decision was made to withhold explicit information from the participants regarding the precise aims, objectives, and scope of the research. Instead, they were only informed that the study was focused on online schooling during the COVID-19 pandemic.

The methodology employed for data collection encompassed a semi-structured verbal interview technique in order to gain comprehensive and nuanced responses. These responses were meticulously recorded and transcribed for further analysis. Notably, the interviews were conducted in the Czech language, aligning with the subjects' native tongue. This approach aimed to foster an environment in which the learners could articulate themselves in a manner that felt most innate and natural, thereby minimizing any linguistic constraints.

For the purposes of the paper, the collected data were subsequently translated into English. This translation process was done with increased attention to linguistic accuracy and the preservation of semantic nuances, thereby enabling comprehensive analysis and interpretation in the context of the paper's aim.

8.1 Creating the Semi-structured Interview

For the purposes of the paper's research and aim a semi-structured interview was selected as the most fitting and appropriate tool for data collection. Semi-structured interview is a technique commonly used to collect and document (in a written form of the results) insight into the issues studied. This type of data collection tool was selected due to its convenient balance of structure (researcher had a list of questions which explored different themes for further analysis and enabled the two interviews to maintain somewhat similar structure) and flexibility (as a qualitative research was conducted it was essential for the researched to collect authentic raw data, which otherwise would not have been recorder or could have been overlooked).

With this in mind, the semi-structured interview for this paper was created with two main points in mind:

- To minimize any biases that could invalidate the authenticity of the findings
- To promote open conversation to collect a broad spectrum of information

The first of the two requirements was achieved by concealing any crucial details about the aim of the interview and the following research. The subjects were not to be told what exactly their condition is (they were only to be asked how they personally understood it), and they were not informed what the interview would be about ahead of time. Therefore, the expectation is that they would respond authentically and truthfully based on their current emotions, experiences, opinions, states of mind, and moods. Another feature to be implemented was to record the interviews and make precise transcriptions (with no omissions) to maximize the possibility of decoding the language nuances and hidden meaning of discourse in further analysis.

The second requirement was achieved by a wide range of open questions as well as comforting questions (that should make the interviewed learner feel validated and safe) and open a positive relationship between the subject of the interview and the interviewer. This was achieved via casual conversation on the previous two occasions

(selection of the child and asking for permission, and official announcement to the parent, plus request of their permission). The interviews took place in the children's homes, which are assumed to be their safe space and a place where they are willing to take down their guard, relax, and get comfortable. There was also another factor implemented, and that was the application of off-topic questions (based on the situation given throughout the interview) to relax the subject as well as not to overwhelm them.

A big role throughout the interviews was played by the researchers' ability to react appropriately to a given situation, read social cues given by the subjects, as all as improvisation. Improvising was necessary due to the open, flexible nature of the semi-structured interview. A high number of unexpected unrelated topics and statements is to be expected while collecting experience and emotion-based data.

The semi-structured interview was based on multiple themes of interest;

- subjects' understanding of dyslexia
- subjects' understanding about what "supportive measures" they are accommodated with (the term "supportive measures" was not used, the interview emphasized the importance of the subjects' understanding about what the questions are about, therefore a more child-appropriate wording was used, ex. "How does the English teacher help you with your dyslexia at school?")
- subjects' opinion on whether the accommodations they are granted are helpful
- subjects' emotions / feelings about the online English lesson during the COVID-19 pandemic
- subject's emotions / feelings about English lessons before the COVID-19 pandemic
- subject's experiences with the online English lesson during the COVID-19 pandemic
- subjects' experiences with English lessons before the COVID-19 pandemic
- subjects' subjective opinions about the differences between these two
- subjects' subjective opinions and preferences between these two
- subjects' subjective opinions on whether the accommodations they are normally granted during F2F lessons were in any way (possibly in what way) adapted to the online situation

The interviews were completed between April to September of 2021 and later on went through two modifications (one initial and another after a piloting session).

8.2 Piloting

Piloting is the preliminary testing or trial run of a research study's methods, procedures, instruments, or protocols before conducting the full-scale research. An essential phase of the research was to identify any potential issues, glitches, or shortcomings in the research design, data collection methods, and validity of collected data.

The pilot interview was conducted during November of 2020, and the subject of the interview was an 11-year-old female, diagnosed with dyslexia only 2 years prior (referred to also as “Subject Zero”). The version used for this interview was slightly different in comparison to the final version, as the final version was edited after the piloting session to reflect on any shortcomings.

The piloting phase of the research helped with the following aspects:

Identifying Issues: Piloting of the semi-structured interview on a subject zero (a different learner with dyslexia than the final subjects selected) helped to identify an issue with the structure of the question and potential emotional and mental pressure the interview could have on the learner. It was decided that the interview was to be less structured and offer a friendlier atmosphere for the interviewed individual rather than maintaining a strictly professional attitude.

An interesting issue occurred during the piloting in relation to the data collection. Originally, the data was supposed to be transcribed in a written form by the researcher based on their personal perception of the situation and the importance of the provided information, attitudes, experiences, and opinions of the subject. Unfortunately, this proved completely impossible as the interview picked up quite a quick pace, and it became unrealistic to be able to pre-analyse the importance of the information communicated. Therefore, it was decided to record the interviews for later analysis that would not be time-limited by the pace of the conversation.

Refining Instruments and Testing Procedures: As mentioned above, the interview had been reworked to become less structured with the addition of off-topic segments to increase the comfort of the interview individual. Especially to increase the level of

friendliness and relaxed atmosphere, as the interviewed subject zero showed a significant degree of stress/anxiety during the piloting session. The steps that were taken were mostly related to the attempt to build a short-term positive relationship with the interviewed individuals and changing the environment in which the interview took place during piloting. The original place the interview was supposed to take place was a classroom (an extra classroom that was empty after school lessons were over for the day). This has been changed to a more familiar and safe place for the individual's own bedroom. The space limitation was an ongoing issue, but selecting the subject's home was the best option.

Assessing Participant Responses: The responses of the piloting phase were unsatisfactory, as the individual interviewed expressed stress and anxiety. The responses seemed to be limited and filtered to what the subject found appropriate to say, and they did not seem authentic or substantial enough to be used for research purposes. It was assumed that the failure was only due to limited trust from the individual to the interviewer, but eventually, it was not the only element that was identified as a problematic point of stagnation. The environment, the relationship between the subject and the researcher, and the atmosphere of the situation were all identified as aspects of the unsatisfactory responses and restrained from the subject's position.

Timing: At first it was expected the interview would take approximately 15 to 20 minutes and it proved correct during the piloting session, however, since the pilot interview was non substantial for the purposes of the research due to the limited nature of the data collected and information gathered it was re-estimated to approximately 20-30 minutes. This proved incorrect, as well as the final interviews and final data collection took over half an hour.

Enhancing Validity and Reliability: As for a multicase study, it is almost impossible to guarantee the reliability of the findings, as the aim of a multicase study is not to offer hard data but to offer insight into the issue researched. A research on experiences, opinions, emotions, and challenges of dyslectic children during the online schooling can vary tremendously and therefore it is important to keep in mind that realizing the same kind of research with the same research tools and instruments could have a completely different outcome purely based on the differences in experiences and perceptions of the studied individuals. However, this should not be considered a flaw of the research, but

rather a limitation of this particular sort of study that brings a different value to educators than hard data, but it is no less worthy of their attention.

The validity of the research was mostly based on the authenticity of the information collected in regards to truthfulness and openness of the interviewed learners. The main focus of the validity guarantee was to modify the research factors, tools, and instruments to increase the chance of perfect conditions to collect authentic responses from the subjects. Authenticity is defined as the quality of truth to own experience, values, opinions, emotions, and personality. In terms of the research, authenticity relates to the truthfulness and realness of the learners' interview to themselves. As the aim of the paper is not to analyse the condition for dyslectic learners during the online school it is not the point of the need to achieve authenticity - the aim is to provide valid insight into the challenges of dyslectic learners based on their personal experiences - therefore the authenticity is not in relation to the actual condition, but in relation to the experience and perception of the studied individuals.

The pilot study was conducted with only one representative (unlike the final study, which had two). The aim of the piloting is not the same as the final study; the objective of piloting is to identify and correct any issues before committing to the final research. It saves time and resources as it eliminates the initial errors and undesired invalidating factors.

8.3 Modifications

The first modifications were made before the piloting session. They were mainly based on feedback provided by other educators in the field. Firstly, the interview was changed to a semi-structured interview as that is a more suitable tool for collecting the type of data the research would benefit from the most. With the aim of the paper in mind, the semi-interview was created as a guideline for the interviewer rather than a list to be strictly followed. Many closed questions (mostly used for quantitative data) were changed to open questions (more suitable for qualitative data).

Initially, it was planned to interview three dyslexic students, however, this has been changed as the thought of three learners providing more reliability was challenged and denied. Three learners were an unnecessary number as the insight value of the research would not increase. Another modification related to the learners studied was about their

school environment. Originally, both selected subjects were attending the same school - this was challenged and changed for the reason of providing a higher possibility of collecting broader data.

As mentioned in the pilot chapter, the environment the interview took place was also changed. Due to a significant presence of tension and stress in the pilot subject, it was decided to change the interview location from the subject's school to the subject's home (preferably their own bedroom) to offer the comfort of a well-known and safe space that they find relaxing and non-threatening. This was done in order to increase the possibility of gathering authentic and non-biased responses, which was an issue identified during the piloting as the interviewed learner seemed to be overly cautious of what he was communicating and seemed anxious to be open. In other words, the observation was made that the subject was modifying his responses in order to make them seem/feel more "acceptable". It was decided that such behavior was undesirable and the causes of that were identified and corrected.

However, it was not only the environment that was identified as a cause of certain restraint from the subject's side. Two more factors were observed - an unfamiliar person (the interviewer) and the atmosphere of the situation. These causes were attempted to be eliminated by implementing a higher number of friendly interactions between the subject and researcher, as well as improving the atmosphere. The attempt to improve the atmosphere was made via implementing a background music record of the subject's liking and allowing them to have a toy/stuffed animal, and offering a tasty treat.

And lastly, one error on the researcher's side of a successful data collection was identified. The original preconception was that the researcher would be able to take notes and identify important key information during the interview to write down for further analysis later on, however, this has proven unrealistic and impossible due to the quick pace the interview took. Based on this failure, it was decided that the interviews are to be recorded and transcribed later on, with no time limitation and no pressure set on the interviewer to catch important information in an unrealistic time span. This has also improved the overall flow of the interview as the subject was not interrupted by the interviewer throughout the exchange, which occurred on multiple occasions during piloting.

These modifications proved sufficient and successful as the final interview outcomes improved significantly in comparison to the initial piloting session. The data collected was found to be sufficient and passed the researcher's evaluation of authenticity.

8.4 Final Data Collection

The final data was collected between the 1st of April and the 1st of September 2021. Two subjects were interviewed, a 6th grader – 11 years old female learner (referred to as Learner A) and an 8th grader – 14 years old male learner (referred to as Learner B).

The process of data collection took place at the subjects' homes, as determined after the piloting errors were corrected. A phone recorder was used to record the interviews, and then a process of transcription started. The interviews were expected to last between 15-20 minutes, similarly to piloted interviews, but in the end, they both took over half an hour. Only one attempt at the interview was conducted for each learner, and both interviews were decided to be substantial for further analysis and data interpretation.

There were no major issues during the interviews except for a couple of interruptions (pets, parents, phone calls). Both learners were very friendly and responsive and seemed mentally present for the whole duration of the interviews (ensured by short breaks, confirmation questions, and overall attitude of the subjects). A couple of times, a clarification was requested and was provided to a point of acceptable satisfaction and appropriate understanding of the message communicated (ensured through questions of confirmation).

Very little to no discomfort was recognized in the subjects' behavior and speech. Each interview was different as each learner reacted to the questions and non-verbal cues of the interviewer differently; however, both interviews were validated and were accepted to be used for the paper's purposes. It had been anticipated that one or both subjects could have a block and therefore decrease the informative value of the answers provided (as during the piloting), but that did not occur. Learner A seemed to express a desire to continue the interview even after all the pre-selected topics (questions) were done.

It was of great importance to provide perfect conditions for the studied individuals to provide authentic information to be gathered and collected for the analysis. As mentioned in the piloting chapter, the aim of the paper is to provide insight based on

personal experiences of the learners, therefore steps were taken to provide an environment and conditions for the subjects to be open and willing to open up and express their personal truth based on their opinion, experiences, and emotions.

All the data collected was transcribed and prepared for detailed analysis. It has proven greatly invaluable and practical to have a full transcription for better orientation and the full recording for identifying speech cues. The only data that was impossible to collect was visual (as there is no recording of the session). This could have been a great addition to increase the value of the further analysis and deepen the understanding of the subject's communicative intentions, as it would provide material to be analyzed for non-verbal social cues and behavior.

9. Data Analysis Methods and Interpretation

The qualitative data gathered through semi-structured interviews were analyzed using a thematic approach – the most commonly used qualitative technique across many scientific fields (Swain 2018). Thematic approach is defined as “a search for themes that emerge as being important to the description of the phenomenon” by Fereday and Muir-Cochrane (2006, 82). Swain (2018) explains Braun & Clarke 2013 notion that “it is a method, or process, for identifying and encoding patterns of meaning in primary qualitative research” by encoding and labeling collected data.

This method was selected for its flexibility in capturing rich, detailed insights (Swain 2018), particularly in relation to the complex personal and emotional experiences of dyslexic learners navigating the shift to online schooling. The aim of the analysis was to uncover recurring patterns in the learners' narratives, especially concerning their academic engagement, emotional well-being, and the adequacy of supportive measures provided during online instruction as well as to look at the data collected via the interview and the provided SEP details and SEDP (detailing assigned supportive measures) to paint a complete picture of the situation the subjects were experiencing during the COVID-19 pandemic.

After transcription, the interviews were reviewed with attention to both verbal and non-verbal indicators. A series of interpretative labels was applied to highlight recurring language, tone, and behaviors reflective of emotional status and opinions. This included observable emotional responses (such as hesitation, laughter, or sighing), repeated word

choices (e.g., "stupid", "dumb", "boring"), and significant pauses or body language observed in video recordings.




Verbal labels were coded as follows:

- pos. – positive emotional language ("fun", "cool", "good")
- neg. – negative emotional language ("boring", "stupid", "horrible")
- avd. – avoidance strategies (e.g., deflecting questions, pretending technical issues)
- **Key contextual terms:** teacher (T), home (H), friends (<3), online (on), face-to-face (off)

Non-verbal cue labels included:

- Long pauses, fidgeting (fg.), laughter (smích), sighing, lack of eye contact, and moments of agitation or discomfort

The final table of labels

Verbal		Non-verbal	
positive words: comfort, nice, good, great, etc.	pos.	pauses	
negative words: bad, boring, stupid, etc.	neg.	fast-paced (fast speech)	
giving examples	ex.	shaking head (“no”)	
avoidal answers	avd.	avoiding eye contact	
excited tone	happy	shifting/rapid movement (physically manifesting discomfort)	///
sad/unhappy tone	sad	fidgeting	fg.
word: unfair / not fair	α	unrelated sounds (ex. humming)	∅
word: different / strange / weird	e	smiling / laughing	smích
word: sick / broken / wrong	f	expressing comfort (talking a lot, starting a story, looking comfortable)	☆
word: teacher	T	expressing discomfort (lying, avoiding answers, dissociating, etc.)	□
word: friend / classmates	<3		
word: home	H		
word: online / remote / on the computer	on		
word: F2F / normal school / at school / classroom	off		
word: better	:)		
word: worse	:(

These labels were used to develop initial codes. The transcript was manually coded and then organized into broader themes, ensuring consistency and depth. Reflecting on the list of themes the interview was structured around (more in Chapter 8.1). The coding process also accounted for contradictions or shifts in emotional tone, reflecting the nuanced and sometimes conflicting perspectives of the learners. To minimize researcher bias, interpretations were grounded in direct participant quotes, which served to validate the themes identified. For instance;

Learner B: “It’s not like I care anyway,”

This statement was marked with labels “adv.” and “□”, concluded to be most likely a lie or a dishonest answer, an answer evoking an omission of the truth, or an attempt to avoid the truth – unclear if it was meant to mislead the researcher or if it was self-denial.

Additionally, each participant's data was cross-referenced with their school’s Special Education Plan (SEdP) to assess the alignment and/or misalignment between recommended support and actual educational experience. For instance;

Learner A: “We played Kahoot a lot, I always felt stressed [...] I didn’t play sometimes.” (asked about what topics the Kahoots were) “Uhhh, [...] like, I like and I don’t like and for other people” (asked if they played the same as everyone else)
“Yes.”

This statement was linked back to the SEP provided, as it mentions the grammar point of “liked/disliked” + “3rd person singular verb forms”. It was also compared to the supportive measures the learner was supposed to receive based on their PPP evaluation.

The data was later interpreted into conclusive notions that could be used for an elaborate analysis of the students’ position in the online lessons and the challenges they faced based on their experiences and emotions shared during the interview.

The following chapters will go into greater detail in regards to that, as well as attempt to provide an explanation on what could have been the cause of the learners' challenges in the online environment or influence on their learning processes.

9.1 Learner A

Learner A is an 11-year-old girl attending the 6th grade. Diagnosed with moderate dyslexia at the age of nine, her SEP recommends extended time on tasks, reduced reading demands, and regular emotional reassurance. During the interview, she displayed high emotional sensitivity, particularly when discussing her academic struggles, social interactions, and self-perception.

Reading out loud was described as her most stressful activity. This aligns with common phonological challenges in dyslexic learners, as described in 4.1.1, where difficulty decoding sound-symbol relationships leads to performance anxiety in oral reading tasks. She admitted to pretending her microphone was broken to avoid being called upon. The recurring use of terms like "dumb" and "stupid" in reference to herself suggests a deeply internalized fear of failure and social judgment. Her emotional responses indicated a strong dependency on peer support and affirmation.

"I feel dumb when I read. I feel bad. I don't want others to think I'm stupid."

Such feelings can be demonstrative of stress connected with phonological awareness (as mentioned in Chapter 4.1.1), which makes reading difficult due to poor grapheme-phoneme awareness. Despite these difficulties, she expressed a genuine interest in English and demonstrated insightful awareness of her learning preferences. Her strongest motivators were collaborative tasks and playful learning formats, such as picture-based or game-like activities. However, she emphasized that time-constrained activities like Kahoot induced stress and performance anxiety.

"I like games, but not when there's time. Then I get nervous and can't think."

She consistently linked her frustration with online learning to feelings of isolation. She missed her friends and found working alone demotivating and emotionally draining. She also reported frequent confusion about instructions and a general lack of feedback

or clarification during online lessons. When asked if any accommodations were provided during online learning, she replied:

“No, I don’t think so. It was the same for everyone.”

These experiences led to decreased motivation, forgetfulness, and incomplete assignments. Her responses highlighted the deterioration of structure and relevance in her academic routine, contributing to poor memory retention and disengagement over time. This kind of forgetting echoes the issues described in Chapter 4.1.6 – where poor encoding and working memory limit retention and task follow-through.

“Sometimes I didn’t know what I was supposed to do.”

A statement like this was representative of auditory processing limitations (as mentioned in Chapter 4.1.4), especially in a chaotic or non-interactive online setting.

“I forgot things a lot. It wasn’t important. I didn’t want to do it.”

This statement is indicative of Learner A’s lack of motivation, and disengagement from reading tasks could be linked to the mental fatigue and low reward associated with slow, effortful reading described in Chapter 4.1.2.

9.1.1 Learner A – Links to SEP and SEdP

According to SEP and her SEdP, Learner A should receive:

- Additional support in reading and writing tasks
- Extended time for task completion
- Reassurance to confirm understanding of instructions
- Modified learning expectations (particularly in literacy-based assessments)

These recommendations are also reflected in the official guidelines found in the school's Školní vzdělávací program (Czech word for SEP), which states:

"Uplatňování principu diferenciacce a individualizace vzdělávacího procesu při organizaci činností a při stanovování obsahu, forem i metod výuky."
("Application of the principle of differentiation and individualization in the

organization of activities and in the determination of content, forms and teaching methods")

Additionally, the SEP recommends:

"V odůvodněných případech odlišnou délku vyučovacích hodin pro žáky se speciálními vzdělávacími potřebami..."
("In justified cases, different lesson lengths for pupils with special educational needs")

In practice, however, these provisions were absent during online learning. Learner A reported that her tasks were the same as those of her peers, with no visible differentiation or modifications. She expressed confusion with instructions and had no extra contact with her teacher outside of scheduled lessons. This contrast between expected support and her lived experience illustrates a significant implementation gap, especially under the pressures of the pandemic.

Her case exemplifies how written supportive measures, though clearly outlined, can be easily neglected in practice, especially in digital environments where individualized instruction is harder to enforce.

In practice, these provisions were absent during online learning. Her teacher offered no additional contact outside scheduled lessons, and she reported that her tasks and expectations were identical to those of her peers. The lack of differentiation and ongoing support contributed directly to her negative emotions, reduced performance, and growing aversion to school.

Her experience strongly suggests that without proactive individual support, even learners who enjoy a subject (such as English) can become alienated from it in an unsupportive environment.

9.2 Learner B

Learner B is a 14-year-old boy in the 8th grade diagnosed with severe dyslexia in early elementary school. His SEP includes comprehensive accommodations: exemption from written assessments, modified instruction, use of assistive technology, extended time, and reduced emphasis on spelling or grammar accuracy. Despite these measures,

Learner B expressed considerable disconnection from school, both in physical and emotional terms.

He described English lessons as “useless” and “stressful”, whether online or in person. He reported no significant difference in his learning experience across modalities, suggesting a persistent disconnect between his learning needs and the educational approach provided. This also indicates an inability to retain information or internalize it, which is something many dyslexic learners struggle with, as mentioned in Chapter 4.1.6.

“It doesn’t matter if it’s online or school. It’s all the same. I never learn anything useful.”

Learner B revealed that he preferred learning English informally, through video games, Discord, and other social platforms. He used English effectively in gaming contexts to communicate with international peers, demonstrating functional language skills not acknowledged or cultivated in the classroom. This might suggest a problem if understanding grammar issues, memorization, and issues with other skill issues are often associated with dyslexia (ex. Chapter 4.1.3 explaining issues with accuracy in spelling and grammar), which also often undermines engagement for dyslexic learners – something Learner B expressed multiple times.

“I talk to people from Germany and Poland. I know what I need. We laugh. It’s not about being right.”

His remarks hinted at low self-esteem and emotional distress, particularly around being treated differently. This signals that he might have benefited from decreased pressure in speaking tasks, as stress is a significant factor for dyslexic learners (more in Chapter 4.1.5). He expressed frustration about extra help being associated with feelings of inferiority, and recalled negative emotions linked to after-school support sessions, which might reflect back to issues with motivation, which is a topic connecting many language skills (in the context of dyslexia – Chapter 4.1.2 – especially reading).

“I had to do more than others and that is unfair. It made me feel stupid.”

Learner B's resistance can be interpreted to support a connection to shame associated with written output (due to spelling and writing issues, which are typical for dyslexic learners) – a theme supported by discussion on spelling errors as emotional triggers in Chapter 4.1.3.

During the pandemic, these support sessions ceased entirely. No extra support was provided during online lessons, and he was not contacted individually by the teacher. Despite this, he expressed indifference toward their removal, implying that their emotional cost outweighed their academic benefit in his view.

9.2.1 Learner B – Links to SEP and SEdP

Learner B's SEP and SEdP outlines:

- Exemption from written work
- Use of spell-check tools
- Modified reading and writing tasks
- Emphasis on oral communication and flexible assessment formats
- Psychological support and emotional reassurance

These provisions are clearly supported by the school's Školní vzdělávací program (School Educational Programme), which notes:

"Koordinací postupů při poskytování vzdělávání žáků se SVP je pověřen výchovný poradce..."

("The coordination of procedures for providing education to pupils with special educational needs is entrusted to the educational counselor...")

It also emphasizes:

"Je-li pro žáka vytvořen Individuální vzdělávací plán (IVP), je vyhodnocován v souladu s příslušným předpisem."

("If an Individual Educational Plan (IEP) is created for the student, it must be evaluated in accordance with the relevant regulation")

However, during the online learning period, Learner B reported no communication or individualized adjustments. He experienced a complete halt of previously arranged

after-school support and was not contacted for supplementary sessions. Despite being entitled to technology-supported writing and alternative assessment, no such accommodations were made.

This disconnect between policy and practice highlights a troubling pattern: even well-outlined SEdP can collapse under systemic stress, such as the pandemic, leaving vulnerable learners without the help they are guaranteed by law (order n. 248/2019 and order n. 349/2020) and school policy (for example, SEP).

None of these measures were consistently applied during online schooling. The absence of modification and the continued use of rigid academic structures contributed to his growing detachment. While he did not express confusion as overtly as Learner A, his emotional responses and vocabulary suggested possible symptoms of depression or burnout. The pandemic-era discontinuation of individualized support likely exacerbated his academic disengagement.

10. Results and Findings

Both learners faced unique challenges during the transition to online learning, yet certain shared themes emerged. This chapter will discuss and summarize Learner A's specific challenges, Learner B's specific challenges, and finally also the challenges both learners shared and reported in their interviews accordingly. Divided into three parts as follows;

Learner A-specific:

- Strong dependency on social interaction
- Emotional sensitivity toward perceived failure
- Preference for collaborative and visual activities

Learner A dislikes reading out loud, often pretending her microphone doesn't work to avoid participation. She finds online lessons of decreased importance because she prefers working with friends and finds it more entertaining and easier. Activities involving pictures and games are easier for her, but time-limited games cause stress. She struggles with reading and listening comprehension during online lessons, often

feeling confused and giving up instead of asking for help due to a fear of seeming unintelligent.

Online lessons make Learner A feel nervous, demotivated, and disinterested, despite English being one of her favorite subjects. The main challenges for her in online learning are distance, isolation, and a sense of exclusion. There is a recognizable lack of support for her dyslexia, with unclear instructions and unmodified tasks contributing to her confusion and negative emotions. She suggests having more time to complete assignments and incorporating more games and less reading into lessons would be beneficial for her. She misses talking exercises and feels lonely during online lessons. In face-to-face learning, she can ask questions and find the lessons more interesting due to open communication.

During online learning, her educational achievement significantly dropped. She frequently misses deadlines due to demotivation and forgetfulness caused by the irregularity of assignments. The emotional and mental impact of distant learning becomes evident as important details blur and fade from memory over time.

Most of the supportive measures Learner A qualifies for were not implemented in online lessons and could have been the cause of her negative experience.

In summary, Learner A faces challenges with dyslexia and struggles with online learning due to a lack of social interaction, support, and modified tasks. She values communication, interaction with peers, and a supportive environment. Her academic performance suffers during online learning, and the emotional toll of the experience affects her interest, memory, and motivation.

Learner B-specific:

- Resistance to formal instruction
- Preference for real-world, peer-driven language use
- Possible signs of mental health struggles linked to school pressure and identity

Learner B is to receive various supportive measures to accommodate his learning needs, including increased assistance with orientation, extended time for tasks, no written testing, and modifications in reading and writing methods. His struggles with writing

and reading are emphasized, and it is noted that his dyslexia may not be the sole cause of his difficulties.

Learner B's behavior appears typical of his age, showing both disinterest and sensitivity, influenced by his disability. There's a suggestion that his struggles might be compounded by potential depression related to the impact of the COVID-19 pandemic on adolescents. Despite his challenges, he displays proficiency in English when communicating through video games and voice chats with online friends.

Learner B's attitude towards school-based English lessons is negative; he finds them uninteresting, stressful, and considers them a “waste of time”. He doesn't connect with the teaching methods or content. His demotivation might be influenced by his special needs status and negative emotion-inducing experiences with correction.

During interviews, Learner B couldn't definitively state a preference for face-to-face or online lessons, indicating a lack of distinction in his perception of English lessons regardless of the format. Online lessons didn't lead to any significant self-discovery regarding his dyslexia.

The student's interaction with a teacher, who used to offer additional support after school, stopped when lessons shifted online. The impact of this support remains unclear, as Learner B expressed uncertainty about its benefits.

Learner B struggles with dyslexia and its related challenges did not drastically change after the migration to online platforms. However, it is possible that the discontinuation of additional support from his teacher during the transition to online learning might have been influential.

And finally, the shared challenges. What is interesting and became apparent throughout the analysis process is that the shared challenges seemed to be more related to the general execution of the teaching/learning process such as tasks, supportive measure, atmosphere, motivation, or relevance of topics taught, while the individual challenges were mostly centered around the social element of school and personal difference (such as introverted learner vs. extroverted learner).

Shared difficulties:

- Lack of teacher support and task modification

- Emotional strain and feelings of exclusion
- Decreased academic motivation
- Stress related to peer comparison and correction

These shared challenges were analysed in greater detail during the second look at the transcripts of both interviews.

1. Lack of Individualized Support: Both learners reported an absence of personalized accommodations during online instruction. Despite well-documented SEPs, neither received the support necessary to meet their educational or emotional needs.

2. Emotional Disengagement: The psychological toll of the pandemic, combined with dyslexia-related struggles, manifested as anxiety, demotivation, or avoidance. Learner A expressed these feelings more directly through words like “dumb” or “bad”, while Learner B’s detachment was more implicit but equally concerning.

3. Learning Environment Misalignment: Learner A thrived in social, collaborative settings. Learner B, in contrast, rejected formal instruction in favor of informal, gamified learning. In both cases, the online environment failed to adapt to their learning preferences.

4. Communication Breakdown: Both learners noted the lack of ongoing teacher-student communication, particularly outside of scheduled lessons. This absence of contact led to confusion, loneliness, and reduced performance.

5. Educational Irrelevance: Learner B especially emphasized that school tasks felt disconnected from real-world applications. His functional use of English in digital spaces was overlooked in favor of grammar-focused instruction.

These findings reinforce the necessity of differentiated, inclusive teaching practices – especially in remote contexts. Learners with specific educational needs require not only modified tasks but also consistent emotional and academic reassurance. The abrupt shift to digital formats during the pandemic magnified existing gaps in support and amplified emotional strain for learners like A and B.

While these case studies are not representative of all dyslexic learners, they offer authentic insights into the lived experiences of two individuals. Their voices highlight

the need for educators to rethink inclusion, not just as a set of policies, but as a lived, relational practice.

A more comprehensive study incorporating additional learners, teacher interviews, and longer-term observation is recommended to further explore these findings and validate them in broader educational settings.

Summary

This research set out to investigate the experiences of dyslexic learners within the Czech online schooling system during the COVID-19 pandemic. It aimed to offer an authentic and grounded insight into how remote schooling impacted learners with specific educational needs, particularly in relation to their English as a foreign language (EFL) development. Through a qualitative, multi-case study approach, two semi-structured interviews were conducted with dyslexic learners enrolled in Czech elementary schools. Each participant's responses were analyzed through a thematic lens, allowing for an in-depth exploration of their emotions, perceptions, and educational realities.

The analysis focused on verbal and non-verbal indicators of emotional response, academic frustration, and engagement. Findings were cross-referenced with each learner's School Educational Programme (SEP) to assess whether the recommended supportive measures were implemented during online schooling. The research found significant discrepancies between expected support and actual practice.

The study revealed several key challenges: a lack of individualized accommodations, reduced teacher-student communication, emotional withdrawal, and the misalignment between remote learning structures and learners' preferred learning styles. For Learner A, emotional vulnerability and performance anxiety dominated her narrative, exacerbated by the absence of social interaction and feedback. Learner B expressed deep disconnection and frustration with academic content, showing a preference for informal, interest-driven learning through games and social platforms.

Despite differing personalities and needs, both learners experienced a collapse in supportive frameworks during online schooling. This failure led to emotional strain, reduced motivation, and decreased academic performance, even in areas where learners

previously expressed interest. While SEPs clearly outlined the necessary measures, their implementation during remote instruction proved insufficient or nonexistent.

The findings demonstrate how emergency online schooling often overlooks the nuanced needs of dyslexic learners, ultimately magnifying existing inequalities. Although the study's scope is limited, it highlights the urgent need for inclusive teaching strategies that are adaptable across both traditional and digital contexts. The study reinforces the importance of understanding learner identity and agency in creating educational environments that are not only accessible but genuinely supportive.

Conclusion

This research set out to explore the real-life experiences of two Czech dyslexic learners during the COVID-19 lockdown and assess the extent to which their needs were supported through remote education. Based on the data collected through semi-structured interviews, the findings strongly support the preconception that supportive measures were either inconsistently applied or entirely absent during this period. Despite having clearly outlined SEPs, both learners reported that the accommodations they were entitled to were not reflected in their online schooling experiences.

The research confirmed that online learning, while theoretically rich in adaptive potential, often failed to provide dyslexic learners with the tailored support, emotional scaffolding, and flexible structures they require. Learner A, who had previously been enthusiastic and self-aware, became overwhelmed and emotionally disengaged. Learner B, who already expressed skepticism toward traditional schooling, further distanced himself from educational participation and formal learning environments.

Thus, the study successfully fulfilled its aim of uncovering lived experiences, highlighting key problem areas such as the absence of individualized instruction, emotional strain, lack of teacher interaction, and a sense of educational irrelevance. While the findings cannot be generalized to all dyslexic learners, they offer valuable insight into how two individuals navigated an extraordinary educational disruption.

At the same time, it is important to acknowledge the limitations of this study. As a small-scale qualitative inquiry involving only two participants, the findings cannot be universally applied. Additionally, the interpretative nature of thematic analysis means that some degree of researcher bias is inevitable, even when grounded in participant quotes and observable behavior.

Nevertheless, the strength of qualitative research lies in its ability to present detailed, human-centered insight. This study offers exactly that—an authentic glimpse into how dyslexic learners experience inclusion, or the lack thereof, in a digitally mediated educational landscape. Future research might build on these findings by incorporating more voices, comparing teacher perspectives, or evaluating systemic implementation of SEPs in various schooling formats.

In conclusion, the study confirms the original concern: while inclusive education exists in policy, its practical realization, especially under pressure, remains fragile and inconsistent.

Resumé

Oblast vzdělávání prošla nečekanou transformací, na niž jen zřídka mohla být připravená. Na přelomu desetiletí svět zasáhla celosvětová pandemie viru COVID-19, které změnila chod nejen ve vzdělávání, ale ve všech oblastech každodenních lidských životů. V tomto prostředí, ve kterém se mění formy, metody a způsoby výuky, se vyskytuje jedna obzvláště citlivá skupina žáků. Jsou jí žáci se speciálními potřebami k učení, u nichž akademický úspěch často závisí na podpůrných opatřeních, která jsou jim přidělena pedagogicko-psychologickou poradnou a školním speciálním pedagogem.

Tyto žáky chrání zákony České republiky a zajišťují jim podmínky k učení, které odpovídají jejich individuálním potřebám v procesu vzdělávání. Při přechodu na distanční výuku však přišlo mnoho změn, které bylo potřeba ošetřit, zavést a ukotvit v zákoně a nakonec také uvést do praxe. Tato výjimečná situace postavila zdánlivě nekonečnou řadu výzev před státní úředníky, Ministerstvo školství, mládeže a tělovýchovy, školská zařízení, ředitele škol, učitele, ale také žáky samotné.

Žáci s dyslexií se setkávají s řadou výzev při svém vzdělávání na dennodenním pořádku, a to ať už v distanční výuce, či té prezenční. Distanční výuka však přinesla změny, na které ministerstvo a školy, včetně jednotlivých učitelů, neměli šanci zareagovat dostatečně rychle a pohotově, aby byl přechod z prezenční výuky na distanční dostatečně ošetřen tak, aby možnosti a podmínky vzdělávání žáků nikterak nepoškodil. Jsou to pak obzvláště děti, jež potřebují ke svému vzdělávání adekvátní podpůrná opatření. Tato opatření pomáhají žákům s poruchami učení vyrovnat síly s ostatními žáky. Během přechodu na distanční výuku se však tato strana problému nezdála být prioritou a dostala se do pozice, ve které učitelé neměli kapacitu, prostředky či osobní motivaci udržet standard podpory, jenž nabízeli během prezenční výuky.

Tato práce se zaměřuje na tuto problematiku v na detail orientované výpovědi dvou žáků druhého stupně základní školy, kteří si prošli rokem a půl distanční výuky jakožto zástupci z řady dětí s oficiálně diagnostikovanou dyslexií a se seznamem podpůrných opatření vypracovaných speciálním pedagogem. Teoretická část práce se zabývá vysvětlením a definováním pojmů důležitých k pochopení a vykreslení pozadí tohoto problému. Úzce se zaměřuje na otázku výuky angličtiny v prostředí České republiky, na inkluzivní vzdělávání a inkluzi v Česku, na dyslexii z pohledu historického, moderního,

celosvětového i českého a také na distanční výuku a podpůrná opatření z hlediska toho, jak byla a jsou implementována a ošetřena v zákonech a vyhláškách České republiky.

Práce se také krátce zabývá příbuznými tématy, jako je krátká definice jiných poruch učení či dalších specifických poruch učení – do této kategorie se řadí i dyslexie. Rozebírá rozdíl mezi angličtinou jako druhým a cizím jazyce z pohledu českých žáků, kulturních možnosti a způsob výuky jazyka na českých školách.

Teoretická část staví základ, na němž stojí empirická část práce, ale také pomáhá dokreslit rozlišnost a komplexnost této problematiky, obzvláště pak z pohledu cíle práce jen si dává cíl poskytnout autentický vhled na toto téma skrze hlasy samotných žáků, které tento problém postihuje. Výpovědi žáků s dyslexií jsou páteří práce a celkový cíl práce se o ně opírá. Práce si klade za cíl vyzkoumat, jak zkoumaní žáci vnímali období online výuky za COVID-19 pandemie a jakými si procházeli výzvami skrze vhled do osobních zkušeností žáků, náhled do pocitů a emocí vyvolaných distanční výukou. Dále pak umožňuje získat novou perspektivu, a to skrze pohled, který žáci nabízejí ve svých výpovědích.

Výzkum práce operuje s nástroji sběru dat ve formě semistrukturovaného rozhovoru s žáky, který je vhodným nástrojem ke sběru kvalitativních dat za účelem případové studie (Průcha 1995, 63-65). V práci je použita metoda vícepřípadové kvalitativní studie, jež slouží jako robustní rámec pro důkladné prozkoumání zkušeností dvou žáků (11 a 14 let) na druhém stupni základní školy s dlouhodobě diagnostikovanou dyslexií. Tato metoda analýzy a práce s daty umožňuje podrobný průzkum jedinečných výzev, kterých tito žáci čelili během distanční výuky.

Tím, že se zabývá dvěma odlišnými případy, se tato výzkumná práce snaží osvětlit různé rozměry obtíží, kterým čelí žáci s dyslexií, zároveň se však zaměřuje na poskytnutí prostoru k vyjádření pocitů, emocí, zkušeností a osobních perspektiv na tento problém. Skrze pečlivou analýzu sebraných dat se tato studie snaží přispět k hlubšímu a komplexnějšímu pochopení složité situace a výzev, jež se pro žáky s dyslexií stala každodenní realitou při přestupu na distanční výuku.

Práce aspiruje na to, aby u čtenářů zájem o tuto problematiku vyvolala, stejně tak jako zakořenila touhu a motivaci dále diskutovat, vylepšovat inkluzivní vzdělávání a pracovat na vytváření adekvátních vzdělávacích podmínek a prostředí pro žáky nejen s dyslexií. Vhled, jež práce poskytuje, nabízí možnost pochopení a uvědomění a nabízí

čtenářům pedagogického vzdělání možnost rozšířit si povědomí, což je forma pozornosti, jež si tito žáci a jejich boj s obtížemi zaslouží.

Tato forma studie má ovšem své limity, a to jak neopomíjitelně nízkou reliabilitu výzkumu, tak vysokou možnost snížené validity dat na základě proměnných, které jsou v obdobných studiích v těchto vědeckých oblastech všudypřítomné. Práce pracuje s omezeními, jež takováto forma výzkumu obsahuje, a implementuje několik modifikací a pravidel sběru analýzy dat. Cílem těchto modifikací je zvýšení relevance, validity a autentičnosti dat i samotného výzkumu a jeho výsledků. Avšak bez ohledu na kroky, jež byly podstoupeny, práce má své neodmyslitelné limity a ve finální zhodnocení dat navrhuje možnosti vylepšení a zdokonalení podobného výzkumu v budoucnu.

K závěru práce jsou sesbíraná a zanalyzovaná data prezentována čtenáři ve formě rozboru, úvah a autorova komentáře nad zjištěnými informacemi, stejně tak jako porovnání výpovědí obou žáků v kontextu, jež má objasnit a upozornit na to, jak rozdílné může být prožívání, zážitky a postoje žáků, kteří by mohli být snadno zařazeni do homogenní kategorie „žáci se speciálními vzdělávacími potřebami“, či dokonce „žáci s dyslexií“. V závěru je také prodiskutován cíl a jeho dosažení. Cíle bylo částečně dosaženo do míry (a to i přes limity výzkumu), kterou práce shledává uspokojující a úspěšnou.

V nelehké době, jež se staly roky 2020-2022, slouží zkušenosti dyslektických studentů jako dojemná připomínka rozmanitosti učebních potřeb, které jsou každodenní realitou žáků bez ohledu na stav světa či formu výuky. Období, jež se stalo pro mnohé černou skvrnou na tapetě jejich života, jež někteří chtějí zapomenout a jiní přemalovat, poznamenala také ty nejzranitelnější z nás - děti. V procesu vzdělávání je každý krok (a rok) důležitý a o to důležitější je plné uvědomění a porozumění dopadů, které tato situace a problematika způsobila právě na děti, tím spíše pak ty, kteří potřebují o to více podpory.

Bibliography

- Abidin, Asriana Zainal. "Students Reading Comprehension through Scanning Technique" *Journal of Asian Multicultural Research for Educational Study* 1, n. 1 (August 2020): 28 – 35.
- Ainscow, Mel, and Tony Booth. 2003. *The Index for Inclusion: Developing Learning & Participation in Schools*. Bristol: Center for Studies in Inclusive Education
- Akpen, Catherine Nabiem, Stephan Asaolu, Sunday Atobatele, Hilary Okagbue, Sidney Sampson. "Impact of Online Learning on Student's Performance and Engagement: A Systematic Review" *Discover Education* 3 n.1 (November 2024): 1 –15.
- Alsudais, Ali., Abdullah S. Alghamdi, Abdullrhman A. Alharbi, Atif A. Alshehri, Mustafa A. Alzhrani, Sinan Keskin, Muhittin Şahin and Alaa M Althubaiti. "Social anxiety in E-Learning: Scale validation and socio-demographic correlation study" *Education and Information Technologies* 27, (March 2022): 8189 – 8201.
- Alsulami, Sami Ghazzai. "The Role of Memory in Dyslexia" *International Journal of Education & Literacy Studies* 7, n. 4 (October 2019): 1 – 7.
- Artonang, Intan Rani, Sandi Lasmana, Deti Kurnia. "The Analysis of Skimming and Scanning Technique to Improve Students in Teaching Reading Comprehension" *Project (Professional Journal of English Education)* 1, n.2 (October 2019): 101 - 106.
- Assalah, Hussein. "Learning EFL Online During a Pandemic: Insights into The Quality of Emergency Online Education" *International Journal of Learning, Teaching and Educational Research* 19, n. 11 (November 2020): 203 – 222.
- Bird, Kelli A. Benjamin L. Castleman, and Gabrielle Lohner. "Negative Impacts From the Shift to Online Learning During the COVID-19 Crisis: Evidence From a Statewide Community College System" *AERA Open* 8 n.1 (January – December 2022): 1 – 16.
- Boets, Bart, van Smedt, B., Cleuren, L., Vandewall, E., Wouters, J., & Ghesquiere, P. "Towards a further characterization of phonological and literacy problems in Dutch-speaking children with dyslexia" *British Journal of Developmental Psychology* 28 (March 2010): 5–31.
- Broun, Virginia, Victoria Clarke. "Teaching Thematic Analysis: Overcoming Challenges and Developing Strategies for Effective Learning" *The Psychologist* 26 n. 2 (February 2013): 120 – 123.
- British Dyslexia Association. Accessed February 2023 and March 2025. <https://www.bdadyslexia.org.uk/>
- Broomfield, Hilary, and Margaret Combley. 1997. *Overcoming Dyslexia: A Practical Handbook for the Classroom*. London: Whurr Publishers.
- Broughton, Geoffre, Christopher Brumfit, Anita Pincas, and Roger D. Wilde. 1980. *Teaching English as a Foreign Language*. New York: Routledge.
- Chastain, Kenneth .1988. *Developing Second Language Skills: Theory and Practice*. San Diego: Harcourt Brace Jovanovich.

Council of Europe. 2001-2025. *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume*. Strasbourg: Council of Europe Publishing. www.coe.int/lang-cefr.

Centers for Disease Control and Prevention (CDC). “Disability and Health Overview”. Disability and Health Promotion. Accessed June 20, 2023. <https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html>.

Česká odborná společnost pro inkluzivní vzdělávání (ČOSIV). “Podpůrná opatření – výčet, členění, příklady”. Accessed January 1, 2022. <https://cosiv.cz/cs/2017/03/01/podpurna-opatreni-vycet-cleneni-priklady/>.

Forghieri, Eriko. 2017. Dyslexia & FL speech production and oral communicative competence. Accessed April 12, 2025. <https://hdl.handle.net/20.500.14247/20545>

Franzen, Léon, Zoey Stark, and Aaron P. Johnson. “Individuals with dyslexia use a different visual sampling strategy to read text” *Scientific Report* 11 (March 2021): 1 – 17.

Harmer, Jeremy. 2001. *Practice of English Language Teaching*. England: Pearson Longman.

Håkansson, Gisela, and Catrin Norrby. “Environmental Influence on Language Acquisition: Comparing Second and Foreign Language Acquisition of Swedish” *Language Learning* 60, n.3 (April 2010): 628 – 650.

Hettiarachchi, Darshani. “An Overview of Dyslexia” *Journal of Child Health* 50, n. 3 (September 2021): 529 – 534.

Hoque, Enamul. “Noam Chomsky’s Contribution to Second Language Acquisition: A Reflection on the Universal Grammar Theory” *The EDRC Journal of Learning and Teaching* 6, n. 3 (October 2020): 57 – 62.

Hymes, Dell. 1968. “The ethnography of speaking” In *The ethnography of communication* edited by Fishman J A (The Hague: Mouton), 99–138.

Hymes Dell, 1972. “On communicative competence” In *Sociolinguistics*, edited by Pride J. B. and Holmes J. (Harmondsworth Penguin), 269–285.

Individuals with Disabilities Education Act (IDEA). “Statute and Regulations.” Statute and Regulations. Accessed January 1, 2022. <https://sites.ed.gov/idea/statuteregulations/>.

International Dyslexia Association (IDA). Accessed June 2023. <https://dyslexiaida.org/>

Janokar, Sagar, Soham Ratnaparkhi, Manas Rathi and Alkesh Rathod. “Text-to-Speech and Speech-to-Text Converter – Voice Assistant” *Inventive Systems and Control* 672, (June 2023): 653 – 664.

Jasim, Yaser. “Benefits of Learning A Second Language” SSRN. (May 20, 2021), <https://ssrn.com/abstract=3895362> or <http://dx.doi.org/10.2139/ssrn.3895362>

Kimel, Eva, Luba Daikhin, Hilla Jakoby, and Merav Ahissar. “Reduced benefit from long-term item frequency contributes to short-term memory deficits in dyslexia” *Mem Cogn* 52 (July 2024): 1928–1940.

Kormos, Judith, Milena Košak Babuder, and Karmen Pižorn. “The Role of Low-level First Language Skills in Second Language Reading, Reading-While-Listening and

- Listening Performance: A Study of Young Dyslexic and Non-dyslexic Language Learners” *Applied Linguistics* 40, n. 5 (October 2019): 834 – 858.
- Krejčová, Lenka, Zuzana Bodnárová, Kamila Šemberová, and Kamila Balharová. 2018. *Specifické poruchy učení: dyslexie, dysgrafie, dysortografie*. Praha: EDIKA.
- Kusmaul, Adolf. “Diseases of the nervous system and disturbances of speech.” *New York H. von Ziemssen - Cyclopaedia of the practice of medicine* 14 (1887): 770–778.
- Learning Disability Association of America (LDA). “Types of Learning Disabilities.” *Learning Disabilities*. Accessed January 1, 2022. <https://ldaamerica.org/types-of-learning-disabilities/>.
- Lefly, Dianne L. and Bruce F. Pennington. “Spelling errors and reading fluency in compensated adult dyslexics” *Annals of Dyslexia* 41 (January 1991): 141 – 162.
- Lyon, G. Reid, Sally E. Shaywitz, Bennett A. Slaywitz, Susan Brady, Hugh Catts, Emerson Dickman, Guinevere Eden, Jack Fletcher, Jeffrey Gilger, Robin Morris, Harley Tomey, and Thomas Viall. “Defining Dyslexia, Comorbidity, Teachers' Knowledge of Language and Reading: A Definition of Dyslexia” *Annals of Dyslexia* 53, n.1 (August 2003): 1 – 14.
- MacLeod, Maija. “*Types of Reading*” Narentc. Accessed March 17, 2025. <https://slllc.ucalgary.ca/Brian/611/readingtype.html>
- Magaldi Danielle, and Matthew Berler. “Semi-structured Interviews: Encyclopedia of Personality and Individual Differences” In *Encyclopedia of Personality and Individual Differences* edited by Virgil Zeigler-Hill and Todd K. Shackelford (Switzerland: Springer Cham): (The Hague: Mouton), 4825–4830.
- Mahyoob, Mohammad. “Challenges of e-Learning during the COVID-19 Pandemic Experiences by EFL Learners.” *Arab World English Journal* 11, n. 4 (December 2020): 351 – 362.
- Mannan, Samsul. “*Best practices of Semi-structured interview method*” Published May 2020. https://www.researchgate.net/publication/341232398_Best_practices_of_Semi-structured_interview_method
- Matějček, Zdeněk. 1995. *Dyslexie – specifické poruchy čtení*. ed. 3. Jinočany: H&H.
- Mareš, Jiří. “Tvorba případových studií pro výzkumné účely”. *Pedagogika* 65, n. 2 (2015): 113–142. <http://userweb.pedf.cuni.cz/wp/pedagogika/>.
- Marsh, George, Morton Friedman, Veronica Welch, and Peter Desberg. “The Development of Strategies in Spelling” in *Cognitive Processes in Spelling* edited by Ita Frith (London: Academic Press, 1980), 339–353.
- Menghini, Deny, Giovanni Augusto Carlesimo, Luigi Marotta, Alessandra Finzi, and Stefano Vicari. “Developmental Dyslexia and Explicit Long-Term Memory” *DYSLEXIA* 16 (2010): 213–225.
- Miller, Fred and Judith Katz. 2002. *The inclusion breakthrough: Unleashing the real power of diversity*. San Francisco, CA: Berrett-Koehler.

Ministerstvo školství, mládeže a tělovýchovy (MŠMT). “Vyhláška č. 27/2016 Sb., O vzdělávání žáků se speciálními vzdělávacími potřebami a žáků nadaných, ve znění účinném od 1. 9. 2017” Vyhlášky ke školskému zákonu. Accessed January 1, 2022. <https://www.msmt.cz/dokumenty-3/vyhlaska-c-27-2016-sb-o-vzdelavani-zaku-se-speciálními-1>.

Ministerstvo školství, mládeže a tělovýchovy (MŠMT). 2020. *Metodologické doporučení pro vzdělávání distančním způsobem*. Praha: MŠMT.

Mishra, Ramesh Kumar. “Attention in Reading” in *Interaction Between Attention and Language Systems in Humans* edited by R. K Mishra, 187 – 213. Springer, New Delhi, 2015.

Murthy, S. N., and U. Bhojanna. 2009. *Business Research Methods*. New Delhi, India: Excel Books India.

National Library of Medicine (NCBI). “Other Chronic Diseases and Disabling Conditions.” *Healthy People 2000: Citizens Chart the Course*. Accessed June 13, 2023. <https://www.ncbi.nlm.nih.gov/books/NBK235765/>.

Nijakowska, Joanna. “Individual Difference in Language Learners with Dyslexia ” In *New Perspective on Individual Differences in Language Learning and Teaching* edited by M. Pawlak (Berlin: Springer-Verlag Berlin Heidelberg 2012), 349–359.

Nijakowska, Joanna, Judit Kormos, Svetlana Hanusova, Barbara Jaroszewicz, Borbála Kálmos, Ágnes Imréné Sarkadi, Anne Margaret Smith, Elzbieta Szymanska-Czaplak, and Nadezda Vojtkova. 2013. *DysTEFL: Dyslexia for Teachers of English as a Foreign Language; Booklet Trainer*.

https://kesy-ko.dod.sch.gr/wp-content/uploads/2023/12/DysTEFL_Booklet_Trainer.pdf

Norton, Elisabeth S., Sara D. Beach, and John D.E. Gabrieli. “Neurobiology of Dyslexia.” *Current Opinion in Neurobiology* 30 (February 2015): 73 – 78.

Nunan, David. 2004. *Task-Based Language Teaching*. Cambridge: Cambridge University Press.

Nwankwo, U. “The concept of errors in second language learning” In *An introduction to applied English linguistics: From theory to practice* edited by A.F. Obi-Okoye (Enugu: Frefabag Investment 2008), 106–164.

Online School. “The History of Online School” Visual Academy. Accessed June 9, 2025. <https://www.onlineschools.org/visual-academy/the-history-of-online-schooling/>

Pauc, Robin. “Comorbidity of dyslexia, dyspraxia, attention deficit disorder, attention deficit hyperactive disorder, obsessive compulsive disorder and Tourette's syndrome in children: A prospective epidemiological study.” *Clinical Chiropractic* 8 (April 2005): 98 – 189.

Podpora společného vzdělávání v pedagogické praxi (NPI). “Co je Inkluze” *Inkluze v praxis*. Accessed January 1, 2021. <http://www.inkluzevpraxi.cz/apivb/co-je-inkluzi>.

Powell, Daisy, Rhona Stainthorp, Morag Stuart, Holly Garwood, and Phillip Quinlan. “An experimental comparison between rival theories of rapid automatized naming performance and its relationship to reading.” *J Exp Child Psychology* 98, n. 1 (September 2007): 46 – 68.

- Prado, Chloé, Matthieu Dubois, Sylviane Valdois. "The eye movements of dyslexic children during reading and visual search: Impact of the visual attention span." *Vision Research* 47, n. 19 (September 2007): 2521 – 2530.
- Průcha, Jan. 1995. *Pedagogický výzkum uvedení do teorie a praxe*. Praha: Univerzita Karlova.
- Quvanch, Ziauddin, and Kew Si Na. "A Review on Impact of Blended Learning on the English Writing Skills" *Innovative Teaching and Learning Journal* 4, n. 1 (May 2020): 41 – 50.
- Rababah, Ahmad Abdallah. "The Effectiveness of an Intensive Reading Program According to the Response to Intervention and Evidence-Based Practices in Treating Dyslexia" *International Journal of Innovation, Creativity and Change* 14, n. 11 (2020): 779 – 794.
- Raymond, Sally. 2002. *Helping Children Cope with Dyslexia. Rev. ed. Overcoming Common Problems Series*. London: Sheldon Press.
- Richardson, John T. E. "Academic Attainment in Students with Dyslexia in Distance Education" *Dyslexia An International Journal of Research and Practice* 21, n. 4 (June 2015): 323 – 337.
- Roitsch, Jane and Silvana M. R. Watson. "An Overview of Dyslexia: Definition, Characteristics, Assessment, Identification, and Intervention" *Science Journal of Education* 7, n. 4 (September 2019): 81 – 86.
- Ruslin, Saepudin Mashuri, Muhammad Sarib Abdul Rasak, Firdiansyah Alhabsyi, and Hijrah Syam. "Semi-structured Interview: A Methodological Reflection on the Development of a Qualitative Research Instrument in Educational Studies" *IOSR Journal of Research & Method in Education* 12 n. 1 (January – February 2022), 22–29.
- Sarkar, Ratan. "Navigating Dyslexia: Hurdles Faced by Students with Dyslexia in Higher Education" *Journal of Disability Studies* 10, n. 1 (June 2024): 1 – 3.
- Shaywitz, Sally E. "Dyslexia." *New England Journal of Medicine* 12 (1998): 307 – 338.
- Sigurdardottir, Heida Maria, Alexandra Arnardottir, and Eydis Thuridur Halldorsdottir. "Faces and words are both associated and dissociated as evidenced by visual problems in dyslexia" *Scientific Reports* 11 (November 2021): 1 – 15.
- Stanton, Rose. "Dyslexia and oral skills: A student's journey." *ATLAANZ Journal* 4, n.1 (November 29, 2019): 57 – 72. <https://doi.org/10.26473/ATLAANZ.2019.1/004>
- Stratton, Samuel J. "Population Sampling: Probability and Non-Probability Techniques" *Prehospital and Disaster Medicine* 38 n.2 (April 2023): 147–148.
- Stowe, Cynthia M. 2000. *How to Reach & Teach Children & Teens with Dyslexia*. New York: Center for Applied Research in Education.
- Soriano-Ferrer, Manuel, Manuel Ramón Morte-Soriano, John Begeny, and Elisa Piedra-Marinez. "Psychoeducational Challenges in Spanish Children With Dyslexia and Their Parents' Stress During COVID-19 Pandemic." *Frontiers* 12 (May 28, 2021) 1 – 15.

- Swain, Jon. "A Hybrid Approach to Thematic Analysis in Qualitative Research: Using a Practical Example" SAGE Publications (February 2018): 1-21.
- Tallah, Paula, Robert L. Sainburg, and Terry Jernigan. "The Neuropathology of Developmental Dysphasia: Behavioral, Morphological, and Physiological Evidence for a Pervasive Temporal Processing Disorder" HHS Author Manuscript 3, n. 4 (December 1991): 363 – 377. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3167171/1991>.
- Thompson, Sue. 1997. *The Source for Nonverbal Learning Disorders*. Australia: LinguiSystems.
- Vandermosten, Maaïke, Fumiko Hoefl, and Elizabeth S. Norton. "Integrating MRI Brain Imaging Studies of Pre-reading Children with Current Theories of Developmental Dyslexia: A Review and Quantitative Meta-analysis." *Current Opinion in Behavioral Sciences* 10 (August 2016): 155 – 161.
- Vogel, Susan A. "Introduction to the special issues on international perspectives on dyslexia and the international adult literacy survey" *Dyslexia* 9, n.2. (May 2003):73 – 74.
- Yalçinkaya, Fulya, Nuray Bayar Muluk, and Semra Sahin. "Effects of Listening Ability on Speaking, Writing and Reading Skills of Children Who Were Suspected of Auditory Processing Difficulty" *Int J Pediatr Otorhinolaryngol* 73, n. 8 (May 2009): 1137 – 1147.
- Verhoeven, Ludo, Charles Perfetti, and Keneth Pugh. 2019. *Developmental Dyslexia across Languages and Writing Systems*. UK: Cambridge University.
- Wallin, Jamie. "Non-Linguistic Benefits of Learning a Second Language: Recent Research and Implications for Educators and Governments." *JOUR* n.2 (October 30, 2019), https://www.researchgate.net/publication/336890892_Non-Linguistic_Benefits_of_Learning_a_Second_Language_Recent_Research_and_Implications_for_Educators_and_Governments/
- Wolvin, Andrew, and Coakley, Carolyn Gwynn. 1996. *Listening* (5th ed.). New York: McGraw-Hill.
- Wong, Isobella. "An Exploratory Study to Investigate Eye Movement Performance and Visual Perceptual Skills in Children with Dyslexia" *Asia Pacific Journal of Developmental Differences* 7, n. 1 (January 2020): 27 – 60.
- Yin, Robert K. 2009. *Case study research: Design and methods*. CA: Thousand Oaks.
- Young, J. C., Rose, D. C., Mumby, H. S., Benitez-Capistros, F., Derrick, C. J., Finch, T., Mukherjee, N. "A methodological guide to using and reporting on interviews in conservation science research." *Methods in Ecology and Evolution* 9 n.1 (2018): 10 – 19.
- Youman, Martha, and Nancy Mather. 2012. "Dyslexia laws in the USA" *Annals of dyslexia* 63 no. 2 (October 2012). https://www.researchgate.net/publication/232534242_Dyslexia_laws_in_the_USA
- Zákony pro lidi. "Vyhláška č. 248/2019 Sb." *Sbírka zákonů*. Accessed January 1, 2021. <https://www.zakonyprolidi.cz/cs/2019-248>.

Zelinková, Olga, Monika Černá, and Helena Zitková. 2020. *Dyslexie – Zaostřeno na angličtinu*. Praha: Pasparta Publishing.

Zheng, Meixun, Daniel Bender, and Cindy Lyon. “Online learning during COVID-19 produced equivalent or better student course performance as compared with prepandemic: empirical evidence from a school-wide comparative study” *BMC Medical Education* 21 n.1 (2021): 1 – 11.

Appendices

Appendix A – List of questions in Czech

Jak se jmenuješ? (jméno)

Kolik je ti let? (věk)

Kdy sis první všiml/a, že jsou pro tebe některé věci těžší/jiné než pro ostatní? (rok, třída, období)

Kdy jsi byl/a diagnostikován s dyslexií? (třída)

Myslíš, že jsi kvůli tomu (dyslexii) jiný/jiná? (ve škole, mezi kamarády, ve volném čase)? (Ano/Ne)

Jak rozumíš dyslexií? (Jak bys popsal, co to je dyslexie?)

Vysvětlil ti to někdo? (Ano/Ne) Co ti o tom říkali?

Jak se projevuje u tebe? Co je pro tebe ve škole nejtěžší?

Co jiného pro tebe pan/paní učitel/učitelka angličtiny dělala když jste byli normálně ve škole? (Mám na mysli něco jako, že dostaneš víc času, že máš zadání v češtině, že nemusíš psát celou větu ale jen seřazuješ slova za sebou do věty,...)

Pomáhalo ti to?

Cítil/a jsi se špatně, že máš jiné cvičení/zadání než ostatní? // Cítil/a jsi se špatně, že se k tobě pan/paní učitel/učitelka chová jinak?

Líbilo se ti když byla škola online? (Ano/Ne) Proč?

Jak jsi se cítil/a při online výuce?

Byl/a jsi aktivní? (Ano/Ne)

Bavila tě online výuka? (Ano/Ne)

Jak se k tobě choval pan/paní učitel/učitelka?

Jak se k tobě chovali ostatní spolužáci?

Dělal/a pan/paní učitel/učitelka všechny ty věci ke kterých jsi mluvil/a i potom co začala online výuka?

Proč myslíš, že ano/ne?

Jak jsi se ohledně toho cítil/a?

Bylo učení těžší nebo snazší online? Proč?

Co pro tebe bylo za online výuky nejtěžší?

A proč? A co?

Co pro tebe bylo naopak nejjednodušší?

A proč? A co?

Existuje něco, co jsi o sobě nebo o své dyslexii zjistil/a během online výuky? A pokud ano, co to bylo?

Appendix B – List of questions in English (Translation)

What is your name? (name)

How old are you? (age)

When was the time you first noticed there was something different about you? (year, grade, period of time)

When were you diagnosed with dyslexia? (grade)

Do you think dyslexia is a disadvantage (at school, among your friends, outside of school) (Yes/No)

Has anyone explained to you what dyslexia is? (Yes/No)

How would you describe dyslexia?

What is it like to be dyslexic? How does it affect you in school?

What did the teacher do back then during face-to-face lessons that she/he didn't do for other students? (For example, you got more time than others, your exercises were already filled in at some places, etc...)

Do you think it was helping? (Yes/No)

How did/do you feel about that? (Does it feel good or bad to be given different exercises or extra minutes during tests?)

How did you feel during the online lessons?

Were you active? (Yes/No)

Did you enjoy it? (Yes/No)

Did the teacher treat you any differently than others?

Did the teacher do any of those things we spoke about previously? (extra time, exercises with filled-in sentences, etc)

Why do you think he/she did/did not?

How did you feel about it?

Was learning online harder or easier than face-to-face?

What was the most difficult during online lessons?

Why do you think so?

What was the easiest during the online lessons?

Why do you think so?

Is there anything you learned about yourself or your dyslexia during the online lessons?

And if so, what was it, and what do you think caused it?