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BAKALÁŘSKÁ PRÁCE

Online technologies in the lives of lower secondary school learners

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Prohlašuji, že jsem bakalářskou práci zpracovala samostatně a použila jen prameny uvedené v seznamu literatury.

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Abstract

The research paper investigates the use of online technology among lower-secondary school learners and its impact on English language proficiency. Conducted at Labyrinth Primary School in Brno with 68 participants, the study examines specific online technologies, the duration of technology use, and whether the use is intentional for learning. Findings indicate that learners predominantly use online technologies for informal and unintentional learning, with mobile devices being the preferred tool. The study does not confirm that learners who engage more with online technologies tend to achieve higher levels of English language proficiency in comparison with learners who have a lower level according to CEFR. This thesis highlights the potential of online technologies in supporting language development, especially through informal learning avenues.

Bibliographical description

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Annotation

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Název práce:	Online technologie v životech žáků na druhém stupni základní školy
Název v angličtině:	Online technologies in the lives of lower secondary school learners
Zvolený typ práce:	bakalářská
Anotace práce:	Tato bakalářská práce se zaměřuje na používání online technologií žáky druhého stupně základní školy a vztahem s dosaženou úrovní anglického jazyka, což je i hlavním záměrem práce. Teoretická část je orientována na specifikaci online technologií, žáků a typů učení. Praktická část těchto teoretických poznatků využívá a pracuje s nimi ve vyhodnocování cíle práce.
Klíčová slova:	Online technologie, žák druhého stupně základní školy, formální, neformální a informální učení, učení se anglickému jazyku
Anotace v angličtině:	This bachelor thesis focuses on the use of online technologies by lower-secondary school learners and the relationship with their English language level, which is the main purpose of the thesis. The theoretical part concentrates on the specification of online technologies, learners and types of learning whereas the practical part works with this theoretical knowledge in evaluating the aim of the thesis.
Klíčová slova v angličtině:	Online technologies, lower secondary school learner, formal and informal learning, English language learning
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INTRODUCTION

In essence, children attending primary or lower-secondary school today have been born into an era where technology profoundly impacts our lives. The days when computers and the Internet were used solely for work purposes are long past.

The advancement in this field is so rapid that, although adults have long left school, they still must learn new things to keep up. It is not uncommon for adults to learn from children, as for them, using online technology is so natural that it sometimes seems they were born with these skills. However, it is the responsibility of adults to help them find the balance between when online technology is a beneficial tool that can significantly aid various aspects of their lives, and when it becomes a detrimental master that consumes them and prevents them from experiencing real life.

This thesis emphasizes the positive aspects of online technology use, specifically how lower-secondary school learners utilize these technologies and whether and how they aid in improving their English language proficiency. It is irrelevant whether this learning is intentional or incidental, although this thesis also explores this question. The main aim is to determine whether and which applications Labyrinth learners utilize, either intentionally or informally, to support their English language development and how this influences their language proficiency.

The division of this thesis is clearly delineated into theoretical and practical parts. The theoretical section is dedicated to explaining what online technologies are and presenting the possible types, although it is impossible to cover all existing ones in this thesis. Furthermore, the content of this section focuses on the specifics of student development in the second stage of primary school. Naturally, the different types of learning are described, including formal, non-formal, and informal learning. The last chapter of the theoretical part is a literature review, where selected research on similar topics to this thesis is discussed.

The practical part is devoted to the research and its results. The first chapter clarifies the aim and research assumptions, followed by a discussion of the respondents and the school where the research was conducted. A description of the methodology used and the research instrument, which in this case is an online questionnaire, is included. The most comprehensive chapter presents the outputs from this questionnaire, followed by an evaluation of the research assumptions. The entire thesis concludes with a summary.

It is hoped that this research will not only be useful to the school where the study was conducted but also beneficial to other schools in encouraging students to use online technology in a meaningful way.

THEORETICAL PART

Online technologies have greatly impacted the lives of lower-secondary school learners. From virtual classrooms and online collaboration tools to instant messaging and social media, technology has changed the way students learn, communicate, and socialize. These technologies have both positive and negative effects on the educational experience of lower-secondary school students, providing new opportunities for learning and engagement but also raising concerns about screen time, digital literacy, and online safety (Lang and Šorgo, 2023).

The use of online technologies has changed English language learning. Platforms such as online tutoring websites, language learning apps, and virtual classrooms provide students with flexible and interactive ways to practice and improve their language skills. These technologies also offer opportunities for students to engage with native speakers and learn from a variety of authentic materials, enhancing the learning experience beyond traditional textbook-based approaches. However, it is important to ensure that students receive adequate guidance and support to develop their digital literacy skills and avoid potential online dangers (Muftah, 2022).

This paper examines the impact of selected online technologies on the lives of lower-secondary school learners and on their intentional and unintentional learning of English.

1. Online technologies

Online technology is a widespread tool that most people, consciously or not, encounter every day. The learners of the lower secondary school, or Digital Teens as Zounek, Juhaňák and Záleská (2022, p. 237) call them, were born in a time when it is quite common to use online resources to communicate, search for information or just for fun.

We define online technology as a broad range of tools, applications, systems and services that have been designed, developed and are primarily operated in a digital networking environment (the Internet) (Zounek and Sudický, 2012, p. XIV). As this definition suggests, online technologies include a diverse variety of tools, and the following chapters will present some subsets and specific examples of these.

1.1 Social networks and messengers

As the name suggests, social networks were created for people to interact with each other. It is possible to share pictures, videos, and text, to comment on all this content. But it is also possible to be a consumer, a person who watches other people's content without creating anything himself. The network is not limited by place and time, so it connects people from different countries, cultures and speaking different languages. The messenger itself is used to send and receive messages (Kopecký and Krejčí, 2023, p. 17).

1.1.1 Discord

Discord is a social network, a communication platform that works on computers and mobile devices. In addition to text messaging, it also allows voice or video chat communication, even to multiple people at the same time. It is widely used by online game players (Arifianto and Izzudin, 2021, p. 180).

1.1.2 Messenger, Facebook and Instagram

Messenger, Facebook and Instagram are managed by company called Meta. This allows these apps to be linked together, making a person more findable within these networks. The ability to use a joint login can also be an advantage. While Messenger is mainly used for text or picture messaging, Facebook and Instagram work differently (META, 2024).

Facebook offers users the ability to share textual, visual and video content, find friends, search for interesting events, or trade using the Marketplace module. Although Facebook is one of the most popular social networks with many useful features, young people tend to prefer networks such as TikTok and Instagram (Kopecký, 2023, p. 31).

It is Instagram that is distinctive in its visual aspect, which bears a striking resemblance to a classic Polaroid camera photo. Although text content can be shared here as well, it is the photo or visual content that is seen first. The text here serves as a complement to the image. Nevertheless, you also have the option to publicly comment on posts or send private messages here (META, 2024).

1.1.3 Snapchat

Snapchat, like other social networks, allows text or visual communication, however, what makes this app special and might even seem more secure is that all shared content is deleted after 24 hours (Snapchat, 2024). However, as Kopecký (2023, p. 48) points out, this apparent security might be a problem, because although the application deletes the content itself, the data can still be misused.

1.1.4 TikTok

TikTok is a kind of social network that focuses on sharing short videos. The maximum length of one video is 60 seconds. According to De Leyn et al. (2021, p. 2), children aged 8-12 are the main users of this site. Concerning this age group, Kopecký (2023, p. 43) highlights that while it is a great advantage for users that creating content is very easy, the problem with this network is that the videos often include various challenges that can be life-threatening.

1.1.5 YouTube

YouTube is a widely used online video-sharing platform. It allows users to upload, view, and share videos, encompassing a diverse range of content such as music videos, educational tutorials, entertainment, and vlogs. YouTube operates as a subsidiary of Google, generating revenue through advertisements and premium subscriptions (YOUTUBE, 2024).

1.2 Online games

In Zounek et al (2021, chapter 5.2), games are divided into two categories. Namely games that are primarily designed to educate and games that are not educational but are still useful for learning. In order to play, one needs to use a computer, a game console, or a mobile phone.

Since the question in this paper focuses only on online games, it is appropriate to say that in addition to a suitable gaming device, the learner needs an Internet connection, which will allow him to connect and communicate with other players anywhere in the world. Although this is not the direct intention of the players, there is a development of their knowledge of the English language, especially its spoken form (Rytych, 2021, p. 96).

1.3 Web browsers

Since it is assumed in this thesis that most students will use mobile phones extensively to work with online technologies, two representative search engines were selected. Namely, Google Chrome, which is typical not only for Android operating system users (Google, 2024), and Safari, which is used on phones with iOS operating system (Apple, 2024). Cambridge dictionary defines a web browser as "*a computer program that allows you to read or view information on the internet*" (Cambridge dictionary, 2024).

Web browsers are a kind of gateway to information found on the Internet, which is the reason for their listing as an online technology in this thesis.

1.4 Streaming platforms

The Cambridge dictionary defines a streaming platform as "*a service that sends video, music, etc., over the Internet so that people can watch or listen to it instantly instead of having to download it, or instead of having to watch or listen to it at a specific time when something is broadcast*" (Cambridge dictionary, 2024).

1.4.1 Disney+ and Netflix

After examining both platforms, it is possible to conclude that both provide a large number of documentaries, films or series not only of their own production. The primary language used is English, although both platforms try to offer Czech dubbing or at least Czech subtitles. Thus, when streaming, it is possible to practice understanding the spoken word in English, while subtitles can serve as an aid to contextual comprehension if the viewer's language skills are not yet at a sufficient level.

Yao (2023, p. 3) mentions that Disney Plus focuses on the productions of Walt Disney and other subsidiaries such as Pixar, Marvel and many others, while Netflix offers other titles created by other companies to watch in addition to its own production.

1.4.2 Spotify and Apple Music

Audio content is the focus of Spotify and Apple Music. It's not just music, but podcasts and audiobooks are also available and can be very useful for developing language skills. The more popular of the two platforms, according to the annual report (Spotify, 2024), is Spotify, which reports a total of 602 million users, while Apple Music has only 93 million (Curry, 2024).

1.5 Neural networks

Neural networks are better known as artificial intelligence, or AI. Actually, this is not a new concept; artificial intelligence has been used by search engines, translators and social networks for many years. However, it is the so-called generative artificial intelligence that looks revolutionary. It can work with large amounts of data, it is continually developing, it can generate texts, images, even videos that look very authentic (E-Bezpečí, 2023).

AI tool, such as Chat GPT, may be used for intentional learning, for example, it is capable to explain a lesson if a suitable prompt is given (Božić, 2023, p. 1). According to Cambridge dictionary (Cambridge dictionary, 2024), the prompt is actually a command that tells the AI what it is being asked to do. The more detailed it is, the better the quality of the response.

1.6 Learning applications and websites

Countless different apps exist for mobile phones, which can usually be found in the App Store if it concerns the Apple iPhone, or GooglePlay if dealing with phones with the Android operating system (UTB, 2024). Downloading them to the phone is easy and it is possible to start using them immediately.

However, learning tools are usually created both as websites and as mobile apps. Among these online tools are those that are purely focused on teaching English, such as English Central which presents itself as a personal English teacher (EnglishCentral, 2024). We can further divide these tools into those that are dedicated to language learning including English, such as Duolingo, Lyrics Training, or Mondly, which in addition offers the possibility to converse with an AI chatbot (Mondly, 2024). And those that have multiple purposes for learning, where English is not the only school subject that can be learned through them – Quizlet, Kahoot, Wordwall and Quizizz.

Furthermore, websites can be found on the Internet that are intended as a learning tool. These can be used both on a computer and on a mobile phone through the web browser. In this thesis, the questionnaire includes three websites that focus on learning English, of which Cambridge English serves as a support to prepare for the official language exams according to the CEFR framework (Cambridge English, 2024). In addition, there is LearnEnglish, run by the British Council, and Umimeanglicky, which is developed in the Czech Republic and follows the Czech curriculum (Umíme anglicky, 2024). Both are also dedicated to learning English. The last site included in the questionnaire is LiveWorksheets, which like some of the following sites has multiple uses in learning itself and English is not the only subject area (LiveWorksheets, 2024).

Moreover, some apps or websites use gamification features. According to Zounek et al (2021, chapter 5.2), embedding gaming elements has a positive effect on learner's motivation. Gamification in practise than means that apps use different rewards that the learner collects (Duolingo, Umimeanglicky) or the tool itself allows to create game that can be used both for a single player and for the whole class directly in the classroom (Kahoot, Wordwall or Quizlet).

As is obvious from their descriptions, all of the websites and apps mentioned above are designed for intentional learning, unlike, for example, social networking or streaming platforms, where learning English is unintentional.

2. Formal, non-formal and informal learning

The concept of learning can seemingly be linked to learning in institutions. In fact, one begins to learn before knowing what learning actually is. And what and how we learn is influenced not only by the person himself, but by everything surrounding him throughout his life. Learning doesn't end with getting the university diploma (Pugnerová, 2019, p. 92). According to Průcha, Walterová and Mareš (2009, p. 292) learning can be divided into categories called formal, non-formal and informal learning.

2.1 Formal learning

According to Průcha, Walterová and Mareš (2009, p. 65) formal learning refers to a form of education that is characterized by structure and intentionality. This structure is clearly defined. In the Czech Republic, it is provided by the Ministry of Education, Youth and Sports (MŠMT¹). The ČSÚ² (2016, p. 8) points out that this involves learning at different levels of schooling, from kindergarten to university. It further notes that formal learning is legally compulsory in the Czech Republic and its legislation is anchored in the Education Act³.

2.1.1 Formal learning of English language in the Czech lower secondary school

The binding document according to which schools develop their school curriculum (ŠVP⁴) is the Framework Curriculum for Primary Education (RVP ZV⁵). This document specifies the required competences to be achieved in each area of education and the minimum outcomes. It is therefore up to individual schools to develop their own curriculum in a way that does not conflict with this framework document (RVP ZV, 2023, p. 5).

As far as language education is concerned, English is included in the area called Language and Language Communication. The particular outcomes and competences are specified in the subchapter Foreign Language (RVP ZV, 2023, p. 27). The CEFR level of

¹ Ministerstvo školství, mládeže a tělovýchovy

² Český statistický úřad

³ Školní zákon č. 317/2008 Sb.

⁴ Školní vzdělávací program

⁵ Rámcový vzdělávací program pro základní vzdělávání

English that learners are expected to achieve at the end of the lower secondary school is A2 (RVP ZV, 2023, p. 17).

2.2 Non-formal learning

According to the Ministry of Education (MŠMT ČR, 2024), non-formal learning stands outside the mainstream school system, but it may take place in an organized way and may have some form of formal ending. Although it is seen as a voluntary activity on the part of the learner, it is intentional learning.

This is echoed by the National Institute for Education⁶ (NPI ČR, 2024), which adds that it is learning that develops not only children's interests but supports lifetime learning. However, it notes that this also includes primary art schools, which are governed by the Basic Arts Education Act, which is part of the Education Act, mentioned earlier in the chapter dealing with formal education.

It is therefore clear that there is a partial overlap rather than strict boundaries between the different forms of learning.

2.3 Informal learning

Průcha (2002, p. 78) explains the process of informal learning as an activity that happens quite unintentionally and the person who is learning has no idea that learning is happening. In contrast, Marsick and Watkins (2001, p. 25) state that "*Informal learning is usually intentional but not highly structured.*"

Hence, differing views suggest that the definition of informal education will not be entirely strict. However, the common thread between the different perspectives is that informal learning takes place outside the institutions that would manage this activity (Maciá and García, 2016).

The research in this thesis is concerned with the use of online technologies in English language learning, which can occur both deliberately in school or in-home preparation for school lessons, as well as quite unintentionally during the use of technology in learners' free time.

⁶ NPI ČR - Národní pedagogický institut České republiky

3. Developmental characteristics of the lower secondary school learners

Before focusing on the description of online technologies, it is beneficial to provide an overview of the general developmental specifics of learners of the lower secondary school. Namely, physical, cognitive, emotional, and social development. Krejčířová and Langmeier (2006, p. 143) refer to the period between the eleventh and fifteenth year of a person's life as the period of pubescence. Thorová (2015, p. 414), in contrast, refers to this stage as adolescence. According to Vágnerová and Lisá (2021, p. 374), who divide adolescence into early and late adolescence, it is the early phase of adolescence until the age of fifteen. It is very aptly summarized in the Pedagogical dictionary as “*the overall most tumultuous period in an individual's development*” (Průcha, Walterová and Mareš, 2009, p.237).

3.1 Physical development

From a physical point of view, this period represents a time of very important changes, it is a kind of milestone when the child's body begins to change into that of an adult. The whole process takes longer than the age of fifteen, yet it is a very dynamic phase. The physical changes are not the same for both sexes, although hormonal changes in the bodies of boys and girls are the reason they occur.

The girl's body experiences a growth of breasts and the appearance of pubic hair. Thorová (2015, p. 425) mentions that fat begins to be deposited on the body in typical areas, thus giving the girl's figure a feminine shape and making it distinctly different from that of a boy. The first menstruation also emerges.

Vágnerová and Lisá (2021, p. 383) point out that for boys there is typically accelerated growth and overall thickening. On the neck of boys, a bite can be noticed, and important is the change of voice (Thorová, 2021, p. 425). Of course, the boys' genitals and pubic and facial hair also develop.

Vágnerová and Lisá (2021, p. 377) believe that the brain undergoes certain changes that lead to its more efficient functioning. Krejčířová, Langmeier (2006, p. 143), Vágnerová a Lisá (2021, p. 376), and Thorová (2015, p. 424) agree that girls start puberty on average two years earlier than boys.

3.2 Cognitive development

The processes in the body are not isolated, the development of individual areas takes place on a parallel scale and is intertwined. The changes in the brain mentioned in the previous chapter also affect the behavior and thinking of boys and girls.

As Thorová (2015, p. 428) points out, learners are newly capable of abstract reasoning at puberty. As the brain works more efficiently to connect information, adolescents are able to present their views, using lived situations and accumulated experiences to make arguments. However, this may not always be received positively by others, which affects relationships. Krejčířová and Langmeier (2006, p. 150) agree, adding that a pubescent is capable of performing complex logical operations, working with hypotheses, and getting to philosophical questions. Vágnerová and Lisá (2021, p. 386) describe this period as “*a gradual release from dependence on concrete reality*”.

Thus, although adolescents are equipped with good problem-solving skills due to their diversely developed cognitive domains, their thinking is highly influenced by their emotions.

3.3 Emotional and social development

Adolescence could also be explained in another way as a time of detachment from parents, personality formation, and finding one's place in society and the world. The child longs to be independent, but on the other hand, he or she needs support, even though he or she may claim otherwise (Pugnerová et al, 2019, p. 79)

According to Vágnerová (2021, p. 399), a typical characteristic of adolescent individuals is unbalanced emotional behavior, which is related to insecurity in relation to the understanding of one's own identity. Although the emotional system is mature, emotional regulation is still underdeveloped. Thorová (2015, p. 430) says, it is this reduced regulatory capacity that may be responsible for the fact that adolescents are more likely to get into problematic situations, such as using drugs or going through an eating disorder. They also tend to be influenced by their own impulsivity and are prone to risky behavior, often linked to their social status.

For a teenager in this period, it is important to belong somewhere. However, this does not mean the family, but most often a peer group of friends, and there is also a growing need to find a close person, initially a friend of the same sex (Krejčířová and Langmeier, 2006, p. 154).

It is therefore evident that detachment from the family is a natural and important process. Every adolescent is different, and puberty and its associated features can be more or less intense for each individual. From a social point of view, this period ends with one important event, which in the Czech Republic is the completion of compulsory schooling, which usually occurs at the age of fifteen.

4. Literature review

Online technologies include a vast number of applications and programs that not only students can use in school but also in everyday life. For the purposes of this thesis, it was, therefore, necessary to narrow its focus to a specific group of students and to select only a few online tools to be examined. In order to do this, it was preceded by a study of the literature to gain an overview of what has already been researched in the field.

In the following, six papers will be presented, three from the Czech school environment, two of which are bachelor theses, and one of which is a case study. The other three come from international settings, namely a study from Slovenia, another from Ukraine, and the last one from Indonesia.

4.1 The methodology used in selected researches

All six selected papers work with quantitative research. However, they differ partly in their conception. As in the other cases, Králová (2022) works with a questionnaire created through Google Forms, which is distributed to respondents in an online version. The questions in the questionnaire are in the form of semi-closed answers, where the respondent partly chooses from the offered options and partly has the possibility to write in their own findings. In contrast, Polák (2019) chooses a combination of closed and open questions in the questionnaire.

The breakdown of some questionnaires is also interesting. For example, Černá, Bačíková, Chráska, et al (2021) also choose a questionnaire in Google Docs, but it is divided into three parts. The first part focuses on online technologies, the second part maps the time spent using these technologies, and the last part is devoted to demographic information. This division into three sections was also chosen by Wani, Aziz, and Frebriawan (2018), but unlike previous authors, they include demographic information in the first section of the questionnaire, followed by a section on learning activities outside the classroom, and conclude with a section on learning strategies. In addition, however, they supplement their research with a qualitative research method, the form of which consists of a semi-structured interview.

Yurieva, Musiichuk, and Baisan (2021) also come up with a combination of quantitative and qualitative methods. In their questionnaire, students assess the use of seventeen specific online tools, rate them using a Likert scale, and answer multiple-choice questions. Open-ended questions were used to generate qualitative data. In contrast, Jurkovič (2019) adds a so-called

CEFR-based⁷ self-assessment of language competence in addition to an online questionnaire and a semi-structured interview.

In summary, the questionnaire appears to be the most widely used method, and its design is based on the purely individual requirements of the researcher. Supplementing it with a qualitative method is possible, but not strictly necessary, and is particularly useful where it needs to clarify some specific ideas of the respondents. Based on these findings, a quantitative research method will be used for the purpose of this thesis, using an online questionnaire.

4.2 Research samples, the target group of respondents

The research sample of respondents in this thesis is pre-determined, they are students from lower-secondary school. The studies mentioned above are heterogeneous in terms of research samples and they do not always correspond to the group that is needed for the research in this thesis. But this is not a disadvantage, on the contrary, it underlines the need to conduct new research.

Králová (2022) conducted research among language teachers from fifty different Czech primary schools. Thus, this is the only sample where the respondents are not pupils or students. A relatively large number of teachers were contacted, thousand and twenty-three in total. Due to the stipulation that only language teachers could complete the questionnaire, the resulting sample ended up being only sixty-two teachers, yet it is not the smallest sample size among the previously mentioned research. By far the smallest research group was the Indonesian one examined by Wanni, Aziz, and Febriawan (2018), where 42 students from a private Senior High School in South Tangerang participated in completing the questionnaire. Five of them also responded in an interview afterward.

On the contrary, Jurkovič (2019) worked with the largest sample of students. He approached three Slovenian universities in Ljubljana, Maribor, and Primorska, where a total of nine hundred and five full-time undergraduate students aged eighteen to forty across different faculties participated in the questionnaire survey. Sixteen of them, aged nineteen to thirty-three, then participated in an interview. Likewise, Yurieva, Musiichuk, and Baisan (2021) conducted research in a university setting with both undergraduate and master's degree students. A total of one hundred and thirty-two students from the National University of Ostroh in Ukraine completed an online questionnaire. Similar to previous research, Černá, Bačíková, Chráska, et

⁷ CEFR (The Common European Framework of Reference for Languages)

al (2021) approached one hundred and twenty-six master's students, but this time specifically focused on English language teaching studies. However, only forty-nine of them completed the questionnaire.

The most recent Polák (2019) carried out research on the same age group of pupils as will be used in this thesis. These are the pupils of the lower-secondary grade of two Czech schools, namely the lower-secondary school in Domažlice and the lower-secondary school in Plzeň, with a total number of ninety-seven.

The use of online technology is primarily dependent on access to electronic devices and is used throughout school age and into adulthood. For this reason, research has looked at different groups of people of all genders. As mentioned earlier, the research in this thesis will focus on pupils from the lower-secondary school, with a specific school in mind, namely Labyrinth School in Brno.

4.3 The main aims of selected researches

Although the focus of each study differs, the common theme is the use of online technologies in English language learning.

For example, Polák (2019) in his study compares mobile apps aimed at practice in different school subjects, as well as their use in leisure time. As far as the English language is concerned, it looks in detail at the Duolingo app. Similarly, Králová (2022, p. 44) focuses her research quite closely on the use of online tools such as Kahoot, Quizlet, or WordWall using the SRS method, which is a method of successive repetition. This time, however, the focus is only on language education.

The only research focused on high school students aims to examine *"Indonesian students' experiences in using technology in learning English outside the classroom with regards to learner autonomy as an important capacity for students' learning success"* (Wanni, Aziz, Febriawan, 2018, p. 148).

Three other studies conducted at universities also had different objectives. Jurkovič (2019, p. 28) focused on informal activities and their use in students' smartphones. Likewise, Yurieva, Musiichuk, and Baisan (2021) looked at the experiences and perceptions of online tools outside the classroom. Recent research conducted in the Czech Republic by Černá, Bačíková, Chráska, et al (2021, p. 29) focuses on a comparison of the types of online technologies and the time spent using them.

As can be seen from the above information, online technologies are not only a part of the classroom itself but also influence to a large extent the time spent outside the classroom. Language can be practiced and taught both intentionally and unintentionally through technology. Therefore, the research in this thesis will also focus on the use of online technologies primarily outside the classroom and will only touch on their use during English language classes in a marginal way.

PRACTICAL PART

5. The aim

The primary reason for this research was that I was observing a significant shift in my own children's language development when using online technologies at home. Given that they are encouraged to use it at school as well, it raised curiosity about whether other learners have similar experiences.

The main aim is to find out if and what applications Labyrinth learners use, either intentionally or informally, to support their English language development and how this affects their language level. This aim is based on the following research aims:

1. To examine whether learners prefer more online technologies for intentional or unintentional English learning.
2. To discover how much time learners spend with online technologies.
3. To explore if learners who use online technologies more often achieve higher levels of English.

5.1 Research assumptions

Based on the research aims mentioned above, the following research assumptions have been determined:

1. Learners who use online technologies in English are more advanced in the English language than learners who don't or who use them less frequently.
2. Learners use online mobile apps rather than online tools on computers.
3. Learners prefer to spend time with entertaining websites, applications and programmes over online tools designed for intentional learning of English.

6. Research sample and methodology

In exploring the current state of knowledge, the theoretical section mentions research that has chosen a questionnaire as a research instrument. In this case, too, a questionnaire was chosen as a suitable form of data collection among the learners of the following selected lower secondary school. Polák (2019) also has his own research focused on lower-secondary school students, although he uses data from two different schools.

6.1 Labyrinth school Brno

Labyrinth is a school situated in Brno. It is a private school whose founder is LABYRINTH – gymnázium a základní škola, s. r. o. and it started its activity on the 1st of September 2016. It is important to mention that Labyrinth is a laboratory school, the first in the Czech Republic with this concept, it is also part of IALS⁸ (Labyrinth School, ©2022). *A laboratory school is a school affiliated to a university department or a teacher training structure* (LabSchool Paris, ©2024).

In 2016 the school started with two first classes and four teachers, since then it has gained trust among parents and pupils from Brno and the surrounding area and has grown into an almost complete school with almost three hundred and twenty pupils in total. In addition, the school's vision continues from September 2023 with a grammar school, for which the school received permission from the Ministry of Education in 2022 (MŠMT, 2024).

At the time of this research, the school had a complete primary level with a total of fifteen classes in five grades, which makes two hundred and twenty-three learners. On the other hand, the lower-secondary level was not yet complete. It normally consists of four grades, but Labyrinth had only three so far - sixth, seventh and ninth. The eighth grade was completely absent. This was due to the fact that only learners in seventh grade and below have been in this school since first grade. The ninth grade was created out of the need to place older siblings of younger learners. This level was attended by eighty-nine learners (Svozil, 2024).

6.1.1 English language learning at Labyrinth school

According to the Framework Curriculum (RVP CZ, p. 17), at the end of Year 9 learners usually achieve A2 level in English according to the CEFR. At Labyrinth, however, language

⁸ IALS (International Association of Laboratory Schools)

teaching is conceived differently and according to the school curriculum learners reach levels from A2/B1 to B2/C1 (ŠVP Labyrinth, p. 80-81).

This is possible by splitting learners into smaller groups, where there are always 3-5 groups across the whole grade which are divided according to different levels of English. The groups are flexible, assessment takes place twice a year and if a learner appears to have made more progress or needs more support, he or she is moved. Learners have been used to this system since the first grade (ŠVP Labyrinth, p. 80).

Another reason for the higher output level is the extra hours of English conversation (ŠVP Labyrinth, p. 83). Labyrinth learners also take several trips abroad during the school year, where they have the opportunity to test their language skills in real life (. Finally, the CLIL⁹ teaching system needs to be mentioned. As stated by Baladová and Sladkovská (2009), “*CLIL has a strong interdisciplinary character, where there is a link between language teaching and the subject taught. Language is the tool for teaching educational content, which in turn becomes the resource for language learning.*”

Jurkovič (2019) also worked with the CEFR scale in her research. She used a self-assessment grid that examined the English language level of undergraduate students from Slovenian universities.

6.2 Respondents

Respondents consists of lower secondary school learners at Labyrinth School. A total of 68 learners participated in the research, 30 girls and 38 boys.

The respondents can be further divided into different grades. Grade six is the most represented with a total of 30 learners, followed by grade seven with 28 learners and then grade nine with 10 learners. This is probably due to the fact that there are three parallel classes in grade six, while there are two classes in grade seven and only one class in grade nine. The school has no class in grade eight at all.

⁹ Content and language Integrated Learning

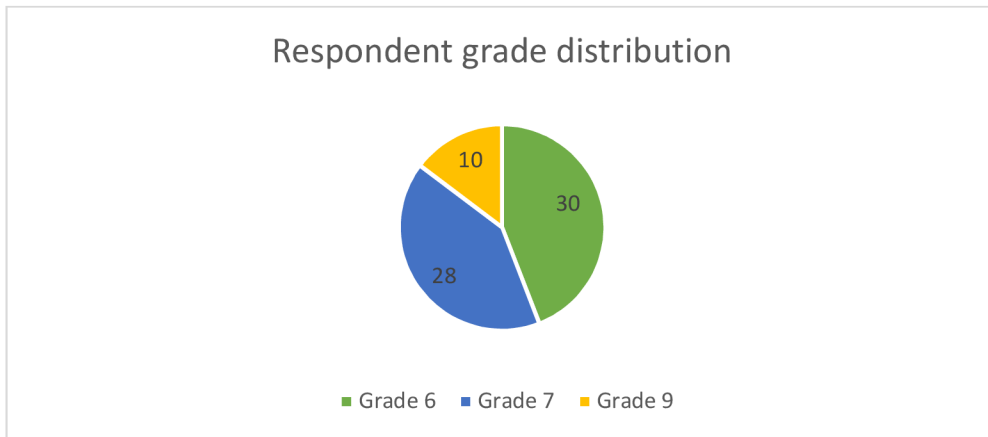


Figure 1. Respondent grade distribution

The age distribution of respondents corresponds to the usual age group of lower secondary school learners in the Czech school system. As shown in figure n. 3, learners aged 11-16 are represented. Questions on age, gender and grade group are included as questions 15, 16 and 12 in the questionnaire.

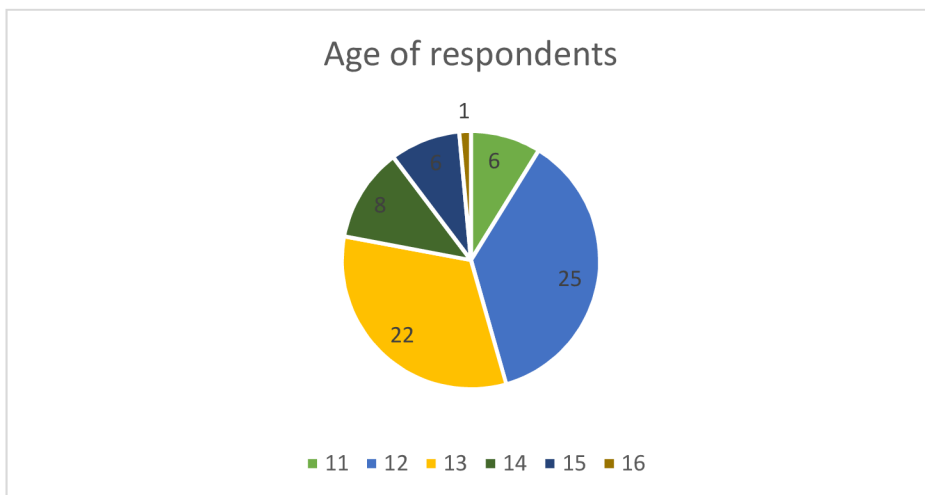


Figure 2. Age of respondents

6.3 Research methodology

Due to the anticipated large number of respondents, it seemed most appropriate to use a quantitative survey, where an online questionnaire can be used as an instrument that is easily distributed to respondents. In addition, a questionnaire is also advantageous in terms of time, as a relatively large amount of data can be collected in a short period of time. The quantitative method has proven itself in the researches mentioned at the end of the theoretical part of this thesis, which was one of the reasons for using the same methodology.

The questionnaire was created using an online tool Forms by Google. It is based on the requirements for questionnaire construction according to Chráska (2016, p. 164) which means the briefness of the instructions for completion, the clarity of the questions, the adequate length for this group of respondents and, the appropriate order of the questions. Demographic questions such as age and gender are listed at the end. Although their research focused on university students, the research by Černá, Bačíková, Chráska et al, (mentioned in the Literature review chapter) has a similar layout and focus.

Final version contains a total of 16 questions. In total, there are 11 semi-closed questions, of which 7 are multiple choice and 4 are single choice. In addition, 5 closed questions consisting of 2 single choice and 3 dichotomous questions were also applied.

Prior to administering the questionnaire to the school, it was pilot-tested with two learners aged 11 and 13 years, following which the initial written instructions were shortened. The average time to complete the questionnaire was found to be around five minutes.

The questionnaire could be filled in at school during computer science lessons, where a teacher was available to provide the necessary information or advice while filling in. As not all learners were present at the time, the questionnaire was also sent out via class groups on the mobile application WhatsApp. The survey was completed by learners voluntarily.

7. Research outcomes

In this part of the thesis, the students' answers to each question will be discussed, followed by a chapter focusing on research assumptions. The questions on age, gender and grade attended have already been covered in the chapter about respondents. The last separate chapter will be the conclusion.

7.1 Questionnaire outcomes

After a short introduction, the first question in the sequence looks at what websites, programmes and apps the learner uses to learn English and prepare for school. This is meant to be an intentional activity that may or may not take place during school lessons. Learners had the opportunity to select several answers and, if they wished, to add their own comments, which 15 of them did.

A total of 63, 2 % of learners identified YouTube as the most frequently used online technology. Duolingo was ranked second with 58, 8 % of the votes and Quizizz came in third with 52, 9 %. Another app worth mentioning is Kahoot!, which received 48, 5 % of the votes. Focusing on the answers that learners could write themselves, in five cases, a total of 7, 4 %, the answer was *Nothing* or *I do not use any*. The full range of responses can then be seen in figure 3.

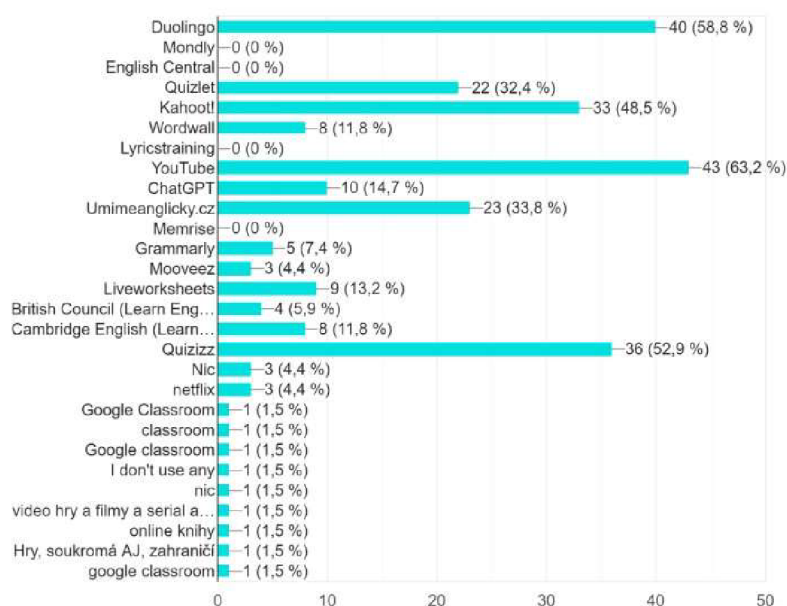


Figure 3. Chart for question 1

In the second question, which asks what learners use these websites, programs and applications for, learners could again choose several options and add to it if necessary. A total of 63, 2 % of learners indicated learning or practising vocabulary as their main activity, followed by learning or practising grammar with 60, 3 %, and learning or practising pronunciation as the third option with 39, 7 % of the votes. The other options received only units of percentages. However, again the option of *nothing* was chosen and this was chosen in a total of 7, 4 % of the cases.

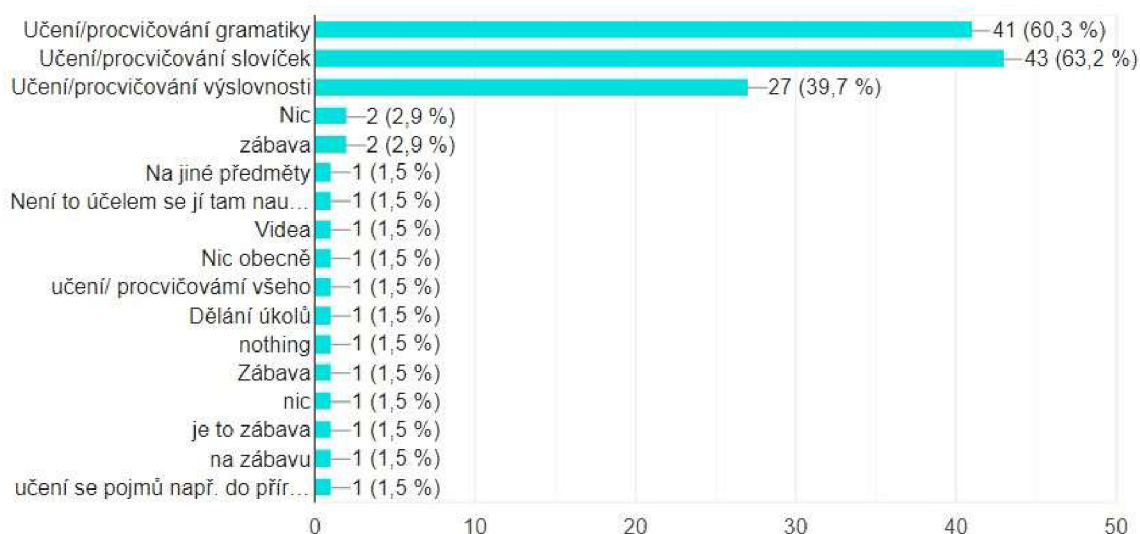


Figure 4. Chart for question 2

The third and fourth questions serve as a complement to the previous two, in both cases indicating the amount of time the learner spends with online technologies in intentional learning. However, in the case of the third question, the time period is Monday to Friday, i.e. the school week, while in the case of the fourth question, it is weekends or holidays. Only one option could be selected for these questions, but it was also possible to add your own.

During the school week, 47, 5 % of learners indicated that they purposely learn with online technology irregularly, for example, when they have homework. While 16.2% stated they use it half an hour a day, another 13, 2 % checked the *never* option.

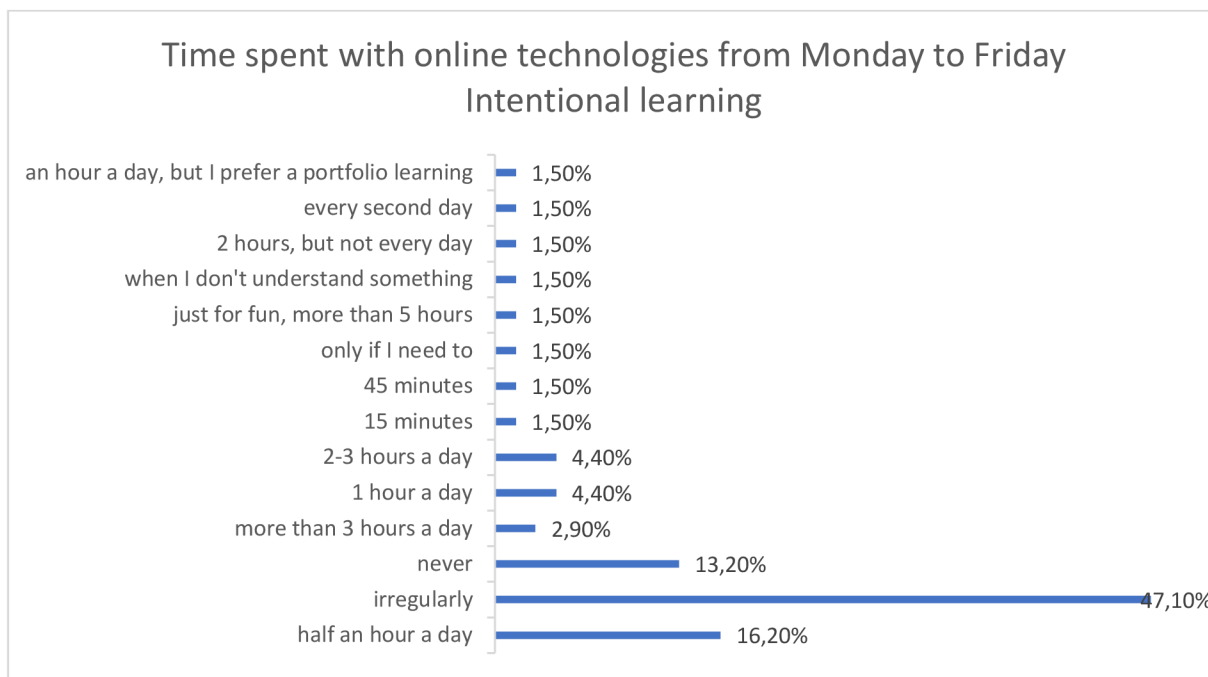


Figure 5. Chart for question 3

Even on weekends or holidays, 51, 5 % of learners indicated that they use online technology irregularly, but the percentage of those who never use it on those days increased to 22, 1 %. On the other hand, 10, 3 % of learners intentionally use online technologies for one hour a day on days off.

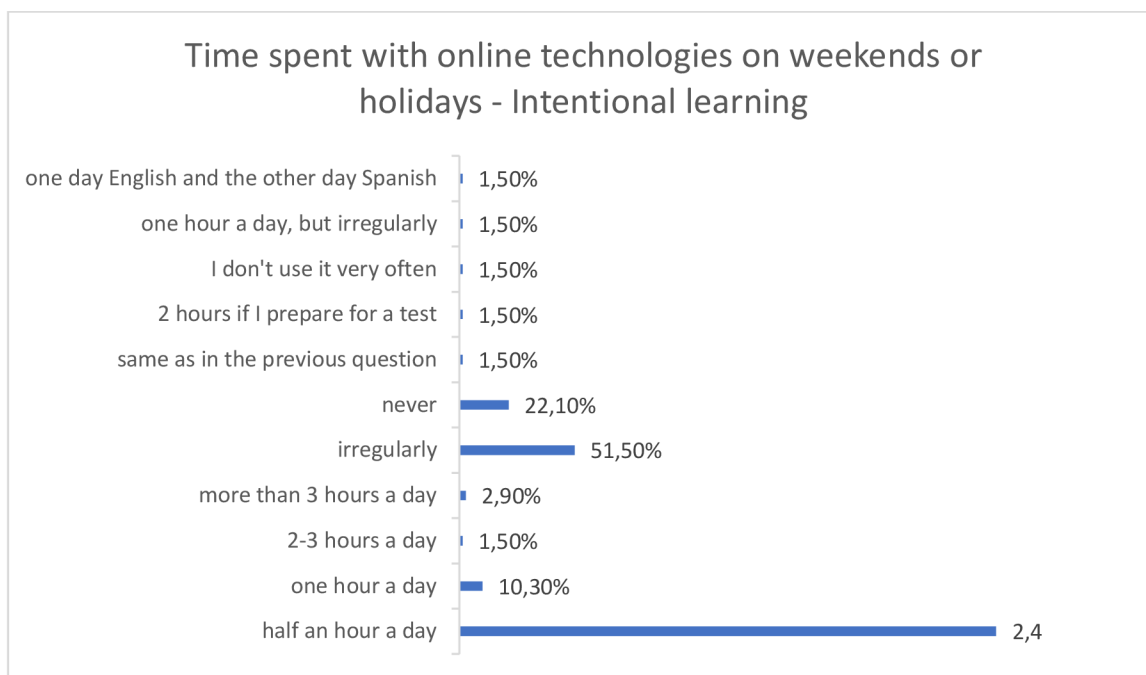


Figure 6. Chart for question 4

Unintentional learning of English is the subject of the fifth question. Learners are asked what kind of websites, apps, or programmes they use to encounter English apart from school preparation. This is a semi-closed question where multiple answers can be selected, as with most other questions, there is an option to insert their own answer.

As in the first question, which looks at apps used for intentional learning, YouTube was chosen as the most used online technology, with a total of 95, 6%. This is followed by streaming platform Netflix with 80, 9% of the votes, then Google with 73, 5% and last but not least, online games with 70, 6% of the votes. This time, however, no one chose or added the option of not using any online technology.

A comparison of the popularity of streaming platforms Spotify and Apple Music is interesting. In the theoretical part it is mentioned that Spotify has about five times more subscribers than Apple Music. Also in this research, about three times more students voted for Spotify (58, 8%) than for Apple Music (20, 6%).

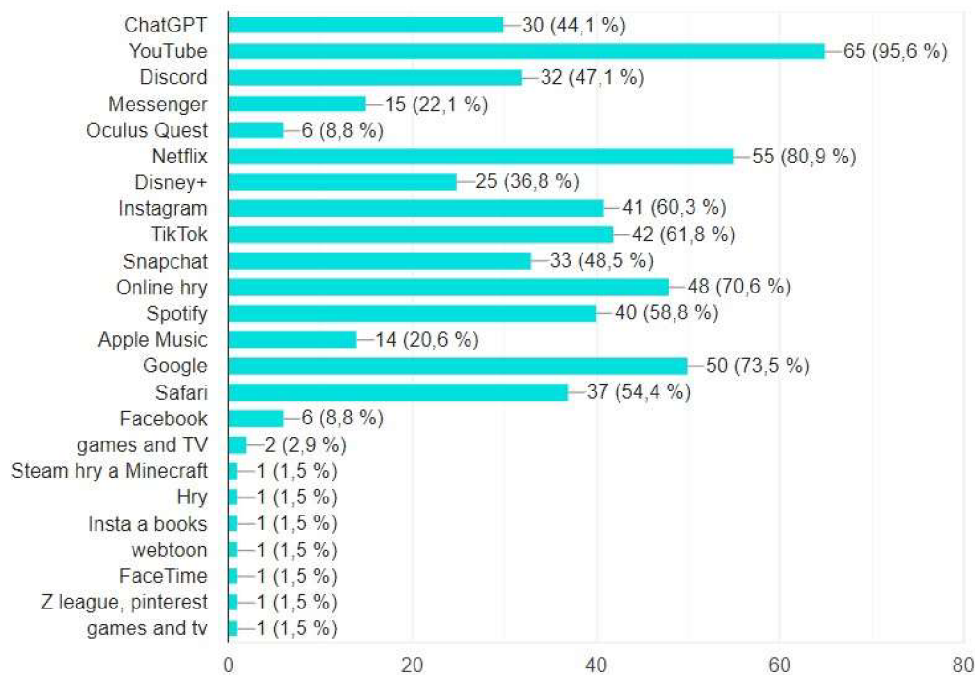


Figure 7. Chart for question 5

Question six investigates what activities learners use these websites, apps or programmes for, to complement the previous question. Students most often watch videos (95, 6%), listen to music (85, 3%), watch movies (80, 9%) or play video games (75 %).

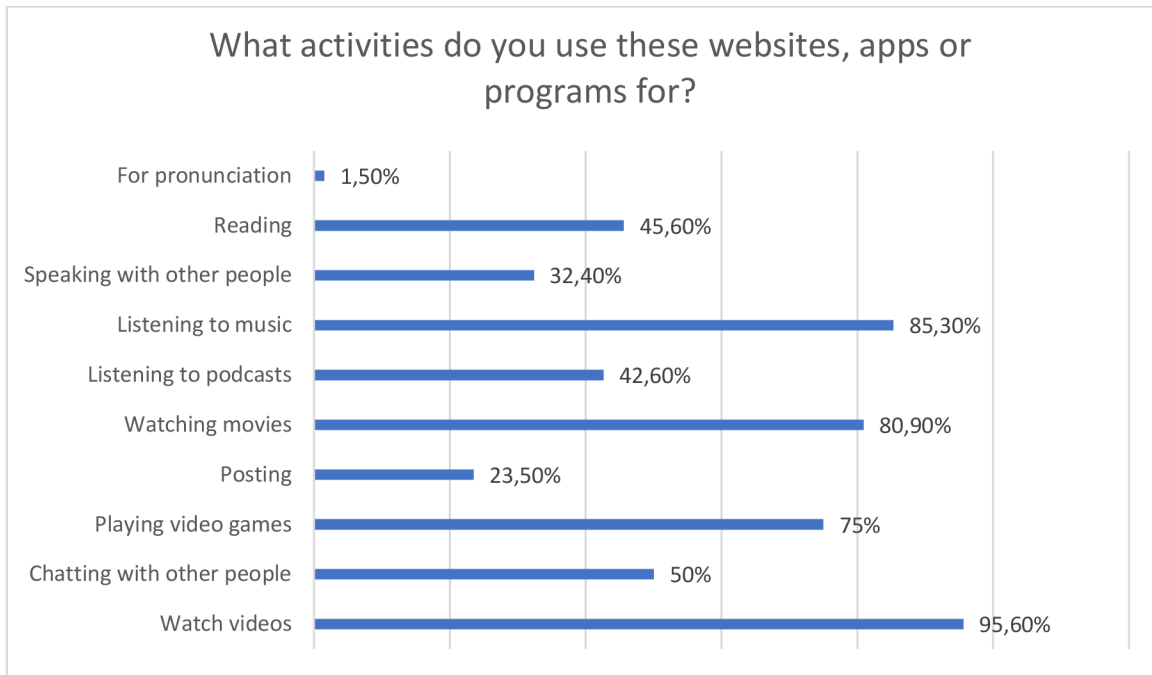


Figure 8. Chart for question 6

The next two questions, numbers seven and eight, again focus on the time learners spend with online technologies. However, unlike questions three and four, these are about leisure time, in other words, about fun and not about intentional learning. Nevertheless, question seven still focuses on the school week from Monday to Friday, whereas question eight is devoted to weekends and holidays. In both cases, only one answer could be chosen.

An equal 25 % of the votes in both cases belong to one hour, but also to two or three hours a day. 22, 1 % of students spend more than three hours a day with online technologies for entertainment, while 11, 8 % said they use online technology irregularly, not every school day.

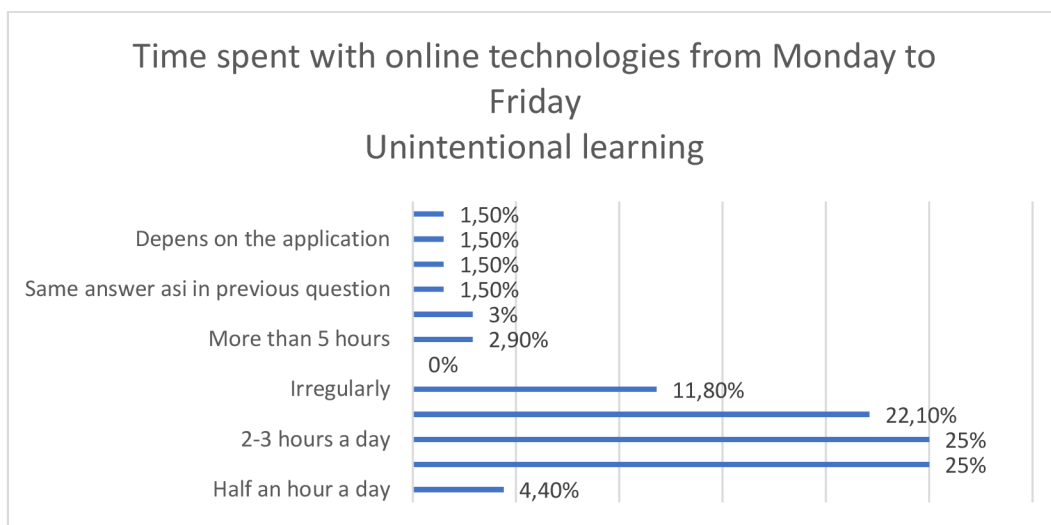


Figure 9. Chart for question 7

During the free days the time increases significantly. More than three hours are reported by 39,7% of the learners, and two to three hours are used by 19,1% of them. One hour a day with online technologies is indicated by 10,3% of learners, while irregular use, i.e. not every day, is indicated by 13,2% of them. 1,5% each had responses of seven or more and nine or more hours. Only 1,5% of learners never use online technologies in their free time on weekends or holidays.

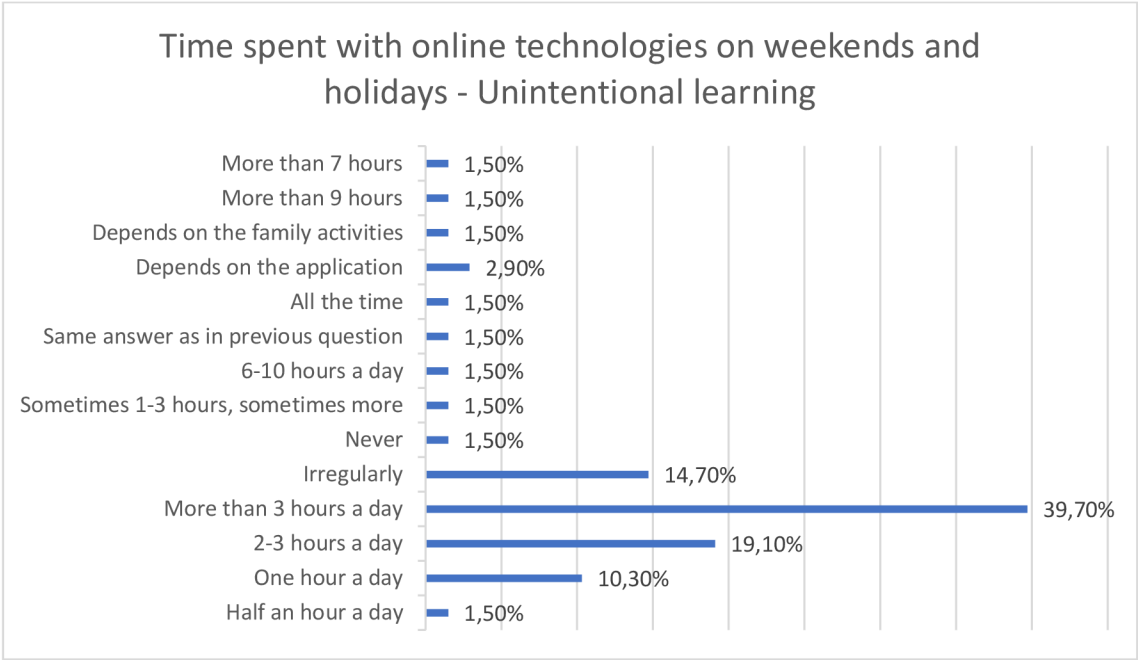


Figure 10. Chart for question 7

The next question is related to all the previous ones, as it explores which devices the learners use for websites, apps or programs. As learners may normally use different types of devices at school, they were allowed to select multiple options at once.

All pupils, thus 100%, indicated a mobile phone as the most common option, 83,8% of them had a computer or laptop in second place and the third most preferred choice was a television with 51,5%. It may sound interesting to note that the dishwasher, washing machine and oven were marked by exactly one student (1.5%). Although it may have been a joke, even these devices nowadays usually have a display to communicate with the user.

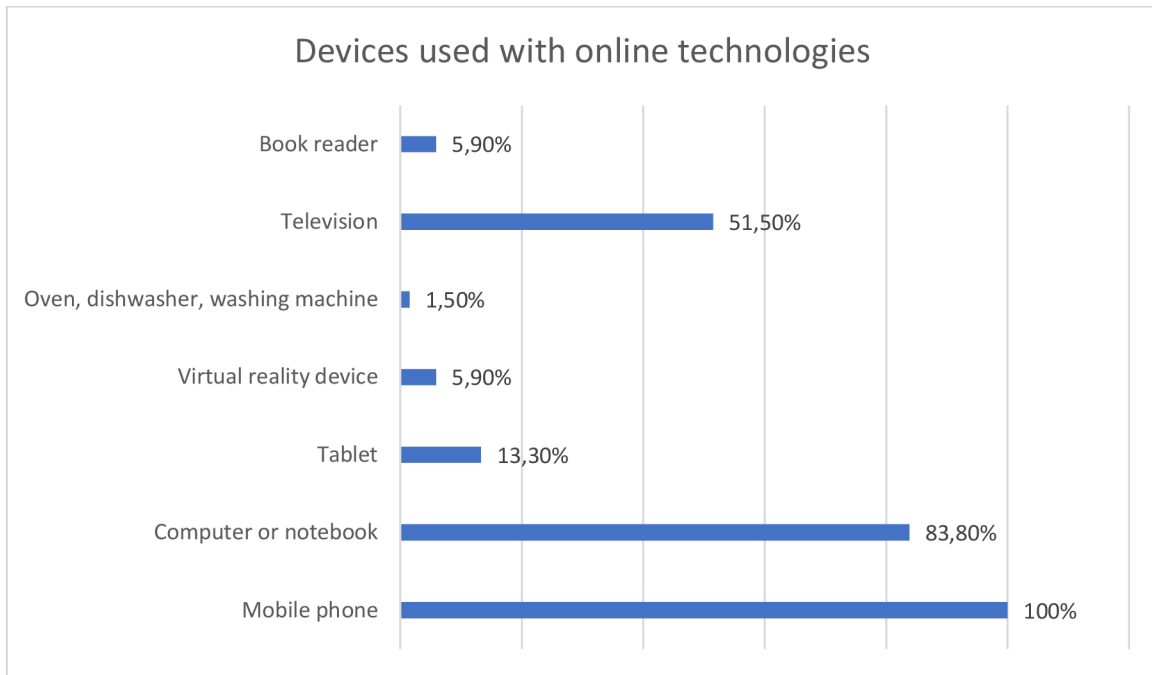


Figure 11. Chart for question 9

The last two questions on attitudes towards online technologies explore the advantages and disadvantages of using them. Both of them are semi-closed multiple choice questions.

The tenth question is about benefits. The majority of learners see the biggest advantage of online technologies as being fun (94, 1 %), followed by their constant availability (60, 3 %). 55, 9 % of learners voluntarily search for them and 42, 6 % see the advantage that some of them can provide immediate feedback. Another interesting answer is that learners are not afraid to make mistakes when using online technologies (41, 2 %), which is important for their further motivation to learn.

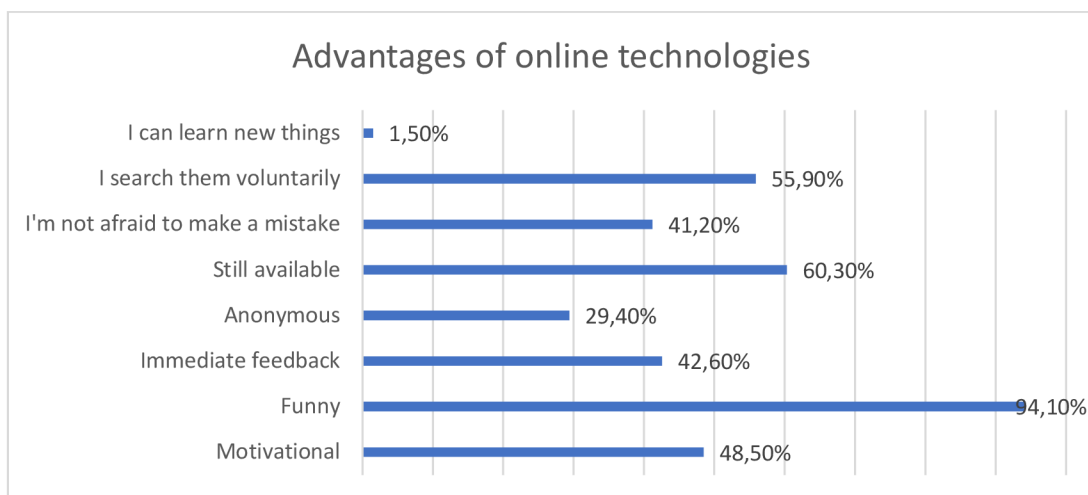


Figure 12. Chart for question 10

When it comes to the eleventh question about disadvantages, while 7, 3 % of learners do not see any disadvantages, another 61, 8 % of learners say that they spend a lot of time there. They cite the need to be connected to the internet as the second most important disadvantage (60, 3 %). Learners are also aware of the risks that may lurk, with 38, 2 % stating that online technology can be used for bullying and 33, 8 % pointing out that they may be contacted by complete strangers.

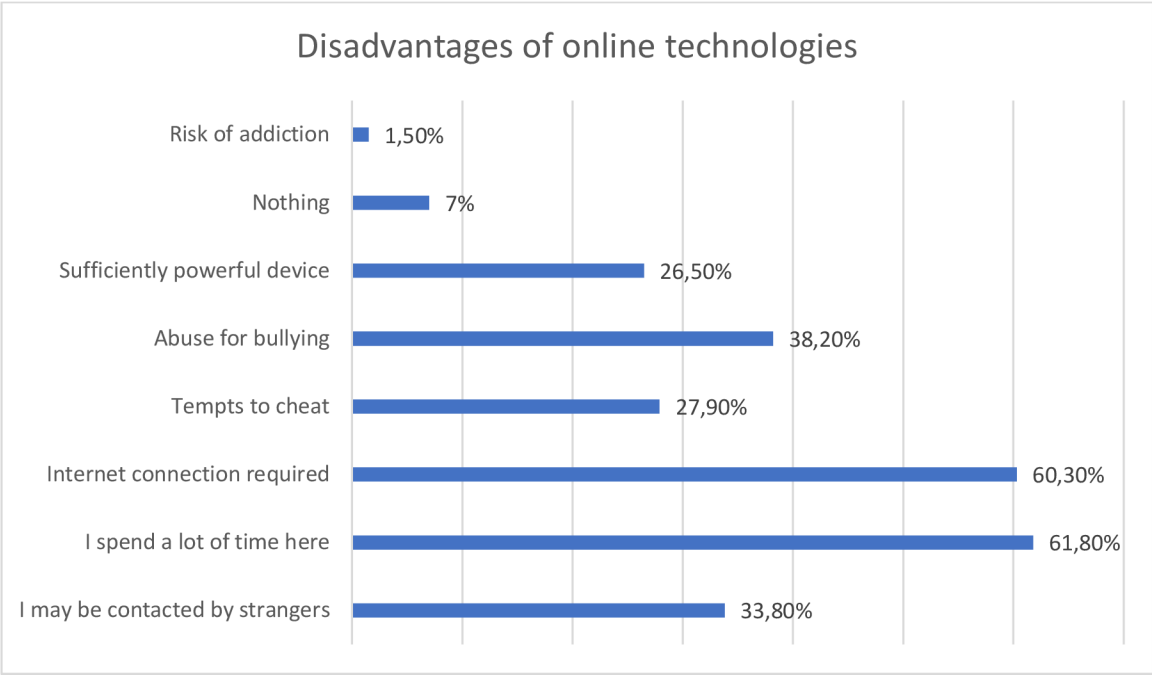


Figure 12. Chart for question 11

Learners from the sixth, seventh, and ninth grades participated in the research. Their distribution, which was part of question number twelve, is already shown in the graph in the chapter about respondents.

Question thirteen deals with the distribution of learners into different groups according to their language level. These groups are interpenetrable within the grade. The individual figures below show the number of learners who took part in the research, not the total number of learners in the whole grade. As a result, some groups may appear larger than others, although the school tries to balance numbers within groups as far as possible.

The most responses (30) were collected in the sixth grade, where learners are divided into 4 groups. 33, 3 % of the bilingual group participated, followed by the A2/B1 level groups, where 30 % and 16, 7 % of the learners took part. The A2 level group is represented by 20 %

of the learners. The percentage is calculated from the total number of responses in this grade, which is 30.

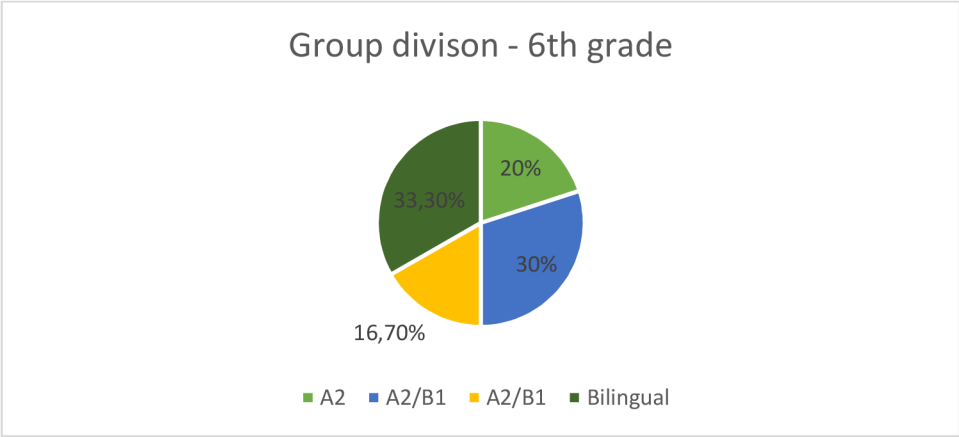


Figure 13. Group division in the 6th grade

In the seventh grade, 3 language groups were formed and 28 responses were collected. The bilingual group provided 28,6 % of the responses, a similar number to the least advanced group with A2/B1 level (25 %). Pupils from the B1/B2 level group were the most likely to complete the questionnaire, with a total of 46,4 % of the overall number of responses in this grade.

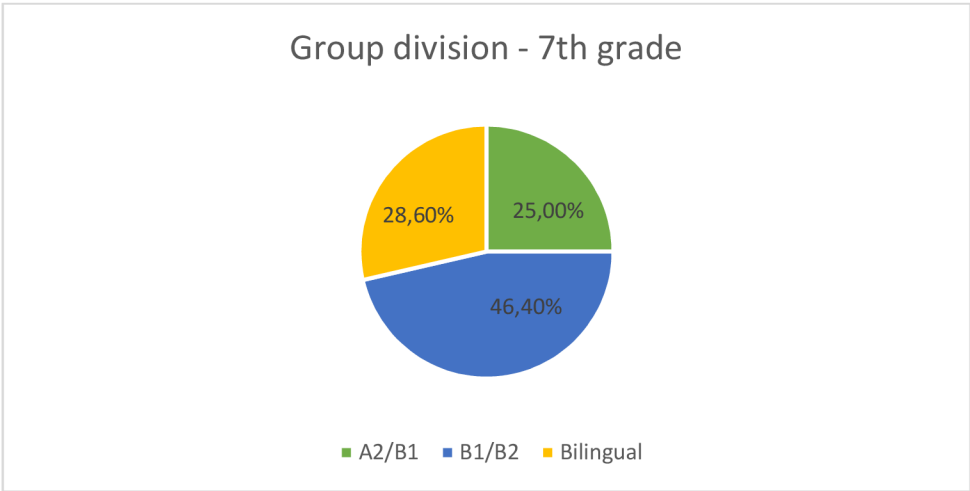


Figure 14. Group division in the 7th grade

In the ninth grade there is only one class, for this reason the least number of answers was collected and also there are only two language groups. The A2/B1 group provided 60% of the responses, while the B2/C1 group added 40%, with a total of 10 responses in this grade.

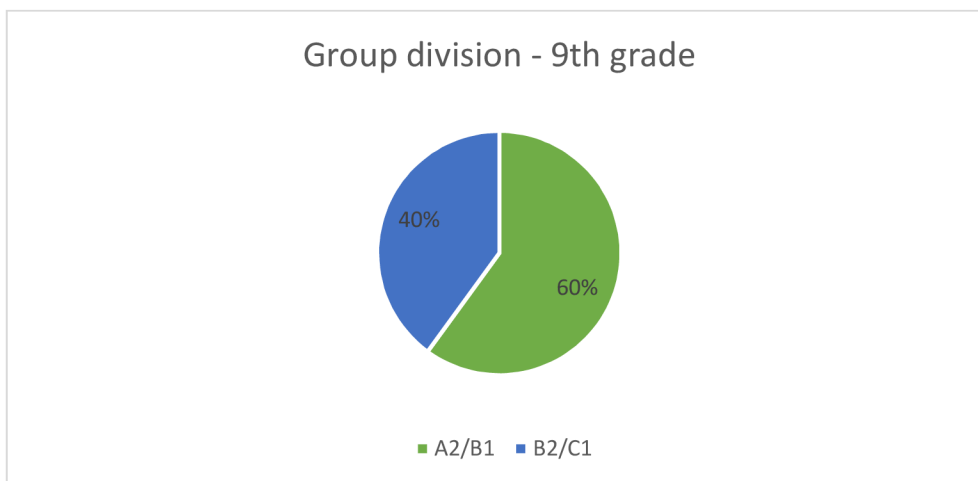


Figure 15. Group division in the 9th grade

The last question that has not yet been addressed is question 14. This is a supplementary question that ascertains the number of bilingual children involved in the research. Out of the 68 learners who participated, 9 are bilingual (13, 2 %). The school also states in its school curriculum that bilingual learners are commonly found in classrooms, which supports the language development of others (ŠVP Labyrinth, 2023, p. 75).

7.2 Assessment of the Research Assumptions

The accuracy of the assumptions was evaluated by comparing the data obtained from the individual responses of the learners. For clarity, the data were arranged in tables to visualize the results for each assumption.

1. Research assumption

Learners who use online technologies in English are more advanced in the English language than learners who don't or who use them less frequently.

In order to assess whether the assumption is correct, it was necessary to examine the data of students from each language group. Thus, there was a comparison of language level and time spent using online technologies. A group of the most and least advanced learners was selected from each grade. Time spent with online technologies was then compared between two groups of learners, a group of 22 learners from the most advanced groups and 19 learners from the least advanced groups.

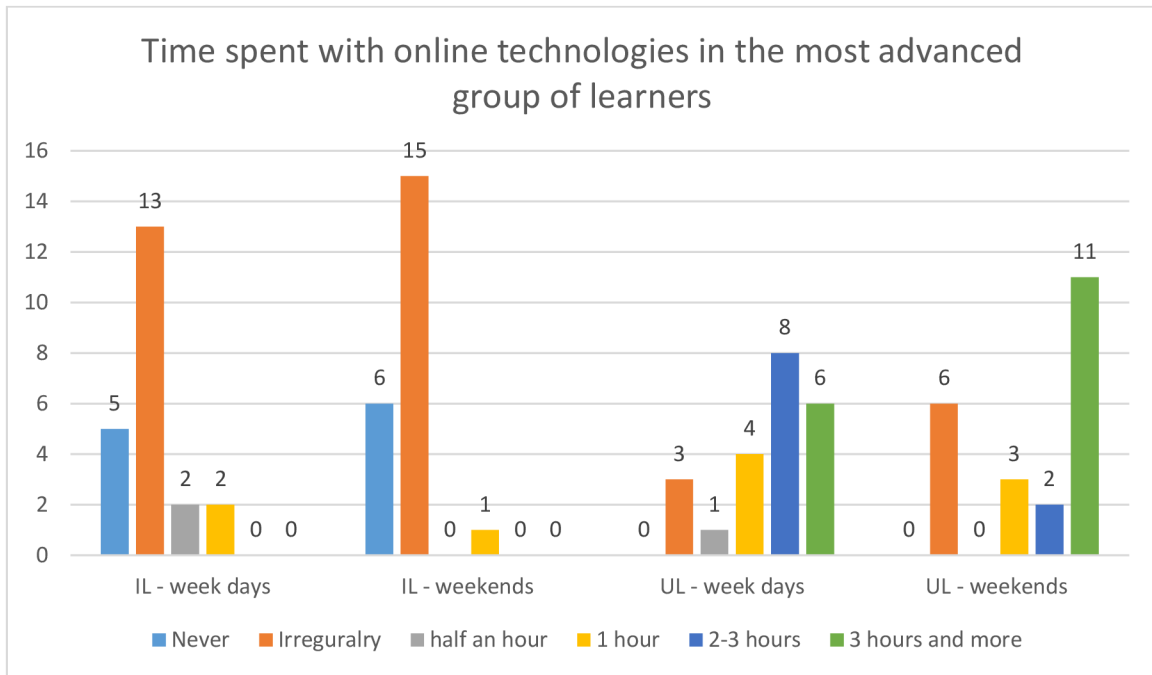


Figure 16. Time spent with online technologies in the most advanced group of learners

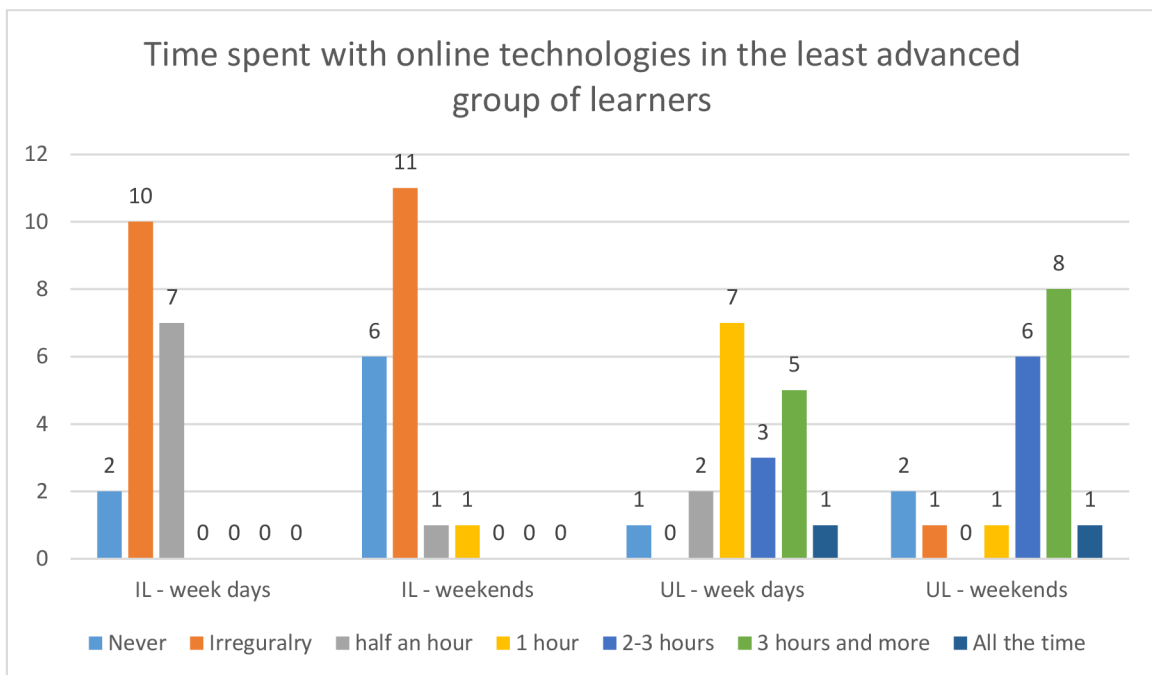


Figure 17. Time spent with online technologies in the least advanced group of learners

A comparison of the two figures above does not clearly show that more advanced learners use online technologies significantly more than less advanced learners. The abbreviation IL in figures 16 and 17 stands for intentional learning, in short, those technologies that are designed for learning English, while the abbreviation UL stands for unintentional learning.

If we consider the unintentional learning part for weekdays, 59.1% of advanced learners spend their school days with online technologies irregularly, 22.7% never. Compared to the less advanced students, 50.6% of students do so irregularly, 10.5% never, but 36.8% reported spending half an hour a day learning, compared to only 9.1% for the previous group. The less advanced learners in this case are those who are more dedicated to intentionally learning English.

During weekends, more advanced learners reported engaging in intentional learning in only 27.3% (the option irregularly) and 68.2% never engaged in intentional learning. This compared to less advanced learners who engage in irregular learning at 59.9%, but only 15.8% reported that they would not intentionally use online technology for learning on the weekend. Less advanced learners may be identified here as those who engage more in intentional learning on the weekends.

When working with technologies, unintentional learning leads the way for more advanced learners, with time spent 2-3 hours per day (36.4%), followed by three or more hours per day (27.3%), and 13.6% using technologies irregularly. Less advanced learners were most likely to choose the response 1 hour per day (36.8%), followed by 3 hours or more per day (26.3%), and then 15.8% chose 2-3 hours per day. This implies that more advanced students use technologies more during school days for unintentional learning.

On weekends, more advanced learners chose the 3 or more hours option (50%), followed by the irregular option (27.3%). Less advanced learners also selected 3 or more hours as the first option (42.1%), followed by 2-3 hours (31.6%). In this case, it could be said that less advanced learners spend slightly more time with online technologies.

2. Research assumption

Learners use online mobile apps rather than online tools on computers.

The second assumption can be compared with Figure 11, which shows the popularity of each device. It clearly shows that learners prefer mobile devices over a computer or laptop. The mobile phone option was indicated by 100% of the pupils, while the computer or laptop was indicated by 83.8% of the learners. Furthermore, the tablet is marked (13.3%), which also works with mobile applications. Therefore, the second research assumption was correct.

3. Research assumption

Learners prefer to spend time with entertaining websites, applications and programmes over online tools designed for intentional learning of English.

Figures 5 and 6, relating to the time spent on online tools designed for learning English, and Figures 9 and 10, which show the time spent on applications where learners are exposed to English but are not intentionally learning it, can provide some insight. However, to improve clarity, a new figure has been created that compares these data in one place.

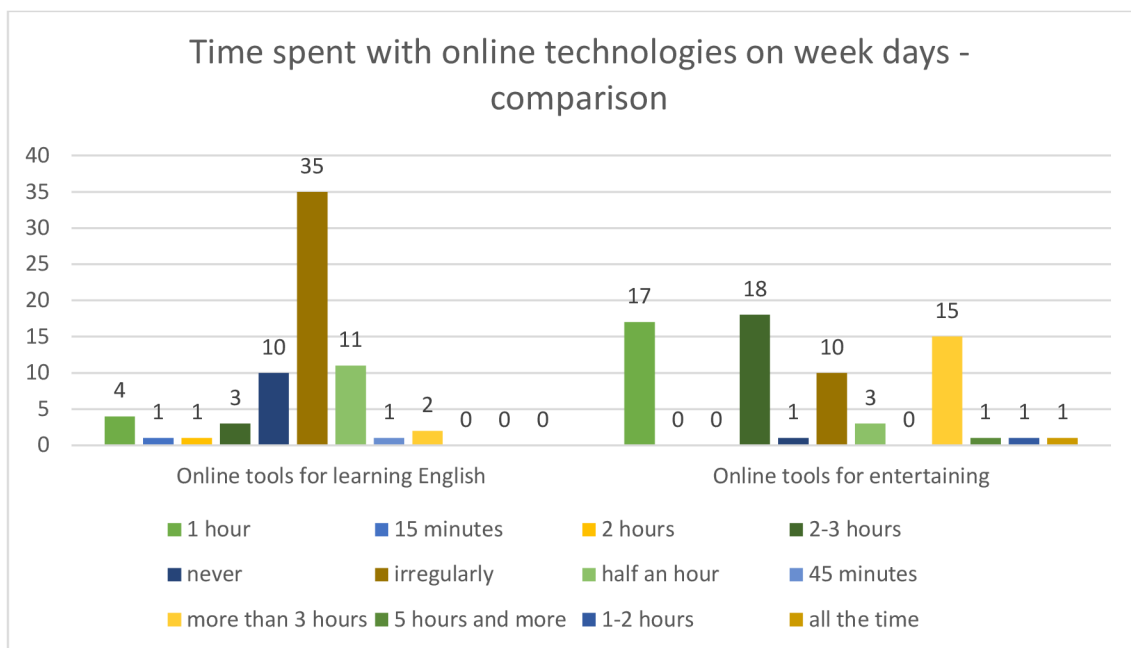


Figure 18. Time spent with online technologies on week days

In terms of the school day, Figure 18 shows that learners spend more time with online technologies that are not designed for learning English. Meanwhile, for the columns with learning tools, the most frequent answer is "irregularly" (35 learners), followed by "half an hour" (11 learners), and the third most frequently chosen answer is "never" (10 learners). With online technologies that are not primarily designed for learning, learners spend "2-3 hours" most frequently (18 learners), followed by "1 hour" (17 learners), and "more than 3 hours" was chosen by a total of 15 learners. The 'irregularly' column still stands out significantly in the graph, with 10 learners choosing this option.

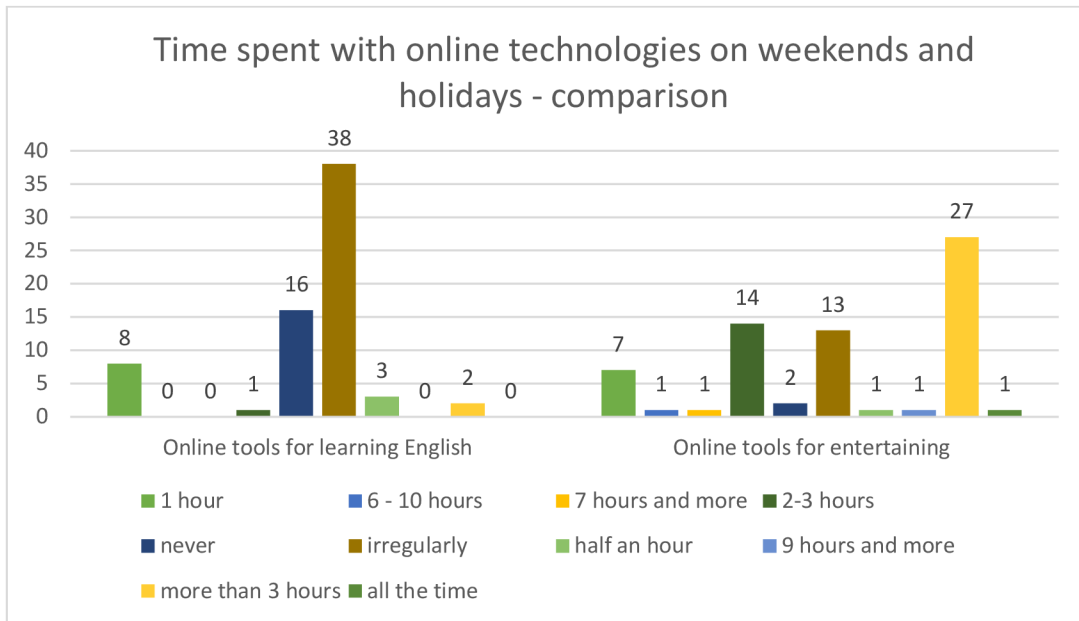


Figure 19. Time spent with online technologies on weekends and holidays

Figure 19 deals with weekends and holidays, the same trend as for school days can be observed again. That is, learners spend significantly more time with online technologies that are not primarily intended for education. Educational technology received the most frequent response of "irregularly" (38 learners), followed by "never" (16 learners) and the third response of "1 hour" was picked by 8 learners. However, if we look at online tools designed more for entertainment, we can see the first option "more than 3 hours" (27 learners), followed by "2-3 hours" (14 learners) and the third option "irregularly" was chosen by 13 learners. It is certainly worth mentioning the fourth position, where 7 learners voted for the option "1 hour".

Thus, the third research assumption can be confirmed.

Conclusion

In conclusion, this thesis highlights the significant role of online technology in enhancing English language proficiency among lower-secondary school learners.

The theoretical section of this thesis provided a comprehensive overview of online technologies and their relevance to learner development and various learning types. The research undertaken in this study sheds light on the specific applications and online resources that 68 learners at Labyrinth School utilize, both intentionally and unintentionally, to support their English learning. Through a detailed analysis of the theoretical foundations and practical research findings, it becomes evident that online technologies offer substantial potential for educational enhancement when used appropriately.

Although the research did not confirm that more advanced learners spend more time with online technologies, the findings indicate that online technologies where learners encounter English unintentionally, and which are used by learners of all levels, occupy a significant amount of their daily lives. Furthermore, learners seek them out voluntarily and consider them motivational. Černá, Bačíková, Chráska, et al (2021) mention in their research that using online technologies is motivating even for university students, who are future teachers.

The findings reveal that learners actively engage with a variety of online applications that contribute positively to their language proficiency. These applications serve as supplementary tools that enrich the formal curriculum, providing opportunities for informal and non-formal learning. It is necessary to mention that the learners at Labyrinth School achieve a higher level of English proficiency than is typical for a lower-secondary school.

In closing, this thesis underscores it would be advisable to encourage students to use online technologies in a meaningful way. Integrating online tools into the curriculum, even those not specifically designed for English language instruction but where students still encounter English, could have a significantly positive impact not only on their language skills but also on their motivation to learn.

BIBLIOGRAPHY

Online sources

- Apple. *Safari*. Apple Inc., n.d. Available at: <https://www.apple.com/safari/> [cit. 13. 06. 2024].
- ARIFANTO, M. a IZZUDIN, I. *Students' Acceptance of Discord as an Alternative Online Learning Media. International Journal of Emerging Technologies in Learning (iJET)* [online]. 2021, 16(20), s. 179-195. Kassel, Německo: International Journal of Emerging Technology in Learning. Dostupné z: <https://www.learntechlib.org/p/220539/> [cit. 09. 06. 2024].
- Baladová, G., Sladkovská, K. *Výuka metodou CLIL*. 12. února 2009. Dostupné z: <https://clanky.rvp.cz/clanek/o/z/2965/vyuka-metodou-clil.html> [cit. 14. 06. 2024].
- Bozic, Velibor. *Chat GPT and education*. [online]. ResearchGate, [cit. 13. 6. 2024]. Dostupné z: https://www.researchgate.net/profile/Velibor-Bozic-2/publication/369926506_Chat_GPT_and_education/links/64350844ad9b6d17dc4d3a79/Chat-GPT-and-education.pdf
- Business of Apps. *Apple Music Statistics*. [online]. [cit. 13. 6. 2024]. Dostupné z: <https://www.businessofapps.com/data/apple-music-statistics/>
- Cambridge Dictionary. Cambridge University Press, n.d. Available at: <https://dictionary.cambridge.org/dictionary/> [cit. 13. 06. 2024].
- Cambridge English. *Learning English*. Cambridge University Press & Assessment, n.d. Available at: <https://www.cambridgeenglish.org/learning-english> [cit. 13. 06. 2024].
- Concept | Labyrinth - laboratorní škola Brno. *Labyrinth - laboratorní škola Brno* [online]. Copyright © 2022 Labyrinth School [cit. 14. 04. 2024]. Dostupné z: <https://labyrinthschool.cz/koncept>
- ČESKÝ STATISTICKÝ ÚŘAD. *Šetření o vzdělávání dospělých (AES) 2016 – Adult Education Survey*. 2016. Dostupné z: <https://www.czso.cz/csu/xu/setreni-o-vzdelavani-dospelych-aes-2016-adult-education-survey>.
- De Leyn, T., De Wolf, R., Vanden Abeele, M., & De Marez, L. (2021). In-between child's play and teenage pop culture: tweens, TikTok & privacy. *Journal of Youth Studies*, 25(8), 1108–1125. <https://doi.org/10.1080/13676261.2021.1939286> [cit. 09. 06. 2024].
- DSpace at University of West Bohemia: *Mobilní aplikace vhodné pro domácí procvičování žáků základní školy*. DSpace at University of West Bohemia: NO TITLE [online]. [cit. 29.01.2023]. Dostupné z: <https://dspace5.zcu.cz/handle/11025/39252>
- DSpace at University of West Bohemia: *Volně dostupné online aplikace ve výuce cizích jazyků na základní škole*. DSpace at University of West Bohemia: NO TITLE [online]. [cit. 29.01.2023]. Dostupné z: <https://otik.uk.zcu.cz/handle/11025/47827>
- Google. *Chrome*. Google LLC, n.d. Available at: https://www.google.com/intl/cs_CZ/chrome/ [cit. 13. 06. 2024].

KOPECKÝ, Kamil a KREJČÍ, Vojtěch. *Sociální síť: Úvod do problematiky 2023* [online]. 2023. Dostupné z: <https://e-bezpeci.cz/index.php/ke-stazeni/odborne-studie/166-socialni-site-uvod-do-problematiky-2023-kopecky-krejci/file> [cit. 09. 06. 2024].

Laboratory School. Lycée International de Londres Winston Churchill [online]. [cit. 14.04.2024]. Dostupné z: [http:// https://en.labschool.fr/qu-est-ce-qu-une-lab-school](http://https://en.labschool.fr/qu-est-ce-qu-une-lab-school)

LABYRINTH – gymnázium a základní škola, s.r.o. *Dokumenty* [online]. Dostupné z: <https://labyrinthschool.cz/dokumenty> [cit. 09. 06. 2024].

Lang, V., & Šorgo, A. Recognition of the Perceived Benefits of Smartphones and Tablets and Their Influence on the Quality of Learning Outcomes by Students in Lower Secondary Biology Classes. *Applied Sciences*, 2023, 13(6), 3379. Available at: <https://www.mdpi.com/2076-3417/13/6/3379> [cit 14. 06. 2024].

MACIÀ, Maria a Iolanda GARCÍA. *Informal online communities and networks as a source of teacher professional development: A review. Teaching and Teacher Education*. 2016, 55, s. 291-307. DOI 10.1016/j.tate.2016.01.021. Dostupné z: <https://www.sciencedirect.com/science/article/abs/pii/S0742051X1630021X> [cit. 09. 06. 2024].

META. *Technologies* [online]. Dostupné z: <https://about.meta.com/technologies/> [cit. 09. 06. 2024].

Ministerstvo školství, mládeže a tělovýchovy ČR. 2024. *Neformální vzdělávání*. [online] Dostupné na: <https://msmt.gov.cz/mladez/neformalni-vzdelavani-1> [cit. 09. 06. 2024].

MŠMT. *Rámcový vzdělávací program pro základní vzdělávání (RVP ZV)* [online]. Dostupné z: <https://www.edu.cz/rvp-ramcove-vzdelavaci-programy/ramcovy-vzdelavacici-program-pro-zakladni-vzdelavani-rvp-zv/> [cit. 09. 06. 2024].

Muftah, M. (2022). Impact of social media on learning English language during the COVID-19 pandemic. *PSU Research Review*, [online] ISSN: 2399-1747. Available at: <https://www.emerald.com/insight/content/doi/10.1108/PRR-10-2021-0060/full/html#sec005> [cit 14. 06. 2024].

Národní pedagogický institut České republiky. 2024. *Neformální vzdělávání*. [online] Dostupné na: <https://archiv-nuv.npi.cz/cinnosti/analyzy-trhu-prace-rozvoj-kvalifikaci-dalsiho-vzdelavani/neformalni-vzdelavani.html> [cit. 09.06.2024].

ONLINE TECHNOLOGY IN INFORMAL LEARNING AND FORMAL EDUCATION: A CASE STUDY AMONG FUTURE ENGLISH TEACHERS — International Scientific Publications. 301 Moved Permanently [online]. Copyright © 2023 Science Events Ltd [cit. 29.01.2023]. Dostupné z: <https://www.scientific-publications.net/en/article/1002268/>

ResearchGate. *INFORMAL ENGLISH LEARNING WITH ONLINE DIGITAL TOOLS: NON-LINGUIST STUDENTS*. Find and share research [online]. [cit. 29.01.2023]. Dostupné z: https://www.researchgate.net/publication/353746168_INFORMAL_ENGLISH_LEARNING_WITH_ONLINE_DIGITAL_TOOLS_NON-LINGUIST_STUDENTS

Rytych, M. (n.d.) *Podpora osvojování AJ pomocí počítačových her*. České Budějovice: Jihočeská univerzita v Českých Budějovicích, Pedagogická fakulta. Available at:

https://www.pf.jcu.cz/images/PF/veda-vyzkum/edicni-cinnost/download/Podpora_osvojovani_AJ_pomoci_pocitacovych_her_-_Matej_Rytych.pdf [cit. 13. 06. 2024].

ScienceDirect. Online informal learning of English through smartphones in Slovenia. ScienceDirect [online]. Copyright © [cit. 29.01.2023]. Dostupné z: <https://www.sciencedirect.com/science/article/abs/pii/S0346251X18300484>

SPOTIFY TECHNOLOGY S.A. *Spotify Technology S.A. to Announce Financial Results for First Quarter 2024*. [online]. Spotify, [cit. 13. 6. 2024]. Dostupné z: <https://investors.spotify.com/news/news-details/2024/SPOTIFY-TECHNOLOGY-S.A.-TO-ANNOUNCE-FINANCIAL-RESULTS-FOR-FIRST-QUARTER-2024/default.aspx>

Svozil, Břetislav (2022). *Labyrinth - laboratorní škola Brno* [online]. Copyright © [cit. 14.4.2024]. Dostupné z: <https://labyrinthschool.cz/uploads/documents/1152634911-vyrocnizprava-2021-2022.pdf>

Školský rejstřík, MŠMT ČR. *MŠMT ČR* [online]. Copyright ©2013 [cit. 14.4.2024]. Dostupné z: <https://www.msmt.cz/vzdelavani/skolsky-rejstrik>

THE USE OF TECHNOLOGY IN ENGLISH AS A FOREIGN LANGUAGE LEARNING OUTSIDE THE CLASSROOM: AN INSIGHT INTO LEARNER AUTONOMY | Warni | LLT Journal: A Journal on Language and Language Teaching. [online]. [cit. 29.01.2023]. Dostupné z: <https://e-journal.usd.ac.id/index.php/LLT/article/view/1259/1277>

Umělá inteligence (AI). 2023. [online] Dostupné z: <https://ai.e-bezpeci.cz> [cit. 13. června 2024].

Umíme anglicky. *Zábavné procvičování angličtiny online*. n.d. [online]. Available at: <https://www.umimeanglicky.cz/> [cit. 14. 06. 2024].

Univerzita Tomáše Bati ve Zlíně. *Stahování aplikací*. n.d. [online]. Available at: <https://www.utb.cz/cvt/stahovani-aplikaci/> [cit. 14. 06. 2024].

Yao, Y., 2023. An Investigation on the Streaming Industry: With the Case of Netflix. SHS Web of Conferences [online], 165, 01001. [cit. 13.6.2024]. Dostupné z: https://www.shs-conferences.org/articles/shsconf/abs/2023/14/shsconf_cike2023_01001/shsconf_cike2023_01001.html.

YOUTUBE. How YouTube Works [online]. Dostupné z: <https://www.youtube.com/howyoutubeworks/> [cit. 09. 06. 2024].

ZOUNEK, Jiří et al. *Life and Learning of Digital Teens: Adolescents and Digital Technology in the Czech Republic* [online]. Dostupné z: <http://zounek.cz/life-and-learning-of-digital-teens-adolescents-and-digital-technology-in-the-czech-republic/> [cit. 09. 06. 2024].

Book sources

LANGMEIER, Josef a Dana KREJČÍŘOVÁ. *Vývojová psychologie*. 2., aktualiz. vyd. Praha: Grada, 2006. Psyché. ISBN 80-247-1284-9.

PRŮCHA, Jan, Eliška WALTEROVÁ a Jiří MAREŠ. *Pedagogický slovník*. 6., aktualiz. a rozš. vyd. Praha: Portál, 2009. ISBN 978-80-7367-647-6.

PRŮCHA, Jan. *Moderní pedagogika*. 2., přeprac. a aktualiz. vyd. Praha: Portál, 2002. ISBN 80-7178-631-4.

PUGNEROVÁ, Michaela et al. *Psychologie: pro studenty pedagogických oborů*. *Pedagogika*. Praha: Grada, 2019. ISBN 978-80-271-0532-8.

THOROVÁ, Kateřina. *Vývojová psychologie: proměny lidské psychiky od početí po smrt*. Praha: Portál, 2015. ISBN 978-80-262-0714-6.

VÁGNEROVÁ, Marie a Lidka LISÁ. *Vývojová psychologie: dětství a dospívání*. Vydání třetí, přepracované a doplněné. Praha: Univerzita Karlova, nakladatelství Karolinum, 2021. ISBN 978-80-246-4961-0.

ZOUNEK, Jiří; JUHAŇÁK, Libor; STAUDKOVÁ, Hana a POLÁČEK, Jiří. *E-learning: učení (se) s digitálními technologiemi: kniha s online podporou*. 2., aktualizované vydání. Praha: Wolters Kluwer, 2021. ISBN 978-80-7676-175-9.

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List of abbreviations

AI	Artificial Intelligence
CEFR	The Common European Framework of Reference for Languages
CLIL	Content and language integrated learning
ČSÚ	Český statistický úřad
IALS	International Association of Laboratory Schools
MŠMT ČR	Ministerstvo školství, mládeže a tělovýchovy České republiky
NPI ČR	Národní pedagogický institut České republiky
RVP ZV	Rámcový vzdělávací program pro základní vzdělávání
ŠVP	Školní vzdělávací program

Appendix – questionnaire

Online technologie v životech žáků 2. stupně ZŠ Labyrinth v Brně

Ahoj,

jmenuji se Veronika Bučková a jsem studentkou Univerzity Palackého v Olomouci. Prosim tě o vyplnění dotazníku o online technologiích. Budu ráda, když napíšeš jaké aplikace, programy či webové stránky používáš.

Dotazník je zcela anonymní, neboj se proto odpovídat pravdivě. Je zde celkem 16 otázek.

Děkuji Ti za tvou pomoc :)

1. Jaké webové stránky, programy a aplikace používáš pro učení angličtiny a přípravu do školy:

- Duolingo
- Mondly
- English Central
- Quizlet
- Kahoot!
- Wordwall
- Lyricstraining
- YouTube
- ChatGPT
- Umimeanglicky.cz
- Memrise
- Grammarly
- Mooveez
- Liveworksheets
- British Council (Learn English)
- Cambridge English (Learning English)
- Quizizz
- Jiné:
-

2. Na co tyto webové stránky, programy a aplikace používáš?

- Učení/procvičování gramatiky
- Učení/procvičování slovíček
- Učení/procvičování výslovnosti
- Jiné:
-

3. Jak často webové stránky, programy a aplikace používáš pro učení angličtiny a školní přípravu ve dny, kdy chodíš do školy?

- Půl hodiny denně
- 1 hodinu denně
- 2-3 hodiny denně
- Více než 3 hodiny denně
- Nepravidelně (například, když mám úkol)

- Nikdy
- Jiné:
-

4. Jak často webové stránky, programy a aplikace používáš pro učení angličtiny a školní přípravu o víkendech či prázdninách?

- Půl hodiny denně
- 1 hodinu denně
- 2-3 hodiny denně
- Více než 3 hodiny denně
- Nepravidelně (například, když mám úkol)
- Nikdy
- Jiné:
-

5. Jaké webové stránky, aplikace či programy, ve kterých se setkáváš s angličtinou, používáš mimo přípravu do školy?

- ChatGPT
- YouTube
- Discord
- Messenger
- Oculus Quest
- Netflix
- Disney+
- Instagram
- TikTok
- Snapchat
- Online hry
- Spotify
- Apple Music
- Google
- Safari
- Facebook
- Jiné:
-

6. Pro jaké činnosti tyto webové stránky, aplikace či programy používáš?

- Sledování videí v angličtině
- Chat s lidmi v angličtině
- Hraní her v angličtině
- Postování příspěvků v angličtině
- Sledování filmů v angličtině
- Poslech podcastů v angličtině
- Poslech hudby v angličtině
- Mluvení s lidmi v angličtině
- Čtení v angličtině
- Jiné:
-

7. Jak často webové stránky, programy či aplikace, ve kterých se setkáváš s angličtinou (mimo přípravu do školy), používáš ve dny, kdy chodíš do školy?

- Půl hodiny denně
- Jednu hodinu denně
- 2-3 hodiny denně
- Více než 3 hodiny denně
- Nepravidelně (ne každý den)
- Nikdy
- Jiné:
-

8. Jak často webové stránky, programy či aplikace, ve kterých se setkáváš s angličtinou (mimo přípravu do školy), používáš o víkendech či prázdninách?

- Půl hodiny denně
- Jednu hodinu denně
- 2-3 hodiny denně
- Více než 3 hodiny denně
- Nepravidelně (ne každý den)
- Nikdy
- Jiné:
-

9. Na jakých zařízeních webové stránky, aplikace či programy používáš?

- Mobilní telefon
- Počítač či notebook
- TV
- VR (Zařízení pro virtuální realitu)
- Elektronická čtečka knih
- Jiné:
-

10. Jaké jsou výhody používání webových stránek, programů a aplikací?

- Jsou motivující
- Jsou zábavné
- Některé umí poskytovat okamžitou zpětnou vazbu
- Jsou anonymní
- Nebojím se udělat chybu
- Jsou stále dostupné
- Vyhledávám je dobrovolně
- Jiné:
-

11. Jaké jsou nevýhody používání webových stránek, programů a aplikací?

- Mohou mě kontaktovat cizí lidé
- Trávím tu hodně času
- Musím mít připojení k internetu
- Svádí k podvádění
- Mohou být zneužity k šikaně
- Musím mít dostatečně výkonné zařízení (mobil, počítač apod.)

- Jiné:

12. Do kterého ročníku chodíš? (Následující 13. otázka se žákům zobrazí jen s nabídkou v jejich ročníku)

- 6. ročník
- 7. ročník
- 9. ročník

13. Do které anglické skupiny ve škole chodíš?

- Skupina paní učitelky Terezy (6. třída)
- Skupina paní učitelky Gabriely (6. třída)
- Skupina paní učitelky Martiny (6. třída)
- Skupina paní učitelky Jany (6. třída)

13. Do které anglické skupiny ve škole chodíš?

- Skupina paní učitelky Gabriely (7. třída)
- Skupina paní učitelky Jany (7. třída)
- Skupina paní učitelky Moniky (7. třída)

13. Do které anglické skupiny ve škole chodíš?

- Skupina paní učitelky Martiny (9. třída)
- Skupina paní učitelky Ailsy (9. třída)

14. Je některý z tvých rodičů rodilý mluvčí (pocházíš z tzv. bilingvní rodiny, ve které má některý z rodičů angličtinu jako svůj mateřský jazyk)?

- Ano
- Ne

15. Jsi chlapec nebo dívka?

- Chlapec
- Dívka

16. Kolik je ti let?

- 11
- 12
- 13
- 14
- 15
- 16