

Univerzita Hradec Králové

Pedagogická fakulta

Katedra anglického jazyka

**Challenges of Blended Learning: Engagement of EFL Learners at
Lower-Secondary Schools**

Diplomová práce

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Hradec Králové

2022



Zadání diplomové práce

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Studium: P16P0818

Studijní program: M7503 Učitelství pro základní školy

Studijní obor: Učitelství pro 2. stupeň ZŠ - tělesná výchova, Učitelství pro 2. stupeň ZŠ - anglický jazyk

Název diplomové práce: **Challenges of Blended Learning: Engagement of EFL Learners at Lower-Secondary Schools**

Název diplomové práce AJ: Challenges of Blended Learning: Engagement of EFL Learners at Lower-Secondary Schools

Cíl, metody, literatura, předpoklady:

Předkládaná diplomová práce se zabývá využitím technologií ve výuce anglického jazyka a jejich vlivem na zaujetí žáků v hybridní výuce. Teoretická část popisuje současnou znalost hybridní výuky, známé modely a související výhody a nevýhody hybridní výuky. Dále podává ucelený přehled edukativních technologií, aplikací a popisuje možnost jejich využití ve vzdělávání. Poslední část teoretické části poté poskytuje teoretický základ pojmu zaujetí a dává ho do souvislosti s motivací a využitím digitálních technologií ve výuce žáků druhého stupně ZŠ. Praktická část nejprve pomocí dotazníkového šetření zkoumá přístup žáků a motivaci k učení anglického jazyka. Dále pak pomocí kvaziexperimentu realizovaném ve třech skupinách žáků devátého ročníku základní školy ověřuje vliv využití technologií na zaujetí žáků během výuky čtení a poslechu v kontrastu s tradičním přístupem a identifikuje nejčastější výzvy související s využitím technologií ve výuce. Poslední část se poté zaměřuje na hledání vhodného výukového modelu pro hybridní výuku anglického jazyka na základní škole. Práce je psána anglicky.

Gavin Dudeney and Nicky Hockly : How to teach English with technology. Pearson 2008.

Lever-Duffy, Judy: Teaching and learning with technology. Pearson 2005.

Evans, Michael (ed.) Foreign-Language Learning with Digital Technology. Continuum 2009.

Spiro, Jane. Changing Methodologies in TESOL. Edinburgh University Press 2013.

Zadávací pracoviště: Katedra anglického jazyka a literatury,
Pedagogická fakulta

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Datum zadání závěrečné práce: 5.12.2018

Prohlášení

Prohlašuji, že jsem tuto diplomovou práci vypracoval (pod vedením vedoucí diplomové práce) samostatně a uvedl jsem všechny použité prameny a literaturu.

V Hradci Králové dne

Acknowledgement

I would like to thank my supervisor PhDr. Štěpánka Rubešová, PhD. for her priceless advice, recommendations, and encouragement during the writing process. I would also like to thank my wife and my whole family for their patience and support. Last, I would like to dedicate a huge thank you to all my former students that willingly participated in the research.

Anotace

Předkládaná diplomová práce se zabývá využitím technologií ve výuce anglického jazyka a jejich vlivem na zaujetí žáků v hybridní výuce. Teoretická část popisuje současnou znalost hybridní výuky, známé modely a související výhody a nevýhody hybridní výuky. Dále podává ucelený přehled edukativních technologií, aplikací a popisuje možnost jejich využití ve vzdělávání. Poslední část teoretické části poté poskytuje teoretický základ pojmu zaujetí a dává ho do souvislosti s motivací a využitím digitálních technologií ve výuce žáků druhého stupně ZŠ.

Praktická část nejprve pomocí dotazníkového šetření zkoumá přístup žáků a motivaci k učení anglického jazyka. Dále pak pomocí kvaziexperimentu realizovaném ve třech skupinách žáků devátého ročníku základní školy ověřuje vliv využití technologií na zaujetí žáků během výuky čtení a poslechu v kontrastu s tradičním přístupem a identifikuje nejčastější výzvy související s využitím technologií ve výuce. Poslední část se poté zaměřuje na hledání vhodného výukového modelu pro hybridní výuku anglického jazyka na základní škole. Práce je psána anglicky.

STONAWSKI, Jan. *Challenges of Blended Learning: Engagement of EFL Learners at Lower-Secondary Schools*. Hradec Králové: Pedagogická fakulta Univerzity Hradec Králové, 2022. Diplomová práce.

Klíčová slova: hybridní výuka, vzdělávání na druhém stupni ZŠ, výzvy, zaujetí, technologie ve vzdělávání

Annotation

The thesis deals with the use of technological devices in English language teaching and its impact on pupils' engagement in a blended learning context. The theoretical part provides insight into the current findings of blended learning and the known models, while the related advantages and disadvantages of blended learning are also outlined. A comprehensive overview of the potential employment of educational technologies and applications in education is specified. The last part of the theoretical section then provides a theoretical basis for the concept of pupils' engagement, which is set in the context of motivation and the use of digital technologies in the lower-secondary English classroom.

The practical part first investigates pupils' attitudes and motivation towards English by applying a questionnaire survey. Subsequently, a quasi-experiment has been conducted in three groups of 9th-grade students of a lower-secondary school focusing on the verification of the impact of technology on pupils' engagement in reading and listening skills lessons. Furthermore, the most common challenges related to the use of technology in teaching have been identified. Finally, the last section aims to find an appropriate blended learning model for English language teaching at a lower-secondary school. The thesis is written in English.

STONAWSKI, Jan. *Challenges of Blended Learning: Engagement of EFL Learners at Lower-Secondary Schools*. Hradec Králové: Pedagogical Faculty, the University of Hradec Králové, 2022. Diploma Thesis.

Keywords: blended learning, lower-secondary education, challenges, engagement, technology in education

Prohlašuji, že diplomová práce je uložena v souladu s rektorským výnosem č. 13/2022 (Řád pro nakládání s bakalářskými, diplomovými, rigorózními, dizertačními a habilitačními pracemi na UHK).

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Introduction

As the pandemics of COVID-19 struck the world, primary schools, secondary schools, and universities were forced to adjust their teaching methods according to the government's newly adopted measures. School buildings were officially closed, restricting teachers to teach their pupils in a face-to-face environment. With the new situation induced, blended learning, frequently also called hybrid learning, became a term firmly connected to the new situation. This brought many new challenges, yet also opportunities for making changes in the way students were being taught English.

Therefore, as the author of the thesis has been very eager to try new teaching methods that would be effective and engaging for the current generation of pupils at lower-secondary schools, the pandemic situation was seen as an opportunity for a possible change in education.

Nevertheless, the author's first ever contact with a blended learning course was before the worldwide outbreak of COVID-19, when taking a hybrid course while studying at Eastern Michigan University in a study abroad programme. The experience of blended learning gave him a much-needed insight into a student's perspective of attending a course that is enhanced by the use of technology. In addition, the beginning of the author's teaching career was also highly influenced by the use of technology, as only after a short time of teaching at a lower-secondary school, the schools were fully closed, and remote teaching became a nation-wide practice. This brought the author of the thesis insights into teachers' perspectives on the use of technology in education.

Such experiences of different blended learning situations further sparked the author's interest in finding the possibility of regular use of technology in the teaching practice and the possibility of using blended learning in general education.

Therefore, the author decided to conduct quasi-experimental research, searching for a viable blended learning model, examining the influence of technology on learners' engagement and exploring common challenges for blended learning in the context of EFL lower-secondary education.

The theoretical part deals with the concept of *blended learning*, providing an overview of the theory behind blended learning models, and the benefits and challenges of the concept. The second part discusses *educational technology*, giving an overview of possible software applications that may be used in lessons with the use of *digital technology*. The third part then describes *student engagement*, *engaged students*, the

classification of engagement as suggested by previous research, the possible ways of measuring engagement, various influences on engagement and the connection between engagement and *motivation*.

The practical part presents the research objectives, questions, and hypotheses that were examined. Moreover, the research design, research sample and data collection are described. The data was collected from a total of three questionnaires that were connected to the conducted two-week-long quasi-experiment in three EFL classes at a lower-secondary school. The whole quasi-experiment was organised during a period in the second semester of the school year 2021/2022 after the nationwide upper secondary school exams. The research first describes learners' motivation for learning English, uses the quasi-experiment to inspect the common challenges experienced in blended learning, examines the use of technology as a possibility to promote engagement and suggests a viable learning model for EFL classrooms at a lower-secondary school.

Theoretical part

1 Blended learning

This chapter outlines the basic concept and definition of blended learning while describing key methods and models used for education. Furthermore, it discusses the advantages and challenges of blended learning that could be faced by both teachers and pupils at lower-secondary schools.

Blended learning is a concept that is still quite young. In fact, a press release by EPIC learning from 1999 is generally believed to be the first occasion on which the term was coined down. (Friesen, 2012; Hrastinski, 2019) However, even though blended learning is a concept known for a limited time, the interest is considered to have been consistent throughout the years. (Hrastinski, 2019) Nevertheless, blended learning is very often discussed in the context of higher education with universities around the world offering hybrid/blended learning courses. (Dziuban, Graham, Moskal, Norberg & Sicilia, 2018; Graham, 2004) However, the term itself is not limited to one setting and is still considered as an evolving concept. (Halverson & Graham, 2019)

In a more dated paper, Valiathan (2002) talked about blended learning in the context of company training. He described it as a solution that combines various delivery methods among which could be collaboration software or web-based courses used in e-learning. (Valiathan, 2002) Even though, company trainings have different goals and methods than general education, the underlying basics are still very similar. (Blair & Serafini, 2016) Hence, the definition could be still considered somewhat valid given the context. However, there are possibly more fitting definitions that were proposed specifically for the context of general education.

An example of such a definition is from Staker and Horn (2012) who stated that: “Blended learning is a formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path, and/or pace.” (p.4) This definition is targeted at general education, which makes it more fitting to the context of this thesis.

Nevertheless, when outlining the concept of blended learning, it is necessary to state key points and features that underline the term. A very typical feature that is agreed upon by several authors is that unlike traditional face-to-face learning, which is strictly delivered without online content, blended learning combines traditional face-to-

face learning with learning online. (Graham, 2004; Dudeney & Hockly, 2007; Allen & Seaman, 2007) This suggests that the blending occurs by the means of content delivery.

In such context, Allen and Seaman (2007) suggested that blended learning should have approximately 30 to 79% of content delivered online, as visible in Figure 1. However, the content delivered is not the only conceptual underlining, as there are more different concepts, such as those suggested by Driscoll (2002):

- a) To combine or mix modes of web-based technology (e.g., live virtual classroom, self-paced instruction, collaborative learning, streaming video, audio, and text) to accomplish an educational goal.
- b) To combine various pedagogical approaches (e.g., constructivism, behaviourism, cognitivism) to produce an optimal learning outcome with or without instructional technology.
- c) To combine any form of instructional technology (e.g., videotape, CD-ROM, web-based training, film) with face-to-face instructor-led training.
- d) To mix or combine instructional technology with actual job tasks to create a harmonious effect of learning and working.

(p. 54)

As suggested, the term blended learning is a very broad term that encompasses many different sorts of blendings. Cronje (2020) suggested that the definition of blended learning should be focused on learning. Moreover, with this considered, he also defined blended learning, as: “The appropriate use of a mix of theories, methods and technologies to optimise learning in a given context.” (Cronje, 2020, p.120) However, it is generally advised to state what blended learning means for individual researchers and practitioners when discussing the definition. (Hrastinski, 2019; Cronje, 2020)

In addition, Fuller (2021) proposed that the modern blend comprises of: “all computer-mediated instruction in the form of both asynchronous online instruction and synchronous instruction via videoconferencing and computerized webinar tools; the physical environment and face-to-face instruction are absent”. (p.5) This definition seems to be the most fitting to the situation induced by the COVID-19 pandemic during the earlier stages where the students were learning in a fully distant matter. However, the definition is fitting only to certain stages of the blended learning situation, hence it is appropriate to suggest a definition specific to the context researched by this thesis.

In conclusion, defining blended learning can be problematic, as the term is very ambiguous. Hence, consideration of specific context or situation is necessary to define the term.

1.1 Models of blended learning

This chapter presents some of the existing models of blended learning present in the literature.

In other to fully understand the concept, *blended learning* needs to have a certain classification or framework. Kaur According to Halverson & Graham (2019): “engaging and effective blending can involve countless possible combinations of human- and technology-mediated instruction.” In the case of blended learning, several authors (Valiathan, 2002; Staker & Horn, 2012; Bonk, C. J., & Graham, C. R., 2012; Kaur, 2013) talk about so called *models* of blended learning. These *models* can function as an inspiration for institutions and individuals when implementing the blended learning concept into practice. (Kaur, 2013)

Nevertheless, Halverson & Graham (2019) propose that there can be obstacles to not having any clear understanding of indicators of blended learning engagement, which usually play a crucial role in finding the suitable models for effective practice.

In this paper, the author takes into account three model classifications proposed by different authors from distinct backgrounds. The first proposed models inspected in this thesis are by Valiathan (2002) according to what is the main drive for each of the models. (see Table 1)

Table 1

Classification of blended learning models in business training

Model	Definition
Skill-driven learning	Learning that combines self-paced learning with instructor or facilitator support to develop specific knowledge and skills.
Attitude-driven learning	Learning that mixes various events and delivery media to develop specific behaviours.
Competency-driven learning	Learning which blends performance support tools with knowledge management resources and mentoring to develop workplace competencies.

Note. This chart provides an overview of models adapted from Valiathan (2002)

In comparison, Graham's (2006) models bring a more general approach to the classification, proposing that blended learning occurs on a variety of different organisational levels. (see table 2)

Table 2

Classification of blended learning according to organisation

Level	Definition
Activity level	Blending, where the activity level occurs when a learning activity contains both face-to-face and computer-mediated learning.
Course level	Blending, where the blending happens inside a course, combining distinct face-to-face learning together with computer-mediated activities.
Programme level	Blending of courses, where the student chooses a mix of face-to-face and online courses specific for a study programme.
Institutional level	Blending on an institutional level means that the institution has made a commitment to blend face-to-face and online instruction.

Note. Adapted from Graham (2006)

While the models proposed by Graham (2006) seem to be more relevant to general education than the models by Valiathan (2002), which were connected to e-learning in a business setting, Staker and Horn (2012) came up with even more specific classification that reflects the current use in K-12 education. (see table 3)

Table 3

Classification of blended learning emerging in K-12

Model	Definition
Rotation model	A programme in which students rotate on a fixed schedule between learning modalities, where at least one of them is online learning.
Flex model	A programme in which content and instructions are delivered primarily by the internet, where students move on an individual schedule among learning modalities. Teacher support may be available in various forms either online or face-to-face.
Self-blend model	A scenario in which students choose one or more courses to be taken entirely online. The main difference from the other models is in the scenario being an individual, not a whole-school experience.
Enriched-virtual model	A whole-school experience in which students divide their time between attending face-to-face learning and remote learning using online delivery of content and instruction.

Note. Adapted from Staker and Horn (2012)

All three models' aim are slightly different. However, there are some correlating aspects as well. The focus of all the models is on some form of education or training that is combined with some part of learning happening in an online environment.

Valiathan's (2002) classification is focused on work-related training and developing workplace competencies. Hence, it is not very relevant to this paper. However, it was considered as to provide further context into the historical development of blended learning models. On the other hand, the classification proposed by Graham (2006) is considered as more general, yet still focused on general education, which makes it more relevant to the research. However, the models proposed by Staker and Horn (2012) are targeted at K-12 education, which would seem to be the most relevant in the context of this thesis.

Even though some of the models from the literature may seem as more relevant to the context of this thesis, blended learning models can be hardly viewed as fully relevant due to the lack of research on the subject. (Halverson & Graham, 2019)

In addition, Fuller (2021) thinks of blending as of dynamic and evolving, requiring additional research for understanding the ambiguous terminology. Hence, there is a need for specific context to build a model fitting to the specific situation.

In conclusion, it is rather difficult to find models that can be viewed as relevant to the situation of education system observed in the Czech Republic. Therefore, later in this thesis, a new model is proposed. (See 4.10.4)

1.2 Synchronous and Asynchronous learning

This chapter defines the terms synchronous and asynchronous learning, while discussing the main differences and uses for both systems.

Synchronous and asynchronous learning are terms often discussed in relation to e-learning or distance education. (Giesbers, Rienties, Tempelaar, & Gijssels, 2014; Hrastinski, 2008) Both terms are based on the idea of learning happening either in a real time or on a flexible routine. Synchronous learning happens at a real time, where a participation from both sides is necessary at the same time. (Hrastinski, 2008; Tauchmannová, 2016) On the other hand, asynchronous learning happens on a flexible schedule where the learners do not participate in a real time and communicate or cooperate solely on a flexible basis. (Hrastinski, 2008; Tauchmannová, 2016) According to Hrastinski (2008) asynchronous learning is generally facilitated by messaging apps, online forums and collaborative spaces that do not require participants to be online at the same time. Synchronous learning, on the other hand, connects the participants via some form of videoconferencing, enabling them to discuss and interact in the real time. (Hrastinski, 2008)

Asynchronous and synchronous online learning is a widely discussed topic. (Chou, 2002; Hrastinski, 2008; Yamagata-Lynch, 2014; Northey, Bucic, Chylinski, & Govind, 2015) The debate is mainly focused on benefits and challenges of the systems. However, Hrastinski (2008) argues that the main debate should shift towards understanding which situations require each type of e-learning, as both types complement each other.

Hence, Hrastinski (2008) proposed given methodology for the utilisation of asynchronous and synchronous learning, as seen in Table 4.

Table 4

Synchronous and asynchronous e-learning comparison and methodology

Factor	Asynchronous E-learning	Synchronous E-learning
Use	Reflecting on complex issues When synchronous meetings cannot be scheduled	Discussing less complex issues Planning tasks
Reason	More time for reflection because of no necessity of immediate answer	Higher engagement and commitment because of the requirement of immediate answer
Media	Asynchronous means. (E-mail, discussion boards, blogs, etc.)	Synchronous means (videoconferencing, instant messaging, etc.)

Note. Adapted from Hrastinski (2008)

This methodology provides an overview of possible use of both types of e-learning, describes the reasons for the usage and works as a framework for designing course with online component of lessons.

In conclusion, both synchronous and asynchronous learning has its space in online learning. However, it is up to teachers to assess and reflect upon benefits and challenges for each of the e-learning types in their situation when designing a course or a blended learning model.

1.3 Benefits

This chapter provides an overview of blended learning benefits, which may be used for decisions on implementing blended learning concept in education. The benefits are then discussed in connection to learning at lower-secondary schools.

As it was already mentioned, blended learning concept may offer certain benefits, which could make the concept interesting for educators. In research by Smyth, et al. (2022), students at the School of Nursing and Midwifery experienced learning in a blended learning concept. The research found benefits that were divided into 4 categories:

- Accessibility and flexibility
- Autonomy and responsibility
- Application to practice

- Enhanced learning

The categories propose an overview of what blended learning may offer to learners. The first proposed category is accessibility and flexibility. It could be argued that these categories are bound to blended learning models where there is a strict face-to-face and online component. Flexibility can be seen as an option to choose when the work or studying is done. This could be beneficial especially in a context of university students that combine their studies with a full-time job. Accessibility encompasses the option to access learning content from anywhere, using online content provided by educators. However, even more important benefit for the context of general education could be that blended learning provides learners with an option of developing their autonomy and responsibility, which then helps to promote the students' intrinsic motivation. (McHone, 2020) With enough scaffolding, learners can also benefit from the autonomy and improve their problem-solving skills. Moreover, the mixture of face-to-face and online content delivery provides learners with both the social aspect of face-to-face meetings and the flexibility of online content delivery. (Smyth, 2022) The flexibility aspect can be also significant for diversifying of learning content, which enables individuals to work at their own pace. (McHone, 2020)

Last, enhanced learning experience can be seen as one of key considerations for implementing blended learning. Technology can provide learners with a variety of high-quality output, ranging from images, videos, longer texts, etc. Such quality output can be considered as motivating for both teachers and students. (Kwon et al., 2015)

In conclusion, blended learning may offer enhanced experience for both learners and teachers, enabling flexibility, use of high quality output and diversification.

1.4 Challenges

Even though blended learning has various benefits there are also many challenges that need to be addressed by teachers if they wish to use the concept with their students. (Altay & Altay, 2019) Therefore, this chapter discusses the key challenges of blended learning as found in the literature.

Although there are numerous papers focused on challenges and benefits of blended learning, there is a big diversity in the results. (Kenney & Newcombe, 2011; Kaur, 2013; Yang, 2014; Boelens, De Wever & Voet, 2017; Alvarez, 2020). As the ongoing discussion of challenges imposed by blended learning can vary a lot, individual context

is likely the key to understanding the situation and addressing the needs of both learners and teachers. The importance of individual context is evident in a recent study by Dridi et al. (2020) where the researchers studied the implementation of a blended learning course for students in a refugee crisis. The authors suggest that the challenges found in the study could carry some similarities with other studies, however, they still more importantly reflect the unique experience of students and instructors in the fragile context of the refugee crisis. (Dridi et al., 2020)

Nonetheless, when discussing the general concept of blended learning, it is also imperative that the theoretical and more general view of challenges is considered. In a research paper, Kaur (2013) proposed that some of the key challenges in blended learning were of technical, organisational, and instructional character. The challenges were further described in the following way:

- a) The technical challenges mentioned were connected to the effective use of technology in the right context and at the right time.
- b) The organizational challenges were mostly connected to modifications of roles, as well as effective management and assessment of the participant's progress.
- c) The instructional design challenge was then found to be in designing appropriate content for the programme instead of just focusing on the implementation of technology itself.

On the other hand, Yang (2014) discovered that the main challenges of students participating in the research were in the changing roles of the teachers and students, little sense of community building, lack of training in blended teaching of summary writing and an unfamiliarity with the new systems or technologies. While the challenges found are not identical, they both have certain common ground with other studies. It is clear that without the context itself, both studies cannot be compared.

However, the majority of studies considered the technical challenges to be key (Kenney & Newcombe, 2011; Kaur, 2013; Yang, 2014; Alvarez, 2020) as both students and teachers had to overcome some form of technical difficulties when using technology in a blended learning context. The second most prominent challenge was found to be connected to student interaction. (Yang, 2014; Boelens, De Wever & Voet, 2017; Alvarez, 2020) Such interaction is viewed as an important factor in building a

community. (Yang, 2014) Nevertheless, the last of the challenges mentioned by more than one author was in the change of roles of teachers and students. (Kaur, 2013; Yang, 2014) However, change of roles does not always have to be connected to a challenge, as the technology is thought to be promoting learner's autonomy (Spiro, 2013, McHone, 2020). Moreover, possible change of roles was supported by Knowles (1975) who saw the role of teachers as facilitators rather than a simple source of content.

Nevertheless, a number of more recent studies also offer some newly found challenges. In research by Vale et al. (2020) conducted in a tertiary education setting in Canada, it was found that among some of the not yet mentioned challenges were distractions. Such distractions disrupted the focus of some learners, making it difficult to concentrate on the assigned work. (Vale et al., 2020) This adds another possible challenge experienced in the blended learning environment to the already discovered challenges by previous researchers. Moreover, Boelens, De Wever & Voet (2017) suggested that among the most common challenges of blended learning are:

- a) Incorporating flexibility – This challenge is connected to the appropriate use of online component by students, when offering them control over their learning and the amount of flexibility that should be incorporated.
- b) Stimulating interaction – Facilitation of human interaction is viewed as important for learners. Hence, stimulating some form of communication and interaction is important for a successful implementation of blended learning course.
- c) Facilitating students' learning processes – For successful blended learning, the learners must have some form of self-regulation skills that allow them to fully participate in learning.
- d) Fostering an affective learning climate – Creating a motivating environment is a challenge especially significant in blended learning. The distance between the learners can have negative impact on their learning, leading to a lack of motivation. Hence, the learners need to get regular support from the teacher.

These challenges are connected to both students and teachers, as they each have a role in overcoming them. This also points to the fact that challenges with blended

learning are not only experienced by students but also teachers and institutions. (Rasheed Kamsin & Abdullah, 2019)

In conclusion, there are some common challenges that are usually mentioned by the researchers. However, the challenges characteristically reflect onto the context in which the blended learning concept is used, hence pointing at a very big disparity in results and a need for individual context to be taken into account.

2 Educational technology

This chapter outlines the definition of *educational technology*, describes the different types of *learning management systems*, and outlines the possibility of use of online tools and applications in education.

Defining *education technology*, can be seen as quite difficult, as the general meaning of the term is suggested to be quite broad. (Lever-Duffy, 2005) The author also argues that: “the definition of educational technology often varies depending on whether the term is used by educators or by technologists” (Lever-Duffy, 2005, p.4).

As the term may be quite difficult to define, Specter (2012) goes to the very core of the term, saying that: “The word “technology” is derived from two Greek words—*techne* (art, craft, or skill) and *logia* (words, study, or body of knowledge)” (p.4). Moreover, Encyclopedia Britannica (2021) defines the term as: “the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased, to the change and manipulation of the human environment.”

However, these definitions are strictly connected to the word technology itself, not considering the educational part. Hence, in order to describe the term educational technology, it is necessary to specify the term more. Januszewski & Molenda (2013) proposed the given definition: “Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources” (p. 1). This definition seems to be much clearer and more specific to the educational background. However, it could be also argued that the growing technological advancements have marked great progress since the literature was written, hence, making it somewhat outdated. (Bond et al., 2019) Thus, it could be added that technology is a term frequently used when talking about digital advancements that help us access the digital world, ease our communication, or let us work and cooperate on projects remotely. (Sazonova et al., 2022)

In conclusion, educational technology is a term that was defined by several authors in different contexts. As the digital technology is still developing, some of the definitions could be seen as no longer relevant. Hence, the provided most recent definition is seen as the most relevant.

2.1 Learning Management System

This chapter defines the term *learning management system* (LMS) and discusses the use of LMS in the blended learning environment.

Ebner et al. (2011) proposed that: “LMS can be seen as a special type of Web based Content Management System (CMS) providing tools for uploading learning materials, access to such materials and special learning-oriented functionalities including communication, collaboration, and evaluation.” (p.228) While the definition is very specific in its description, Springer, et al. (2013) adds that learning management systems are: “information systems focused on the processes of communication, collaboration and with well-defined educational purpose.” (p.42) Moreover, in a very recent article, Onodipe, et al. (2020) proposed that: “LMSs are web-based systems that promote both synchronous and asynchronous interactions between faculty and students.” (p.4) The common ground in these definitions is their view of LMS as a tool used for communication (Ebner, et al. 2011; Springer, et al., 2013), collaboration (Ebner, et al. 2011, Springer, et al., 2013) and interaction (Onodipe, et al., 2020). It could be also assumed that the authors view LMS as sort of virtual classroom.

Nevertheless, in a study by Springer, et al. (2013) teachers of blended learning undergraduate courses were asked about their use of LMS in education and their concerns in using LMS. The study found that their most valued feature of LMS was the option to distribute content, followed by the feature of an online forum that enabled the students to discuss about various topics. (Springer, et al., 2013) Hence, there were some valued features that could help the students in a remote setting.

However, according to Ebner et al. (2012), LMSs have also some limitations. For example, Queirós, Leal & Paiva (2016) believe that there is an overabundance of different systems that need to communicate together. Due to the variety of web-based apps and systems, LMS can become somewhat isolated since some web-based applications are difficult to integrate into LMS. (Ebner et al., 2012) Hence, it is important to consider this limitation when choosing which LMS to choose for its incorporation into blended learning course. (Queirós, Leal & Paiva, 2016)

In conclusion, LMS can be a powerful tool for creating virtual space for collaboration, interaction and communication between learners and teachers. It can be also used as a component of blended learning, when the teachers are familiar with its potential benefits and limitations.

2.1.1 Microsoft Teams for Education

This subchapter discusses the LMS Microsoft Teams for Education and its possible use.

Microsoft Teams is a “digital hub that brings conversations, meetings, files, and apps together in one place.” (Microsoft, 2022) Microsoft Teams was launched in 2017 as a workspace integrated with the Office 365 Enterprise or Business plans. The integration with Office allows an interconnection with useful apps, such as Microsoft Word, Excel, PowerPoint, Forms, etc. provided by Office 365. The software itself is used by a variety of organisations, ranging from non-profit, retail and governmental to educational. (Microsoft, 2022) However, there are differences among the software versions so that they are tailored for specific use. There are currently 3 possible plans for Microsoft 365 that include specific version of Teams. One of them is the educational version of Microsoft Teams that is specifically designed for educator’s and student’s needs. The main features of the version are:

- a) Class teams which can be used as virtual classrooms.
- b) Meetings that can be used for online meetings.
- c) Assignments that can be used for creation of learning activities.
- d) Grades that allow teachers to leave feedback and grades for students, while also tracking their progress.
- e) Class notebook that can be used in an online meeting for taking notes or collaboration.
- f) Insights that allow teachers to monitor student’s progress and engagement in their virtual classroom.

(Microsoft, 2022)

As the platform allows for classroom management and collaboration among teachers and students, it could be considered as a LMS. In conclusion, Microsoft teams is one of the possible pieces of software that can be used for blended learning.

2.1.2 Google Workspace for Education

This subchapter discusses the LMS Google Workspace for Education and its possible use.

Google Workspace for Education is an edition of Google Workspace with its tailor-made cloud-based tools for education. As of today, it has over 170 million active users. (Google, 2022) There are currently 4 editions of Google Workspace for Education offered by Google, including one free edition accessible for qualifying institutions. In order to qualify for the edition, it is necessary to meet the eligibility criteria. The current eligibility criteria are: “K–12 schools, higher-education institutions globally, and homeschool co-ops in the U.S. are eligible for Google Workspace for Education”. (Google, 2022)

The tools included in the free to use Education Fundamentals plan offer all the tools necessary for communication, collaboration and management of virtual classrooms. All editions of Google Workspace for Education include following tools:

- a) Collaboration: Docs, Slides, Sheets, Drive, Forms and Jamboard
- b) Classroom management: Classroom, Assignments.
- c) Communication: Gmail, Meet, Chat
- d) Organisation: Keep, Calendar, Tasks
- e) Security: Admin

(Google, 2022)

If necessary, Schools can also apply for some of paid editions, that add premium features, such as enhanced security and analytics as well as enhanced teaching and learning tools. (Google, 2022) Due to its functionality and affordability Google Workspace is a worthy competitor for other LMSs.

2.1.3 Moodle

This subchapter discusses the LMS Moodle and its possible use.

Moodle is an open source learning platform that is designed as a LMS. (Moodle, 2020) The first official version of Moodle was released in 2002. Since then, the platform has been undergoing many changes and becoming one of the leading LMSs in the world. The significance of the platform is evident on the amount of registered users as of March 2022 surpassing the 310 million mark. (Moodle, 2022)

Moodle is a web-based software that is highly flexible and customisable, due to its open source nature. The software itself can be modified to match the needs of individual learners or institutions. Developers are also allowed to create custom plugins and integrate external applications, to ensure that the platform is used to its full potential.

The main features for teacher are:

- a) Courses: Virtual classrooms that allow teachers to provide students with learning materials and activities.
- b) Grading: Grading allows teachers to record scores from assignments, quizzes, workshops or lessons.
- c) Tracking Progress: This feature allows teachers to track student's activity.
- d) Badges: A tool useful for motivation of students by giving them a virtual badge for completion of assignments or a sustained progress.
- e) Calendar: A tool that can notify students about upcoming
- f) Activities: Features that allow students and teachers to interact: Assignments, chat, choice, database, feedback, forum, etc.

(Moodle, 2022)

In Conclusion, Moodle is a very flexible LMS with its open source nature, allowing schools to modify the platform to their needs.

2.1.4 Canvas

This subchapter discusses the LMS Canvas and its possible use.

Canvas is a web-based LMS created by a company Instructure. According to Canvas (2022) it is: “an open and reliable web-based software that allows institutions to manage digital learning, educators to create and present online learning materials and assess student learning, and students to engage in courses and receive feedback about skill development and learning achievement.” (p.6)

Canvas (*Canvas*, n.d.) offers a range of features that help foster communication, collaboration and learning. The basic features consist of:

- a) Content sharing: Assignments, discussions, quizzes and modules.
- b) Collaboration and interaction: Collaborations, conferences and groups.
- c) Measurement of student's progress: Outcomes, Rubrics, Analytics.
- d) Feedback: SpeedGrader, Gradebook

- e) Course updates: Calendar, Syllabus, Announcements
- f) External apps integration
- g) Accessibility for everyone: Instructors, students and parents have their own specific access to Canvas.

While the mentioned features may seem to be quite usual for a LMS, there is one feature that could be considered as distinctive from other LMSs. According to Instructure (2022), Canvas offers integration with other LMSs and education tools, such as Google Workspace, Microsoft Teams, or Zoom. Moreover, the significance of Canvas can be seen on the use of Canvas by some of the world's leading universities, such as the Oxford University. (Canvas, n.d.)

In conclusion, Canvas can be understood as a platform that is useful for integrating various LMSs and tools into one, creating a very scalable and customizable learning ecosystem.

2.2 Online Tools and Applications

This chapter presents an overview of online tools and applications and presents typical examples of such applications that can be used in a blended learning context.

The internet offers a variety of applications and online tools that can be used with digital technology, as suggested by a steady business growth, deduced from the market revenue of more than 10 billion dollars. (Vailshery, 2022) It is also expected that the growth will continue in the following years to up to 11.6 billion dollars of revenue. (Vailshery, 2022) This can be viewed as evidence of the importance of educational technology in the recent years.

With the growing software industry, there are tendencies to create new educational apps that are designed to be more powerful than the previous and to be interesting for both teachers and schools. Hence, as there is a growing pool of applications, Lim & Toh (2022) proposed 9 considerations for choosing the correct application for the given context:

1. Learning
2. Learning design
3. Values
4. Interactivity
5. Involvement
6. Motivation

7. Ease of use
8. Appropriateness
9. Appeal

These considerations can be useful as a framework for choosing appropriate applications for specific purposes or goals. However, it cannot be taken as dogmatic, as there are various methodologies and contexts in which these considerations may be irrelevant. (Spiro, 2013)

In conclusion, there is a growing number of educational applications and platforms that can make it difficult for teachers to navigate through. However, there are some considerations that may be taken into account for when choosing an appropriate application for a given context.

2.2.1 Kahoot!

This subchapter provides an overview of the application Kahoot! and its possible use in education.

Kahoot! is a company known for creating a web-based learning game that has been used by billions of players since its inception in 2013. (*About Kahoot! Company History & Key Facts*, n.d.) The game itself was developed as a collaborative project of students at the Norwegian University of Science and Technology. (*About Kahoot! Company History & Key Facts*, n.d.)

The gaming platform has several possibilities of use. The primary function of the game is free. The learners are asked to choose the correct answer for which they earn points. The player with the most points at the end wins and is showed on the podium. This could be used for revision of already discussed topics. However, the platform also offers paid version that enables teachers to build interactive lessons using slides, multi-select answers, type in questions, polls, PowerPoint integration and personalized learning. (*Kahoot! For Schools*, n.d.)

In research by Wang & Tahir (2020), it was found that Kahoot can have a positive impact on student's learning and engagement, which can make it a valuable platform for engaging learning experience. However, the platform also has some limitations, that should be mentioned. It was found that the main challenges were unreliable internet connection, hard-to-read questions, getting the right level of difficulty for students, or stressful time-pressure that reduces thinking. (Wang & Tahir, 2020)

In conclusion, Kahoot! can be an interesting tool for promoting students' learning and engagement. Moreover, the paid version offers a variety of tools for creating engaging lessons. However, there are also some limitations that should be considered before implementation of the app into lessons.

2.2.2 Wordwall

This subchapter provides an overview of the application Wordwall and its possible use in education.

Wordwall is a company founded in 2008, that designed a web-based application that allows teachers and educators to create game-based exercises for their students. (*About*, n.d.) At first, the company focused on products made for interactive whiteboards or audience response systems, which made it quite unavailable for less wealthy institutions. Hence, the company decided to change its direction and in 2016 created a web-based application as it is known today. (*About*, n.d.)

Among the main features of Wordwall is the “switch templates” feature. The feature allows teachers to reuse the data already typed in to create a new, different looking exercise. This can be used for reinforcement of already practiced topic. Other features can be used for both synchronous and asynchronous learning, as there are options for student paced activities, assignments with time limit and interactive games for classrooms. Moreover, there is an option to create printables from some of the already created activities that can be useful for classrooms without the internet access. (*Features*, n.d.)

Currently, there are 3 plans that allow the users to choose according to the number of interactive templates and printables available. There is an option for a free plan that allows users to create a maximum of 5 resources. Even though, the resources can be reused and modified, once they are changed, they cannot be restored to the initial state. (*Price Plans*, n.d.) This could be a possible limitation for teachers that are not willing to pay for the application. On the other hand, the paid plans both offer unlimited resource creation with the possibility of using several interactives and printables, depending on the specific plan. (*Price Plans*, n.d.)

As with other web-based applications, there are some possible challenges when incorporating Wordwall for the us in classroom. In research by Hasram, et al. (2021) the use of Wordwall was examined. It was found that the main issues were connected to lack of electronic devices and internet connectivity issues. (Hasram, et al., 2021)

However, it was also found, that Wordwall and similar applications promoted positive learning experience and supported the learners' persistence in achieving goals. (Hasram, et al., 2021)

In conclusion, Wordwall is a web-based application that allows teachers to create activities and exercises for reviewing of discussed topic. The disadvantages are similar to other web-based applications in addition to limited functionality of the free plan.

2.2.3 Mentimeter

This subchapter provides an overview of the application Mentimeter and its possible use in education.

Mentimeter is an audience engagement platform that was developed for making of interactive presentations and lessons. The platform was launched in 2012 and has had over 280 million of users to this day. (*Investor Information*, n.d.)

Among the main features of Mentimeter is the possibility of allowing everyone from the classroom to participate in polls, brainstorming, surveys, and quizzes. (*Polls, Surveys & Quizzes for School & University*, n.d.) Research by Mayhew et al. (2020) suggests that learning platforms that are based on discussion-driven dialogs, such as Mentimeter, are effective, as they allow all students to participate without judgment in a more inclusive environment.

The students can use smartphones, tablets or other electronic devices to connect to the presentation via a link or QR code. As suggested by the creators, the platform can be successfully used for purposes of blended learning, as there is a possibility of synchronous learning for both students that are in class and online. (*Hybrid Learning Software & Tools*, n.d.)

Nevertheless, there are also some challenges that should be considered when contemplating about the use of Mentimeter, that were identified by Vallely & Gibson (2018):

- a) The necessity of being online to access Mentimeter
- b) The lack of contribution by some students (only some students participate)
- c) Anonymity (It is not possible to identify which students contributed)
- d) No possibility of correction when the answers have been submitted

In conclusion, Mentimeter is a tool that can help teachers to create engaging and interactive lessons for students that are both online and in classroom. If used correctly

the platform can help with engagement and learning of students. However, it is important that the teachers know about its challenges.

2.2.4 Quizizz

This subchapter provides an overview of the application Quizizz and its possible use in education.

Quizizz is an interactive learning platform that was created for making engaging activities and lessons. The company Quizizz was founded in 2015 and has had over 10 million students to this day. (*About Quizizz*, n.d.) The platform allows teachers to create both synchronous and asynchronous lessons using a variety of question types to create lessons more engaging. Besides, the lessons can be enhanced by slides carrying information and all sorts of multimedia including pictures, audio and video. The platform also provides teachers with insights into students' answers and results. (*What Is Quizizz?*, n.d.)

Nevertheless, one of the unique features of Quizizz is an option to create a custom set of "memes". The term "meme" was coined by Richard Dawkins (2006) as: "a unit of cultural transmission." (p.192). In today's internet era, memes usually describe a picture, a gif or a short video with a text reaction to certain situation. Quizizz allows such memes to be shown to students after successful completion of quizzes or individual answers. As it was found by Pranoto & Suprayogi (2020) funny memes can be useful in promoting relaxed atmosphere in classroom and supporting student's attention.

Nonetheless, a comparative study by Basuki & Hidayati (2019) found that even though Quizizz scored more points overall, Kahoot was found to be more collaborative and competitive, hence more engaging.

In conclusion, Quizizz is an interactive web-based platform that offers teachers with various choices for creating both synchronous and asynchronous lessons. Its unique features make it a powerful competitor for other web-based platforms

2.2.5 Quizlet

This subchapter provides an overview of the application Quizlet and its possible use in education.

Quizlet is a very popular set of study tools created by Quizlet,inc. Quizlet comprises of several individual tools and games that were created to indorse student

engagement and learning. (*About Quizlet*, n.d.) Currently, there are several tools available for use:

- a) Flashcards – A tool for creating virtual flashcards. (*Online Flashcard Maker & Flashcard App*, n.d.).
- b) Quizzlet Live – A synchronous interactive game for reviewing of concepts and vocabulary in form of individual or team practice. (*Quizlet Live / Classroom Learning Game*, n.d.)
- c) Quizzlet Checkpoint – An interactive activity that enables teachers to follow students’ progress, while allowing for a formative assessment and feedback. (*Checkpoint / Classroom comprehension activity / Quizlet*, n.d.)
- d) Quizzlet Learn – A machine learning tool that creates set of questions according to familiarity with the content. As the learner advances to more difficult questions, the algorithm automatically introduces open-ended questions. (*Studying with Learn mode*, n.d.).
- e) Explanations – A feature that was created to help students to understand key terms by providing explanations and resources generated by experts on the given topic. (*Explanations: Textbook Solutions / Quizlet*, n.d.).
- f) Mobile – The website and all of its tools are available for both computers and mobile devices. Moreover, there is a mobile app that allows students to study offline with the subscription. (*Mobile*, n.d.)

The features of Quizzlet are mainly focused on reviewing of terms and vocabulary. The effectivity of the application was studied by Dizon (2016) whose research results showed an overall highly positive attitude of students towards learning vocabulary using the platform in an EFL context. Moreover, Setiawan & Wiedarti (2020) found that students using Quizzlet were increasingly motivated and enthusiastic. However, there are individual differences among students that need to be considered when implementing such tools, as there can always be students that prefer different ways of learning. (Lander, 2016)

In conclusion, Quizlet offers a range of ways to review and practice vocabulary. The algorithm and machine learning allows for a personalised experience that can help with addressing students’ needs. Nevertheless, as with every tool, there could be individuals that might not enjoy using the platform, which may lead to disinterest.

2.2.6 Umíme to

This subchapter provides an overview of the application Umíme to and its possible use in education.

Umíme to is a project based on research conducted by Adaptive Learning group at Masaryk University in Brno, Czech Republic. The ongoing research gave its inception to a website Umíme and its subdivision Umíme anglicky, that is focused exclusively on learning of English. The platform uses AI (artificial intelligence) and advanced algorithms to adapt content for personalised learning by learners. (*Adaptive Learning @ FI MU*, n.d.) The goal of the project is to present a platform that offers a practice of topics that learners may come across during their studies. The content is continuously added to the website, so that the topics of school curriculum are covered. (*Umíme to - Online procvičování školního učiva*, n.d.) The web-based exercises offer various ways of practice, ranging from multiple choice questions to engaging educative games.

Nevertheless, the Umíme anglicky section is categorised into 4 main areas: Vocabulary, Grammar, Reading and Listening. There is currently no speaking practice available, which could be considered as limiting for some users. However, each of the existing categories is subdivided into a variety of themes with individually tailored set of exercises. The exercises are mostly offered in various difficulty levels so that learners can choose the appropriate level according to their need. The exercises can be either assigned as homework by teachers or done asynchronously during lessons.

The application offers a reward system, where after successful completion of exercises, the users are awarded with badges for each level completed. The awards and the data are uploaded into the user statistics, which can be then viewed by both learners and their teachers.

Even though there are currently two versions available, one being Czech and the second one Polish, the whole platform is targeted mainly at Czech learners. (*Umiemy to - Zabawna nauka online*, n.d.) This could be seen as very limiting for the use by international users.

In conclusion, the platform offers a whole range of exercises that are ready to use by learners. However, there are also some limitations of the platform that need to be considered in specific contexts. Among such factors could be the lack of international version or a lack of speaking practice in Umíme Anglicky.

2.2.7 Newsela.com

This subchapter provides an overview of the application Newsela and its possible use in education.

Newsela is an online platform that provides teachers with access to various articles from reliable sources that are adapted to different language levels so that the content is accessible to a variety of students. The company targets mostly the US market, as can be found in the application, which is adapted so that it complies with the US curriculum. (*Custom Content & Assignments For All Grade Levels*, n.d.)

However, the articles offer a variety of topics so that it can be used by any person around the world. The topics of articles also vary according to the type of subscription the teacher possesses. (*Compare Product Levels & Features*, n.d.)

Newsela offers 3 types of subscriptions that can be chosen according to the institution's needs. The free version offers basic access to news articles in 5 different levels with comprehension quizzes and writing prompts. These articles can be also assigned to students and shared in a LMS. The free version lacks reporting and insights which otherwise enable the teacher to track down the progress of individuals. (*Compare Product Levels & Features*, n.d.)

Such reporting features can be found in the Newsela Essentials and the Core Subject Products subscription with the latter being the most advanced of the three versions. The Core Subject Products subscription enables teachers to not only track their students' progress but also to access the whole content library, instructional support, and alignment to US standards. (*Compare Product Levels & Features*, n.d.) Such features can be useful for the US market, especially for teachers who seek to find a way to enhance their students learning, yet also make their own lessons preparations easier.

However, it could be argued that the free version offers enough resources for English language teachers, who only seek to find articles in different levels so that they could practice reading in their lessons.

Overall, Newsela offers different subscriptions with diverse features that could be interesting for individual teachers or institutions, especially at the US market. However, the main feature of access to news articles in a variety of levels is free, which makes it a powerful app for teaching reading.

2.2.8 LyricsTraining

This subchapter provides an overview of the application LyricsTraining and its possible use in education.

LyricsTraining is a website application created for the purpose of helping learners to improve their comprehension skills. According to the website, the application also helps learners to improve their vocabulary and reinforce grammar concepts. (*About LyricsTraining*, n.d.) The application can be used in a web-based version or as a dedicated app that can be downloaded to a mobile device through App Store or Google Play. This makes the platform accessible for a use with different digital devices.

The application itself works as a gap-filling exercise with two game modes. In the first one, the students type in the correct words using their device's keyboard. This can be a bit challenging, as the words have to be typed in quickly and precisely. The second game mode lets the students to choose an appropriate word from a word bank provided by the platform. The users are then rewarded for completing the lyrics correctly with points and multiplied points when they get a streak of perfect completion of gaps. On the other hand, the points are deducted for wrong answers and for not writing the missing lyrics in time. (*Bruno Mars - Just The Way You Are | Music Video, Song Lyrics and Karaoke*, n.d.)

Nevertheless, as the application offers 2 game modes and 4 different levels of difficulty, it is useful for diversification of learning. Moreover, the platform enables learners to choose from a variety of genres, which can help in finding a song that they enjoy listening to, which could possibly make it more interesting.

The app is free to use and not for profit, which means that there is a lack of premium features that could be found in other applications. (*Terms of Service | LyricsTraining*, n.d.) Therefore, there may be a lack of features that some users may find as crucial. Among such features is the lack of any dedicated insights or ways of tracking learners' progress, the creation of virtual classroom for assignments. Moreover, the app itself relies on community, where the users add new song lyrics. (*Terms of Service | LyricsTraining*, n.d.)

However, the option of adding own lyrics can be also seen as possibly beneficial for teachers who want to prepare songs for their own classrooms.

In conclusion, LyricsTraining is a simple application that offers a way to practice listening and comprehension skills. Even though there are some missing features that

may be seen in other applications, the app itself relies on its community and is free to use. This can make the application interesting for teachers that do not wish to pay monthly fee for a fully functioning app.

3 Student engagement

This chapter outlines the theoretical basis for the term *engagement* in connection to education, describes the term *engaged student*, categorises engagement and puts it into the context of *digital technology*, *lower-secondary EFL education* and *motivation*.

The term engagement is used very extensively and does not have any universally accepted definition. (Halverson & Graham, 2019) However, it was found that engaged learners tend to achieve more academically than their disengaged peers. (Saeed & Zyngier, 2012) Hence, a description of the terms engagement and *engaged student* might help teachers in assessing what could be done to promote better academic achievements of their learners.

As this diploma thesis discusses engagement in connection to education and blended learning, the definitions mentioned in this chapter are from authors whose research is focused on these areas.

Bond & Bedenlier (2019) proposed a definition, stating that student engagement is: “The energy and effort that students employ within their community learning, observable via any number of behavioural, cognitive or affective indicators across a continuum.” (p.2) Furthermore, Schlechty (2011) adds that engagement involves commitment, attention and persistence that is not motivated by fear or extrinsic rewards. This definition points to the need of *intrinsic motivation* of the learners, which is discussed in sub-chapter 3.5.2.

Nevertheless, some scholars tried describing the term engagement by studying students’ responses to individual tasks. In research by Schlechty (2002, p.3) students’ reactions to individual tasks were divided into the following categories:

1. *Authentic engagement*. A task is designed to be associated with learner’s personal interest.
2. *Ritual engagement*. A task that has little or no meaning, or value to the student. However, the student has the task associated with extrinsic motivation, such as to pass a test or have good grades.

3. *Passive compliance*. The student sees little meaning or value in the task, yet he does the task and puts in whatever effort in order to avoid negative consequences.
4. *Retreatism*. The student does not engage or put any effort into doing the activity. However, the student does not act in disrupting ways, or trying to replace other activities for the assigned task.
5. *Rebellion*. The student refuses to do the assigned task, acting disruptively, or substituting the task for activities that he is committed to instead of doing those assigned by a teacher or school.

Nevertheless, in his later work, Schlechty (2011) also warns that engagement should not be confused with on-task behaviour. Therefore, it was suggested that it is important to distinguish between these two terms. (Schlechty, 2011) However, unlike an engagement, on-task behaviour is usually seen as an individual occurrence that can be measured simply by observation. (Heemskerk & Malmberg, 2020) Thus, rather than limiting the view on observable engagement, it can be of great use to know the definition of an engaged student.

In conclusion, the term engagement does not have any universally accepted definition. Hence, it was suggested that the description of engaged students could provide the foundation for the understanding of engagement.

3.1 Engaged student

This subchapter describes the term *engaged student* in the context of education and shares the components of such an engaged student.

Wiseman, Kenedy & Lodge (2016) defined *an engaged student* as one, who is “cognitively, behaviourally and emotionally involved in an activity.” (p.667) This definition is very specific, pointing at the possible description of an engaged student. However, Halverson & Graham (2019) argue that to understand learner engagement, we have to consider mainly cognitive and emotional engagement. Hence, it was proposed that the definition should not consider behavioural engagement.

Nevertheless, Schlechty (2011, p.14) rather than defining the term, proposed four components of an engaged student:

1. The engaged student is attentive and focused on the task connected with the work.

2. The engaged student is committed without the need of any form of extrinsic motivation.
3. The engaged student is persistent, enduring through difficulties occurring during the task.
4. The engaged student finds meaning and value in the tasks that make up the work.

These components illustrate possible criteria for assessing student engagement, which could help teachers in their examination of successful ways of promoting their students' engagement.

In conclusion, the chapter provided a definition of an engaged student with an overview of some typical characteristics that may be used in assessing the learners' state of engagement.

3.2 The types of engagement

This chapter provides an overview of different types of engagement and discusses the differences between them.

Engagement is a very general term that can be further divided. According to Fredericks et al. (2004), there are three different types of engagement, namely: cognitive, emotional and behavioural. These engagement types are further discussed in the following sub-chapters.

3.2.1 Cognitive engagement

This subchapter describes the term *cognitive engagement* and puts it into the context of other types of engagement.

Cognitive engagement is considered one of the key variables in a student's success. (Fredricks et al., 2004) A definition proposed by Rotgans & Schmidt (2011) characterizes cognitive engagement as: "a psychological state in which students put in a lot of effort to truly understand a topic and in which students persist studying over a long period of time." (p.1) However, as it was suggested by Fredericks et al. (2004), the term effort may be ambiguous, as it can be found in definitions of both cognitive and behavioural engagement. Moreover, it is not a simple criterion that would help us in identifying cognitive engagement. Students who are cognitively engaged usually possess certain self-regulating and meta-cognitive strategic skills that help them in

achieving their goals. (Fredricks et al., 2004; Blumenfeld et al., 2005) Hence, cognitive engagement may not be one that is easily recognised.

In conclusion, cognitive engagement is tightly connected with students' efforts and their strategies for achieving goals. However, it is also tightly connected to the other types of engagements, which may result in certain overlaps in definitions.

3.2.2 Emotional engagement

This subchapter describes the term *emotional engagement* and puts it into the context of other types of engagement.

In order to describe emotional engagement, Fredricks et al. (2004) proposed the following definition: "It is engagement that includes, interest, values and emotions." (p.65) This definition may be seen as very broad and not very specific. Hence, if put into the context of education, it can be viewed as reactions or feelings of a classroom during a particular lesson, task or activity. Moreover, due to Fredricks et al. (2004), emotional engagement is connected to the concept of *Flow*. The term was first coined by Csikszentmihalyi (1988) who described it as a distinct state of total involvement. Such involvement in a task or activity can be beneficial for learning. (Conrad et al., 2019; Heutte et al., 2021)

Nevertheless, emotional engagement is very often discussed in connection to digital technologies and gamification. (Ding et al., 2017; Rodzuan et al., 2018) This makes it significant for this thesis. In recent research connected to the use of gamification in tertiary education by Rincon-Flores et al. (2022), it was found that gamification is useful for encouraging focus and engagement in class, which makes it a successful component of online sessions. Moreover, research in a similar context observed the influence of online tools and activities on emotional engagement. The results showed that an online component and tools increased emotional engagement, even though they did not promote behavioural and cognitive engagement. (Sun & Rueda, 2012) As both situations were set in tertiary education, it may be concluded that in the setting of university education, online content and digital technology may be influential on learners' emotional engagement. As this thesis is focused on lower-secondary education, it is important to think about whether age plays a role in the influence of learners' engagement.

In conclusion, emotional engagement is connected to the person's involvement in an activity. The whole concept is often discussed in connection to the concept of flow,

the use of digital technology and gamification. However, there is a need to consider the individual situation and different variables to conclude whether the digital component influences engagement.

3.2.3 Behavioural engagement

This subchapter describes the term *behavioural engagement* and puts it into the context of other types of engagement.

Behavioural engagement can be considered as observable engagement that may be visible in several aspects, such as effort, activity and attention. (Fredericks, 2004) It is often discussed as a behaviour connected to the following of rules. (Archambault et al., 2009; De Laet et al., 2016) In a study by Wang & Fredricks (2014) it was found that learners who had low behavioural engagement were more prone to substance abuse and delinquency. Hence, one of the significant qualities of high behavioural engagement of learners is in the prevention of problematic behaviour.

However, behavioural engagement is found to be influenced by various factors, such as teacher-student relationship (De Laet et al., 2016; Engels et al., 2016), popularity and aggressive behaviour (Engels et al., 2017), socio-historical context (Badiozaman, 2015), or a parental support (Sureda-García et al., 2021).

Nevertheless, there is a need for distinction among the influences, as some can be rather positively influential on learners' engagement, while some were found to be negatively influential. (Engels et al., 2016) Hence, it can be stated that there might be several influences targeting students' engagement at the same time.

In conclusion, behavioural engagement is a highly complex topic that mainly concerns student behaviour in the classroom, such as following rules and putting effort into learning. While the research has found certain influences, there is a need for further explanations of these influences on individuals.

3.3 Measuring engagement

This chapter provides an overview of typical methods used by researchers for measuring engagement and the limitations of some of these methods.

Measuring engagement is thought to be of great importance in getting students more engaged, understanding their behaviour and addressing their needs. (Henrie, Halverson & Graham, 2015) However, measuring itself can be difficult as there are various types of engagement that need to be considered. Henrie, Halverson & Graham

(2015) found that most measurements used for measuring cognitive engagement are usually done with quantitative self-reports, followed by qualitative measures and quantitative observational measures. Hence, student engagement is typically measured by surveys of either the students or teachers who then report about individual students. (Nguyen, Cannata & Miller, 2016) However, there has been a tendency to find new ways of measuring engagement, as there is a belief that the current methods are limited. (Schall, 2014) Hence, Li (2021) stated that are more possible strategies for measuring student engagement: Self-report scales, Observations, Interviews, Teacher ratings, Experience sampling, Eye-tracking, Physiological measures, Log file, and Language and content analyses.

The mentioned strategies target different types of engagement, which enables researchers to choose the appropriate strategy for the situation. Outside of the already mentioned strategies, Schall (2014) provided an overview of other strategies, such as Facial response analysis, EEG which measures the electric activity of a brain or GSR, which measures the amount of sweat on the skin. However, these methods can be quite costly, which may restrict some researchers from using them. (Schall, 2014) Hence, researchers have to consider both the situation and engagement that they need to measure, as well as the availability of the measurement tools.

In conclusion, the techniques for measuring engagement must be carefully chosen by the researchers, not only taking into account the situational context for measuring but also the availability of the measuring tools.

3.4 Digital technology and its influence on engagement

This chapter puts the term student engagement into the context of the use of *digital technology*.

Technology is a part of our everyday lives. People use digital technology in various ways, ranging from simply consuming online content on social media to working on assigned tasks for their work. However, it is also viewed as an important part of education, as Conrad & Donaldson (2012) stated: “A significant element in meeting the state instructional needs of the twenty-first-century learner is to discover effective ways to reach the individual context of diverse technology-enhanced opportunities” (p.3).

Nevertheless, the use of mobile devices has been on the rise in the past few years, which can be seen in data from Statista.com, indicating that the average daily mobile

usage in the UK has raised by an hour in only 3 years. (Johnson, 2022) However, this is thought to be just the tip of the iceberg, as mobile devices are only one part of the whole term that is described as digital technology. Sokolik (2012) states that digital technology is: “technology relying on computer chips” (p. 409). This definition is very wide, pointing out that digital technology encompasses more than just mobile phones or computers.

However, in this thesis, the author uses the word digital technology as a way to describe specific digital technology that could be used for educational purposes. Among such devices are laptops, tablets or mobile phones appropriate for the use of educational applications or software.

Nevertheless, student engagement connected to the use of digital technology is a topic frequently discussed within the community of educators and researchers on various education levels. (Bond, M., & Bedenlier, S., 2019; Garas-York, K., 2020; Wallace-Spurgin, M., 2020; Dembereldorj, Z., 2021; Fan, S., et al. 2021)

In research by Dong et al. (2022), it was found that digital technology used for learning promoted higher motivation, lower anxiety and a higher level of self-efficacy than learning in a face-to-face learning group. This can point to the significant benefit of digital technology for learners’ engagement. Moreover, Evans & Brindley (2011) found that both teachers and students found the use of computers in lessons as motivating and important for maintaining links between school and home. As motivation is tightly connected with engagement (Saeed & Zyngier, 2012), it could be concluded that digital technology may be generally perceived as engaging. However, this is also further examined in the practical part. (see 4.8)

In conclusion, digital technology can be perceived as influential on certain aspects of students’ learning, which may influence the overall motivation and engagement of students.

3.4.1 Engagement in the context of EFL Learners

English as a foreign language (EFL) is a term used in English language education. EFL learners are defined as those, whose first language is not English and who do not live in a country where English is the primary language of key institutions. (Celce-Murcia et al., 2014) In comparison to the term ESL, which stands for English as a second language, EFL learners have very limited opportunities to use English outside of the classroom. (Celce-Murcia et al., 2014) However, with the emerging use of

technologies, the opportunities for the use of English outside of the classroom rise. (Vaca Torres & Gómez Rodríguez, 2017)

A recent study concerning the engagement of EFL learners found that engagement was positively impacted by the experience of a positive classroom social climate and foreign language enjoyment. (Mohammad Hosseini et al., 2022) Moreover, Nakamura et al. (2021) found that there is also a significant increase in engagement when the learners have the option to choose from a set of elements in a task. These are findings that may be useful for teachers when they prepare lessons using digital technology, as some digital tools offer such diversification. (see chapter 2.2)

Nevertheless, as engagement is sometimes viewed as connected to students' motivation (Oga-Baldwin & Nakata, 2017), it may be worth mentioning that it was found by Bagheri Nevisi & Farhani (2022), that EFL learners in an elementary setting were encouraged to learn English by motives, such as the appropriate use of digital technology, the facilitation of future employment, or efficient communication. Hence, it may be concluded that these are some of the possible motives that learners may have.

However, EFL learners' motivation may differ according to the learner's socio-cultural context. (Keumala et al., 2019) Hence, when discussing engagement in the context of EFL learners, the socio-cultural specifics need to be addressed.

In conclusion, engagement in the context of EFL context has been researched before, with results that provided an overview of possible influences on learners' engagement. However, socio-cultural context also plays role in affecting pupils' engagement, which makes it important for consideration.

3.4.2 Engagement of Lower-Secondary Education Learners

Lower-secondary education is the second stage of compulsory education in the Czech Republic. The learners at lower-secondary schools are generally between 12 to 15 years old. (*Czech Educational System - Gov.Cz*, n.d.) This age may be specifically known for its connection to the beginning of adolescence or puberty. (Sawyer et al., 2018) These two terms were described by Coleman (2001) as a period in which a person experiences major physical, physiological, and mental changes while maturing and undergoing maturation of cognitive functions. He also proposed that: "Major changes in the self-concept are likely to occur, and there are radical alterations in all social relationships to be negotiated" (Coleman, 2001, p.57). It was also found that there is a clear connection between adolescence and connection with behavioural (Engels et al.,

2016; Miller & Desberg, 2009) or school engagement. (Wang & Fredricks, 2014) Moreover, the turbulent growth around the age of lower-secondary 9th graders was found to be an extremely sensitive period in life for building social relationships and for the development of mental illnesses. (Kessler et al., 2005)

In the age of adolescence, learners not only undergo many developmental changes but some other issues influence the engagement and overall effort put in by the learners. Miller & Desberg (2009) suggest that one of the key influences on learners' engagement and motivation is the relevance of content to their lives and the use of digital technology to obtain information similar to what information they normally use. This idea suggests that digital technology may be influential on students' engagement, which is examined later in this thesis.

In conclusion, learners at lower-secondary schools experience major changes in their social, mental and physical state. The particular age of learners is also considered crucial in the development of certain skills and may be influential on the development of certain mental diseases. However, there are certain ways of overcoming these changes, when positively influenced by teachers.

3.5 Motivation

The following chapter discusses the term *motivation* and its importance for student engagement in the context of learning, discussing possible influences of such motivation and providing a usual typology.

First, motivation is often considered a component of student engagement. (Saeed & Zyngier, 2012) This points to the importance of defining motivation in this thesis. Moreover, the knowledge about engagement and motivation is thought to have a positive impact on both learners and teachers, as they can find ways to cooperate better and achieve better learning. (Saeed & Zyngier, 2012)

To define motivation, some authors looked into the origins of the word motivation which comes from the Latin word *movere*, which can be translated as: to move. (Ciccarelli & White, 2012) In fact, Ryan & Deci (2000) also considered the original meaning of the word *movere*, stating that: "to be motivated means to be moved to do something" (p.54).

However, in the context of human psychology, Ciccarelli & White (2012) defined motivation in a rather more complex manner, stating that it is: "a process by which activities are started, directed, and continued so that physical or psychological needs or

wants are met” (p. 344). This definition could be perceived as very general, revealing that motivation is connected to both physical and psychological needs. On the other hand, Hall & Goetz (2013) characterize motivation simply as: “psychological mechanisms that occur throughout the entire process of pursuing one’s goals” (p. 59).

Thus, the differences between the definitions of motivation are very wide, which is suggested by Dörnyei (2012) who argued that: “the meaning of the concept can span such a wide spectrum that sometimes we wonder whether people are talking about the same thing” (p.518). However, even with the differences in the mentioned definitions, there is some common ground and that is that motivation works as a certain force that moves humans forward. (Ryan & Deci 2000; Ciccarelli & White 2012)

Nevertheless, it was found that the amount of motivation is not stable in individuals and that it can vary over time and during the change of learning environments. (Hayenga & Corpus, 2010; Gonida & Serra Lemos, 2019) In fact, in research by Klootwijk et al. (2021) it was found that there were changes in motivation among lower-secondary pupils during the COVID-19 pandemic. It was found that many pupils experienced lower levels of motivation in the online setting compared to the face-to-face setting. (Klootwijk et al., 2021) Hence, this points to the possible influence of setting on individual motivation.

Nonetheless, the term motivation is also commonly categorised in connection to specific types of motives that influence the person. The main two types of motivation that are generally mentioned are *extrinsic motivation* and *intrinsic motivation*. (Sansone et al., 2000; Hayenga & Corpus, 2010) Hence, these two types of motivations are discussed later in subchapters 3.5.1 and 3.5.2.

In conclusion, offered definitions could be viewed as descriptions of an abstract concept that gives people energy to move forward and achieve their goals. There are certain possible influences of motivation mentioned. However, to fully describe the term motivation and the outcome that is human behaviour, it may be necessary to consider both the external and internal motives of the person.

3.5.1 Extrinsic motivation

This sub-chapter defines the term extrinsic motivation and discusses its role in education.

Extrinsic motivation is a type of motivation in which a person acts because it leads to an outcome that is separate from or external to the person. (Ciccarelli & White,

2012; Ryan & Deci, 2000) Extrinsic motivation compared to intrinsic motivation can be often viewed as worse, not creating engaged students that would put greater effort into learning. (Saeed & Zyngier, 2012; Ryan & Deci, 2000) Furthermore, some studies have shown that students with extrinsic motivation have lower academic achievement than those that are intrinsically motivated. (Lee & Pang, 2013; Lemos & Veríssimo, 2014).

However, it is important to note that people do not have only one type of motivation but rather a mix of different kinds of motivation and different level of motivation. (Ryan & Deci, 2000; Lemos & Veríssimo, 2014) Even though intrinsic motivation is usually more valued, both types of motivation play their role. Ryan & Deci (2000) stated that: “knowing how to promote more active and volitional (versus passive and controlling) forms of extrinsic motivation becomes an essential strategy for successful teaching.” (p.55) Moreover, a meta-analysis examining the performance outcomes of intrinsic and extrinsic incentives, found that incentives and intrinsic motivation complement each other instead of being pure antagonists. (Cerasoli, Nicklin & Ford, 2014) This shows the significance of both types of motivation in connection to education.

In conclusion, extrinsic motivation can be seen as a type of motivation that is influenced by external motives. Research findings suggest that learners with prevailing extrinsic motivation have lower overall academic achievement than those with intrinsic motivation. However, it is also necessary to mention that all learners are motivated by both types of motivation.

3.5.2 Intrinsic motivation

In this sub-chapter, the term intrinsic motivation is defined and compared to extrinsic motivation. The possible influences on intrinsic motivation are also discussed.

In comparison to extrinsic motivation, Ryan & Deci (2000) define intrinsic motivation as: “the doing of an activity for its inherent satisfactions rather than for some separable consequence” (p.56) Furthermore, Ciccarelli & White, 2012 view intrinsic motivation as a type of motivation that describes a person that performs an action because the act itself is rewarding or satisfying in some internal manner. Both definitions consider internal motives that do not require any external force.

However, it is important to note that a person cannot be intrinsically motivated for every activity and task. (Ryan & Deci, 2000) Moreover, the amount of intrinsic motivation can be very unstable as, throughout the school years, students undergo

developmental changes that influence the motivational ratio between intrinsic and extrinsic motivation. (Corpus, McClintic-Gilbert & Hayenga, 2009; Gillet, Vallerand & Lafrenière, 2011). Furthermore, the research by Corpus, McClintic-Gilbert & Hayenga (2009) suggests that teachers play an important role in the encouragement and support of students' deteriorating motivation, which may help students in their transformation towards becoming lifelong learners.

Nevertheless, to achieve such transformation, there has to be a clear understanding of what facilitates the student's intrinsic motivation and what could undermine it. Due to Ryan & Deci (2000), the amount of intrinsic motivation is thought to be possibly affected by the amount of autonomy or control by the teachers. The amount of autonomy could be possibly an important factor, as it allows students to choose to do what they enjoy. A study conducted by Løvoll, Røysamb & Vittersø (2017) investigated how positive emotions correlate with intrinsic motivation, finding that intrinsic motivation induced positive emotions and positive emotions facilitated intrinsic motivation.

In conclusion, intrinsic motivation can be crucial for learners' academic achievement as well as for their life-long learning. Together with enough support and facilitation, learners can achieve more than those who are not intrinsically motivated, meaning that it is vital to try and promote intrinsic motivation among learners.

Practical part - Research

4 Methodology

The conducted research focused on implementing blended learning in general education, the challenges of such implementation in relation to students' engagement and finding a viable blended learning model that would prepare learners for emergency situations should the education go fully remote, such as during the pandemics. As it was suggested by Kovačević et al. (2021), blended learning may prepare both students and teachers for such unexpected situations, when there is a need for fully remote learning.

Moreover, the quasi-experiment was conducted to identify whether the use of technology devices influenced students' engagement and subsequently inspected their attitude towards blended learning. Last, the research reviewed a possible influence of a mode of learning which could increase engagement and long-term motivation.

The methodology is divided into five different chapters, that describe the research design. The first sub-chapter (4.1) states the main research objectives and research questions. The following sub-chapter (4.2) proposes the examined hypotheses, that are later examined in the analysis of the results (see 4.5). The research sample is described in the chapter (4.3), providing important info about the examined group. Lastly, the approach to data collection is explained in chapter 4.4, together with the description of the quasi-experimental research.

4.1 Research objectives and questions

This chapter outlines the thesis' objectives and the research questions. The aims of this research were to find learners' attitudes towards learning English in a blended learning context, ways of engaging learners of the English language and discuss possible ways of using blended learning in the future. The research objectives were connected to the context of the blended learning experience, which provided data for the practical part of this thesis. The research aims were set in the context of a blended learning course where the learning objectives were the improvement of reading and listening comprehension skills. (see II)

The following questions were formulated:

Q1: What motivates the examined group of EFL learners at a lower-secondary school?

Q2: What challenges do the learners face during a blended learning experience?

Q3: How does technology influence learners' engagement in a blended learning environment?

Q4: What is a viable blended learning model for the situation of teaching EFL learners at a lower-secondary school?

The research questions were put into the context of the proposed hypotheses for the research.

4.2 Hypotheses

In this subchapter, the author states the hypotheses that address the research questions proposed in chapter 4.1. The hypotheses are connected to each of the proposed research questions so that they can be viewed in the necessary context.

The following hypotheses were stated in connection to the research questions:

Q1: What motivates the examined group of EFL learners at a lower-secondary school?

H1: *The main motivation for learning English will be extrinsic, with only a minority of learners being intrinsically motivated.*

Q2: What challenges do the learners face during a blended learning experience?

H2: *Some of the main challenges will be of the technical character followed by the challenges connected to keeping focus during working on an assignment.*

Q3: Does technology influence learners' engagement in a blended learning environment?

H3: *The use of technology will not influence the engagement of students during a reading practice.*

H4: *The use of technology will not influence the engagement of students during a listening practice.*

Q4: What is a viable blended learning model for the situation of teaching EFL learners at a lower-secondary school?

H5: *The viable blended learning model will have an equal number of lessons with the use of technology and without the use of technology, which will give the learners a feeling of balance, enabling them to stay motivated and engaged by the variety offered through blended learning.*

4.3 Research sample

This sub-chapter describes the research sample that was used for the analysis of the results.

The quasi-experiment was organized at a lower-secondary school in Prague, Czechia during a 14-day period with the consent of all participating students. The research was conducted only a week after the state-wide higher-secondary school entrance exams for the 9th graders. Hence, this was thought to be possibly influential on learners' motivation, so it was also inspected by the research. The total number of three groups of EFL learners in their final grade were examined in a real-world setting during regular English lessons. The first questionnaire was answered by a total of 35 students and the last one by 30 students. Out of all the gathered data, a total of 8 learners' answers were chosen as the valid source of data for further analysis, as they had attended all the lessons during the two-week-long quasi-experimental research. With the limited number of eight participants, it is impossible to draw any broad conclusions. Therefore, any results or hypotheses only apply to this particular group.

The research used a quasi-experimental method, where the students experienced blended learning in which the chosen variable was the use of technology during the lesson. The chosen groups were fairly homogenous with all the participants being between 14 and 15 years of age and consecutively in the same grade of lower-secondary school. All the participants had previous experience with the use of educational technology, namely portable laptops with a touch screen that was also used during the quasi-experiment. Moreover, all three groups were taught by the same teacher, the author of the thesis.

4.4 Data collection

The research was conducted using a multifaceted approach. The data was collected using two main questionnaires (see Ia, Ib) and a third instant feedback questionnaire (see Ic) that was assigned to learners after every lesson with the focus of gathering immediate feedback after the lesson. The main two questionnaires were assigned to learners before (Ia) and after (Ib) the quasi-experiment. Hence, the name pre- and post-questionnaire is used to make a distinction between the two forms. The pre-questionnaire's objective was to observe students' motivation and attitude towards learning English. (see Ia) The post-questionnaire's objective was to collect data about

learners' blended learning experience during the quasi-experiment in terms of engagement, and challenges faced during the research and to provide data for finding a viable blended learning model for lower-secondary education. (see Ib) The challenges experienced during the quasi-experiment were inspected solely from the point of view of the examined students.

The last questionnaire (see Ic) examines the role of technology on students' engagement as proposed by Q3: *How does technology influence learner's engagement and motivation in a blended learning environment?* The data for the associated hypotheses (H3, H4) was collected through the instant feedback questionnaire (see Ic) consisting of a rating on a scale from one to ten on, how engaged did the students feel during the particular lesson. The data was then examined with the ANOVA single factor analysis, where the factor was the use of technology in the lesson. (see 4.8)

Nevertheless, to address the validity issues of the proposed quasi-experimental research, several precautions were implemented. Before the experiment, students were introduced to the educational apps that were used during the research to address the possible effect of novelty. Three groups were participating in the research. The groups were assigned one of the letters - A, B and C. To maintain the internal validity of the data, the groups were randomly assigned for the use of laptops in the classroom. (see Table 5) Furthermore, to minimize the internal validity issues, one control group was present on each day of the quasi-experiment. (see Table 5)

Table 5

The planned schedule for the quasi-experiment

	Wednesday	Thursday	Friday	Wednesday	Thursday	Friday
Group						
A	Q1	TECH Q3	PAPER Q3	PAPER Q3	TECH Q3	Q2
B	Q1	PAPER Q3	TECH Q3	TECH Q3	PAPER Q3	Q2
C	Q1	TECH Q3	PAPER Q3	PAPER Q3	TECH Q3	Q2

Note. Q1 = pre-questionnaire, Q2 = post-questionnaire, Q3 = instant feedback questionnaire, TECH = lessons with the use of technology, PAPER = lessons without the use of technology

Moreover, the examined students chose random identification numbers, starting with the group identification letter A, B or C, which states to which group the participant belonged and a random number between 001 to 015. This was done to ensure the full anonymity of the participating students and to address the possible negative influence of the data by the Hawthorne effect. (Merrett, 2006)

The data collected was selectively picked from respondents that were present throughout the whole quasi-experiment. This aimed at validating the data, as participants that were not present during the whole experience could not provide a sufficient comparison between individual lessons.

Nevertheless, the lessons for the quasi-experimental research were prepared with the aim to teach comprehension skills, namely reading, and listening. (see II) The author's prior experience with the use of educational applications Newsela and LyricsTraining was used to arrange the lessons so that both lessons with and without the use of technology were similar in nature. (see II) Most of the communication was done orally in the classroom without the use of technology. Moreover, the teacher's role was mainly in monitoring the classroom and helping students in need.

The reading lessons consisted of two separate lessons where the reading was done on a series of articles from the platform Newsela.com (see 2.2.7). The first lesson used a traditional method of working with paper copies provided by the teacher. The students had the opportunity to choose from articles which were of their proper interest, as well as at an appropriate level of difficulty. This was done in a classroom setting, where the learners worked at their own pace. (see IIa)

When the technology was used, students were assigned a set of similar articles about the same topic through Microsoft Teams but instead of reading them on paper, they were to read them asynchronously on a laptop via the application Newsela.com. (see IIb)

The listening part was focused on listening comprehension using gap-filling exercises. The first lesson was organised in a traditional manner, where the listening was practised on gap-filling exercises utilising paper copies of lyrics for two different songs. (see IIc) The learners were provided with a word bank at the bottom of the paper copy, which worked as an optional support for lower-performing students.

On the other hand, the lesson with the use of technology (see IId) resembled the lesson, utilising laptops with a learning app called LyricsTraining (see 2.2.8). The learners practised listening on gap-filling exercises using a variety of songs ranging

from well-known pop songs to less-known alternative genres. The website was shared with the learners through Microsoft Teams. As with the traditional lesson, the application provided students with the option to choose from a variety of levels of difficulty and support. (IId)

4.5 Analysis/results

This chapter provides an overview of the results that were found by the research and discusses possible reasons for these findings. The analysis is sorted according to the research questions and proposed hypotheses.

The first three parts (4.6, 4.7, 4.8) of this results section are divided according to the lesson objective in the quasi-experiment. Hence, the questions are considered in connection to reading and listening comprehension practice. The last part (4.9) of the analysis, explores the overall possibility of the use of blended learning in a regular practice of learning in an EFL lower-secondary classroom.

The first part (4.6) inspects the motivation of EFL learners at a lower-secondary school, as was stated in the research question Q1: “*What motivates the examined group of EFL learners at a lower-secondary school?*” The following chapter (4.7) explores the perceived challenges of blended learning in the context of EFL learners at a lower-secondary school, as it was stated by Q2: “*What challenges do the learners face during a blended learning experience?*” The third part (4.8) examines the influence of technology on engagement in the blended learning setting, as seen in Q3: “*Does technology influence learners’ engagement in a blended learning environment?*”

Finally, the last part (4.9) answers the research question Q4: “*What is a viable blended learning model for the situation of teaching EFL learners at a lower-secondary school?*” Hence, it assesses the possibility of using the blended learning model in the context of lower-secondary education and comments on future implications for implementing the model into regular practice.

4.6 Q1: Motivation of EFL learners at a lower-secondary school

This chapter inspects data from the pre-questionnaire (see Ia), with the aim to provide an overview of the attitude of learners towards English learning and to answer the research question Q1: *What motivates the examined group of EFL learners at a lower-secondary school?* Furthermore, in connection to the proposed Q1, it examines

the hypothesis H1: *The main motivation for learning English will be extrinsic, with only a minority of learners being intrinsically motivated.*

4.6.1 The attitude towards English learning

To provide an overview of possible motivating factors, attitude towards English learning was examined. A total of 6 Likert scale statements that were viewed as showing a positive attitude towards learning English were analysed to find the *mean* (M) and *combined mean* (Mc) of all the examined statements. (see Table 6) A total number of eight respondents' answers were analysed. The numeral value was assigned to each of the possible responses in the following matter: "Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly agree = 5".

The results show that the most popular statement was found to be *I enjoy English lessons.* ($M = 4.50$, $SD = 4.03$) This could point to English lessons being enjoyable and possibly engaging. On the other hand, the statement, that the learners agreed the least with, was found to be *I regularly prepare for English classes.* ($M = 3.38$, $SD = 3.08$) This could possibly mean either low intrinsic motivation of learners or rather lower difficulty of English lessons, which the students do not feel the need to prepare for regularly. However, it could be concluded, that the overall attitude towards English learning was generally positive. ($Mc = 4.08$)

Table 6

Positive attitude towards English learning

Statement	M	SD
I would take English even if it wasn't a compulsory subject.	4.25	3.94
I enjoy English lessons.	4.50	4.03
I look forward to English classes	4.25	3.79
I regularly prepare for English classes	3.38	3.08
I learn English in my free time.	4.00	3.54
English is my favourite subject.	4.13	3.74
Combined mean (Mc)	4.08	

Note. Number of respondents $N = 8$

This table shows a mostly positive attitude, which gives an overview of the general attitude of the examined group of learners. Moreover, to observe the groups' possible motivating factors, the overall attitude of students towards learning reading and

listening was considered. Hence, the following subchapters reflect upon this. (see 4.6.2, 4.6.3)

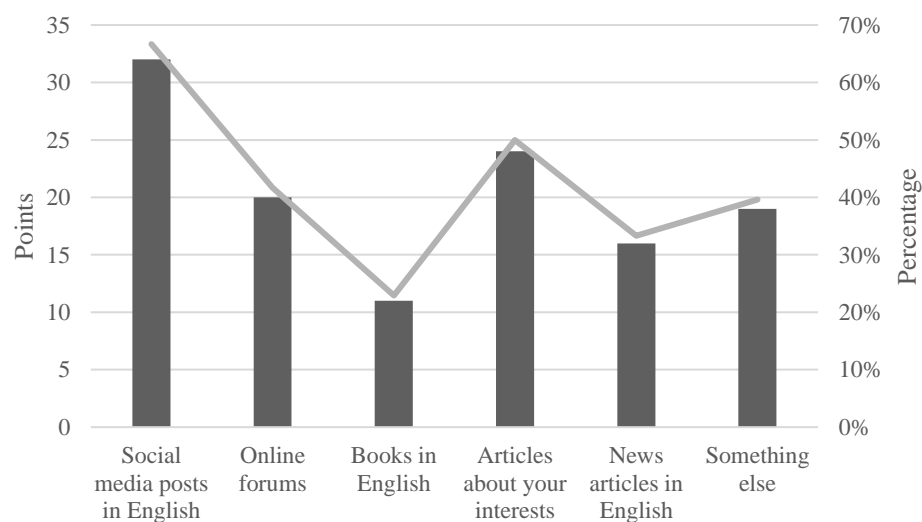
4.6.2 The attitude towards reading in English

This subchapter describes the attitude of learners towards reading in English and their most common means of reading. The importance of knowing learners' attitudes towards specific activities in reading was found important for engagement and motivation by Miller & Desberg (2009). Hence, this was considered in the research. The attitude towards reading in English was examined by ordering the following statements according to how often the learners do the following: *Reading social media posts in English, Online forums, Books in English, Articles about my interests, Something else,* and *News articles in English.*

The data shows that the readers' most common type of reading was Social Media posts in English with 32 points, which equals to 67% of the maximum score, followed by articles about students' personal interests with 24 points, which equals to 50% of the maximum. The results suggest that learners would be mostly motivated by social media posts, which are pictures or videos associated with a short story or a text. (see Figure 1)

Figure 1

The attitude towards reading in English



Note. The percentage equals to points divided by the maximum of 48

In conclusion, the data provided an overview of what can be engaging for learners in terms of reading comprehension. It could be considered that social media posts and articles about learners' interests might be beneficial for gaining their interest and

improving their overall engagement. However, the author suggests that further research should be done in order to be able to generalise.

4.6.3 The attitude towards listening in English

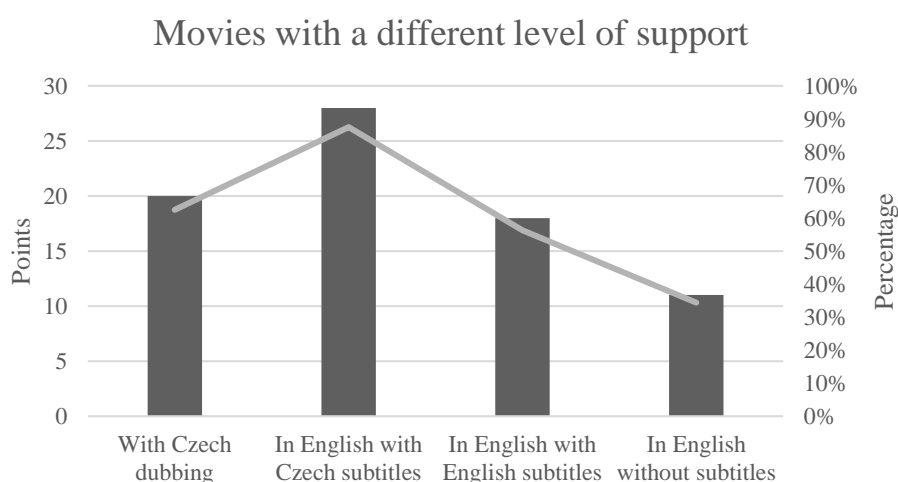
This subchapter describes the attitude of learners towards listening in English and searches for the most common means of listening.

The learners were asked to order statements according to how often they seek to watch a movie with different levels of support, such as subtitles in their native language or English subtitles. The statements were the following: *I watch movies - In English without subtitles, In English with English subtitles, In English with Czech subtitles, and With Czech dubbing*. Each of the statements was assigned with points according to their position, where the most common statement had 4 points and the least common 1 point. The highest position was considered the most common way of watching movies, while the lowest position was considered negligible. The results show that the majority of learners were fond of watching movies in English with Czech subtitles with a score that equals to 88% of the maximum possible points. The second most popular choice was Czech dubbing, which earned 20 points which equal to 63% of the maximum points.

However, even with Czech dubbing being the second most popular, the results point at rather positive attitude of learners towards acquiring English in their free time by watching movies, as the numeral difference between the first two positions was quite big. (28 to 20)

Figure 2

How often do the respondents watch movies with a different level of support

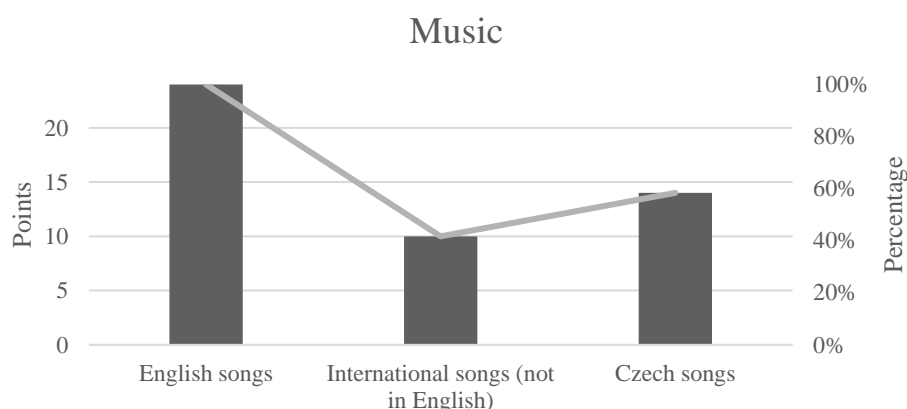


Note. The percentage equals to points divided by the maximum of 32

Nevertheless, the question about the attitude of learners towards listening comprehension was divided into two parts, where the second part was connected with listening to music as a mean of acquiring English. This brought interesting results, as it was found that all the students put English songs as their first choice, which resulted in a score of maximum points. (24) Hence, it can be concluded that all the respondents' most common music choice was from English singing artists. The second most prominent answer was Czech songs with a score of 14 which equals 58% of the maximum points, tightly followed by a choice of other international music. This option scored 10 points, equalling 42% of the maximum possible points. The data shows that English songs were the most popular among the respondents, which can point to a possible motivating factor for learning English, as English songs were found to be highly relevant to the respondents' everyday life. (Miller & Desberg (2009)

Figure 3

Typical type of music listened to by examined learners



Note. The percentage equals to points divided by the maximum of 24

In conclusion, it was found that the respondents are regular listeners of English music, which can be seen as a possible motivating and engaging factor for learning listening. Moreover, the participants also preferred movies with Czech subtitles over Czech dubbing, which can be possibly seen as a willingness to acquire English through movies in their leisure time.

4.6.4 Extrinsic motivation

This subchapter investigates the amount of extrinsic motivation seen in the examined group of learners towards learning English.

The extrinsic motivation was examined on Likert scale statements found in the pre-questionnaire. (Ia) The examined statements were: *I learn English because of my parents. I am motivated by marks. I am motivated by praise.* The statements were created in consideration of the theoretical base for the term. (see 3.5.1) The numeral value was assigned to each of the possible responses in the following matter: “Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly agree = 5”.

The results were found to be surprising, showing that the perceived extrinsic motivation of examined learners was rather neutral ($M_c = 3.04$). However, the results suggest that some of the statements were perceivably rather close to negative, their M was lower than three. Such a statement was found to be *I learn English because of my parents.* ($M = 2.13$, $SD = 1.50$). Among the most motivating factors for the group was the statement *I am motivated by praise*, which had a higher mean ($M = 3.75$, $SD = 3.50$) than the remaining statements.

Table 7

Extrinsic motivation among the examined students

Statement	M	SD
I learn English because of my parents.	2.13	1.50
I am motivated by marks.	3.25	2.96
I am motivated by praise.	3.75	3.50
Combined mean (M_c)	3.04	

Note. The highest M has also the highest standard deviation.

As extrinsic motivation was not found to be that crucial for the respondents learning, it was necessary to consider whether the learners were motivated intrinsically. Hence, the following chapter (4.6.5) discusses the intrinsic motivation of the inspected group of participants.

4.6.5 Intrinsic motivation

This subchapter examines the extrinsic motivation of learners towards learning English.

As it was suggested by the previously done research, there are two main types of motivation. (Sansone et al., 2000; Hayenga & Corpus, 2010) The extrinsic motivation of the examined group was inspected in chapter 4.6.4. Hence, in connection, the intrinsic motivation was inspected too to provide necessary data for the examination of proposed hypothesis H1.

Intrinsic motivation was examined on the three following Likert scale statements: *I learn English because of myself*, *I learn English because of my future* and *I am motivated by the good feeling of having learned something*. (see Ia) These statements were considered intrinsically motivating based on the theory. (see 3.5.2) The numeral value was assigned to each of the possible responses in the following matter: “Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly agree = 5”.

While respondents felt mostly neutral about extrinsic motivation (see 4.7.4), the results of intrinsic motivation show very different results. The *combined mean* of the three statements was found to be higher ($M_c = 4.67$). This points to a very high perceived intrinsic motivation by examined learners. The most significant statements were *I learn English because of myself* ($M = 4.75$, $SD = 4.27$) and *I learn English because of my future* ($M = 4.75$, $SD = 4.27$). The results were surprisingly the same, which could be the consequence of an overall lower number of respondents ($N = 8$).

The lowest scoring, yet still very significantly motivating factor was found to be *I am motivated by the good feeling of having learned something* ($M = 4.50$, $SD = 4.06$).

Table 8

Perceived intrinsic motivation by the examined learners

Statement	<i>M</i>	<i>SD</i>
I learn English because of myself.	4.75	4.27
I learn English because of my future.	4.75	4.27
I am motivated by the good feeling of having learned something.	4.50	4.06
Combined Mean (<i>M_c</i>)	4.67	

Note. Number of respondents $N = 8$

Hence, it could be concluded that among the particular group of students, the overall notion of motivation was rather intrinsic, as found in the data. However, the overall notion was further inspected in the following chapter, comparing both types of motivation and providing further insights into the problematics. (see 4.6.6)

4.6.6 The overall notion of motivation

The overall notion of motivation among the chosen respondents was inspected by a comparison of results provided in Tables 7 and 8. In addition, an overview of the individual learners' motivation was provided for context. The data from the previous two chapters (4.6.4, 4.6.5) were inspected to examine the stated null hypothesis H1: *The*

main motivation for learning English will be extrinsic, with only a minority of learners being intrinsically motivated.

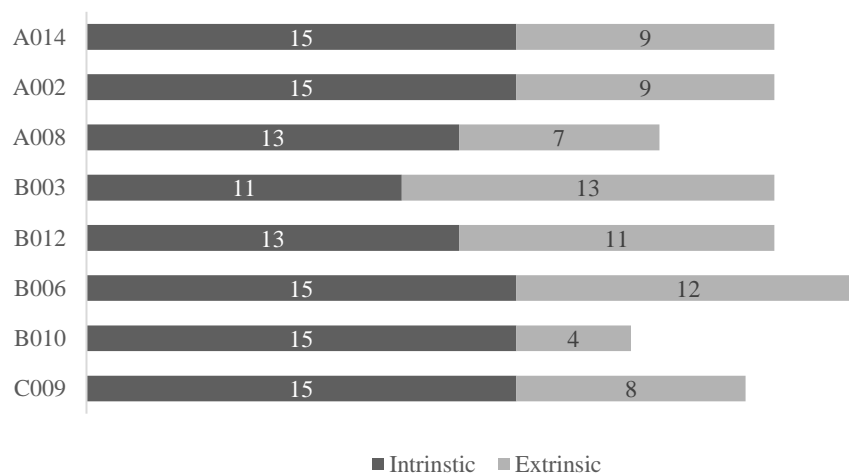
The overall notion of motivation was analysed by comparison of data from two sets of statements (see Table 7, Table 8), depicting either intrinsic or extrinsic motivation. The comparison of the combined means (*Mc*) of the two sets of statements suggests that intrinsic motivation (*Mc* = 4.67) was more common than extrinsic. (*Mc* = 3.04) Additionally, to provide further insights into the results, individual respondents' answers were inspected.

The statements from pre-questionnaire (see Ia) were examined again, providing an overview of the notion of motivation of individual examined students. (see Figure 3) The numeral values were assigned to the statements in the following manner: Strongly agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly disagree (1).

The results show that all respondents were motivated by both types of motivation, which reflects the data from previously done research. (Ryan & Deci, 2000; Lemos & Veríssimo, 2014) The maximum number of points per type of motivation was 15, which was found among 5 students (A014, A002, B006, B010, C010). The most extrinsically motivated student was found to be respondent B003, whose motivation was dominantly extrinsic, which correlates with the proposed hypothesis H1.

Figure 3

Overall notion of motivation among examined students



Note. Only student B003 was found to have higher extrinsic than intrinsic motivation. (13 to 11)

However, some surprising insights were found about the motivating factors of the group of students, as the majority was motivated predominantly intrinsically, which rejects the proposed hypothesis H1.

In conclusion, the majority of examined learners was found to be intrinsically motivated, which was a surprising find, that provides evidence for rejection of the null hypothesis H1.

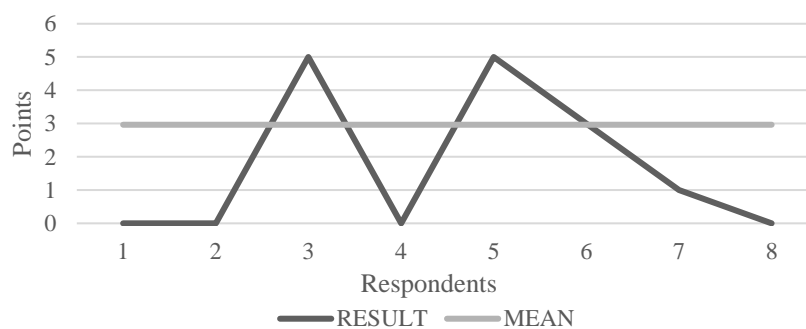
4.6.7 The influence of entrance exams on motivation

This subchapter examined the possibility of influence of entrance exams on motivation of the examined group.

Even though the results showed that the students are generally more intrinsically motivated (see 4.6.6), it was suggested by the theory, that student's motivation may undergo many changes. (Corpus, McClintic-Gilbert & Hayenga, 2009; Gillet, Vallerand & Lafrenière, 2011) Hence, to provide the full overview of learners' motivation for learning English, their learning context had to be considered by assessing the influence of entrance exams on learners' motivation. (See Iib) The group of participants were in their last year of lower-secondary school, which was only a week after their secondary school entrance exams. At the time of the quasi-experiment, all students had already participated in the secondary school entrance exams, which was thought to be possibly influential on their loss of motivation, as there would be no need to keep their grades up. The possible influence of these exams was examined by question two in the questionnaire (Ib) using a scale of 1 to 10 on how much the completion of the entrance exams was perceivably influential on their motivation for learning English during the ongoing research. The data is interpreted in a way that the higher the number, the more probable influence on motivation.

Figure 4

The influence of entrance exams on motivation



The results show that the entrance exams had only a very insignificant influence on the motivation of learners with a mean of $M = 2.96$. (See Figure 4) This data supports the result of overall high intrinsic motivation of the examined group, as the external motives, such as marks do not play such a role in this group. (4.6.6) Moreover, it was found that four respondents answered that they were not influenced by entrance exams at all.

In conclusion, as the results suggest, there was very little support for the influence of entrance exams on motivation. Hence, it can be concluded that the group was not negatively influenced by the completion of exams and their motivation remained high even with the experience.

4.7 Q2: Challenges faced during the blended learning experience

This chapter inspected data from the post-questionnaire (see IIb), with the aim to provide an overview of the challenges faced by English learners in a blended learning environment, answering research question Q2: “*What challenges do the learners face during a blended learning experience?*” Moreover, it aims to examine hypothesis H2: *Some of the main challenges will be of the technical character followed by challenges connected to interaction.*

Some of the blended learning challenges proposed by previous studies (see 1.4) were examined on Likert scale statements. Among the challenges that were examined were *the interaction, focus and technical issues*. Hence, individual statements inspecting the challenges in the questionnaire (Ib) were assigned to each of these categories and their mean was calculated. The studied statements were examined using the Likert scale, where points were assigned to the answers in a following manner: “Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly agree = 5”. The higher the total count of points for each statement, the higher the impact on the examined group. The individual challenges were sorted into three categories, namely *Interaction and sense of community, focus, and technical issues*. These categories were used in relation to the theoretical base. (see 1.4) The results show that the most prominent challenge experienced by the respondents was connected to *focus*. ($Mc = 2.13$) The second most prominent challenge was connected to *technical issues*. ($Mc = 2.06$) Finally, the least prominent category was found to be *interaction and sense of community*. ($Mc = 1.56$)

However, it could be argued that no challenge was significantly prominent, as the highest combined mean was $Mc = 2.13$, which would be close to the statement *Disagree*.

Table 9

Challenges induced by the use of technology experienced by the examined learners

Challenges	M	SD	Mc
Interaction and sense of community			1.56
Technology makes me feel insecure	1.50	3.24	
Technology makes me feel distant from others	1.63	4.17	
Focus			2.13
Technology distracts me from reality	2.13	5.73	
Technology disrupts my focus	2.13	6.23	
Technical issues			2.06
I experienced technical issues	2.25	6.76	
I have insufficient technical abilities	1.88	4.37	

Note. Number of respondents n=8

Nevertheless, the data provided by the research offer some surprising findings. Technical issues were mentioned as the second most prominent, even though past research has shown the category to be the most common. (Kenney & Newcombe, 2011; Kaur, 2013; Yang, 2014; Alvarez, 2020) This could be the result of students' past experience with the use of technology that was also used during the quasi-experiment.

However, there were more unexpected results found, as the interaction and sense of community were found to be the least commonly experienced challenges. This contradicts the prediction of previously done research that suggested these challenges are one of the most prominent. (Yang, 2014; Boelens, De Wever & Voet, 2017; Alvarez, 2020)

Last, the most common challenge experienced by the learners was found to be with focus ($Mc = 2.13$), which was unforeseen, as it was not very often mentioned in the past studies. (see 1.4) Hence, it can be concluded that the results were overall surprising, which may be a result of a very specific situation, in which the research was conducted.

In connection to the proposed hypothesis H2, it was found that there was not sufficient evidence for its support, as the most common challenges were connected to *focus* ($Mc = 2.13$), followed by *technical issues* ($Mc = 2.06$) and *interaction* ($Mc = 1.56$). Hence, it could be concluded that the hypothesis H2 was rejected.

In conclusion, the data provided surprising results, that suggested that the hypothesis (H2) is to be rejected. However, the analysis provided insights into the most common challenges experienced by the examined group.

4.8 Q3: The influence of technology on engagement

This part inspected the research question Q3: *How does technology influence learner's engagement in a blended learning environment?*

The data were inspected using ANOVA single factor analysis on data collected from the instant feedback questionnaire. (see Ic) The examined factor was the use of technology in a lesson and its influence on engagement, which was reflected in the proposed hypotheses. (H3, H4)

H3: *The use of technology will not influence the engagement of students during a reading practice.*

H4: *The use of technology will not influence the engagement of students during a listening practice.*

The data was provided by a total of 12 participants chosen randomly from two examined groups of respondents. The groups were examined according to the research design (see Table 5, 4.4), where one group was assigned to learn with the use of technology and one without. The third group C worked as a control group. From the total of 12 examined participants' answers, 6 were randomly chosen from group A and 6 were chosen from the examined group B, so that data from both lessons with and without the use of technology were considered. Furthermore, the data was analysed from a set of six randomly chosen respondents per group.

4.8.1 The influence of technology on engagement in reading

This sub-chapter examined the possible influence of technology on engagement in reading lessons (see IIa, IIb) experienced during the quasi-experiment.

The proposed null hypothesis (H3): *The use of technology will not influence the engagement of students during a reading practice.*, was examined using the ANOVA

single factor analysis, where the factor was the use of technology in lessons. The HA3 was set to be: *The use of technology will influence the engagement of students during a reading practice.* The data collected from the instant feedback questionnaire (see Ic) were analysed using ANOVA single factor analysis.

The data provided unexpected results, which show that the technology did not play a crucial role in the engagement of learners in reading, as the *P-value* equals to 0.73. Such a value does not match the set significance level of 0.05. (see Table 10)

Table 10

The influence of technology on engagement in reading

SUMMARY						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
W/TECH	6	53	8.83	1.77		
WO/TECH	6	51.5	8.58	1.24		

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.19	1	0.19	0.12	0.73	4.96
Within Groups	15.04	10	1.50			
Total	15.23	11				

Note. The results show a high *p-value* = 0.73

Moreover, the results also point at a very low overall *F* = 0.12, which when compared to the *F crit* = 4.96, suggests a very low significance, hence supporting the null hypothesis.

In conclusion, it was found that the technology itself does not promote engagement in the learners, which supports the null hypothesis. The following subchapter inspects the influence of technology in the second set of lessons. (see 4.8.2)

4.8.2 The influence of technology on engagement in listening

This sub-chapter examined the possible influence of technology on engagement in listening lessons (see Iic, IId) experienced by students during the quasi-experiment.

The possibility of the influence of technology on engagement was examined on the proposed hypothesis H4: *The use of technology will not influence the engagement of students during a listening practice.*

The HA4 was set to be: *The use of technology will influence the engagement of students during a listening practice.* The data collected from the instant feedback questionnaire (see Ic) were analysed using ANOVA single factor analysis.

The results show that the technology had a very insignificant influence on students' engagement with the p-value of 0.54, as when the results are compared to the set significance level of 0.05, it can be concluded that the results support the null hypothesis. Moreover, the results also point to a very low overall $F = 0.40$, which when compared to the $F_{crit} = 4.96$, provides further support for a very low significance of the influence of technology on engagement.

Table 11

The influence of technology on the engagement in listening

SUMMARY						
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
W/TECH	6	53	8.83	1.77		
WO/TECH	6	50.5	8.42	0.84		

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.52	1	0.52	0.40	0.54	4.96
Within Groups	13.04	10	1.30			
Total	13.56	11				

Note. The *p-value* equals to 0.54

However, in comparison to the lessons with reading (see 4.8.1), it could be seen that there is a slightly higher overall chance of the influence of technology on engagement. ($0.73 > 0.54$) This could point to a possibly higher influence of the use of technology on engagement in lessons connected to listening, which is further inspected in 4.9.1, where the individual lessons are compared according to learners' preferences.

In conclusion, the results did not show a significant influence of technology on learners' engagement in lessons focused on listening practice. Hence, the null hypothesis H4 was supported, showing no significant influence of technology on engagement in listening lessons.

4.9 Q4: A viable blended learning model for EFL learners at a lower-secondary school

This chapter inspects the possibility of implementing blended learning into an EFL lower-secondary classroom. The research question Q4: “*What is a viable blended learning model for the situation of teaching EFL learners at a lower-secondary school?*” is considered together with the stated hypothesis H5: *The viable blended learning model will have an equal number of lessons with the use of technology and without the use of technology, which will give the learners a feeling of balance, enabling them to stay motivated and engaged by the variety offered through blended learning.*

Moreover, a viable blended learning model is proposed for the particular situation of examined group, according to the gathered data from the post-questionnaire. (Ib)

4.9.1 Learners’ perceived engagement in individual lessons

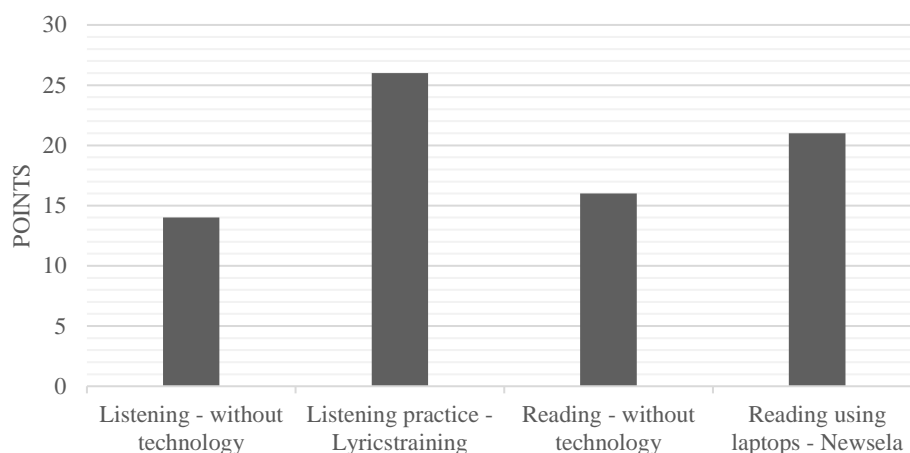
This subchapter observes the perceived engagement of learners in individual lessons, which has the aim to provide an overview of what lessons could be engaging for learners in the examined blended learning model. The learners were asked to sort the examined lessons according to the most engaging. (see Ib) The highest position was awarded four points, while the lowest position was awarded one point. The maximum possible points were 32, as eight participants’ answers ($N = 8$) were analysed.

According to the results, the most engaging lesson was found to be listening with the use of technology, using the platform lyricstraining.com, followed by reading using the technology on the platform Newsela.com. The listening practice scored a total of 26 points, which equals to 81% of the maximum points. (see figure 4) The second most prominent answer was reading with the use of technology which earned a score of 21 points equalling 66% of the maximum possible. This suggests that the lessons with technology were generally more popular than those without the use of technology.

However, the results found in chapter 4.8 suggest that the technology was not found to be significantly influential on learners’ engagement, as the *p-value* for both ANOVA tests connected to the lessons was found to be higher than 0.05, which could be understood as contradicting. However, this might be a result of the difference between perceived engagement immediately after the lesson and when the context of all the experienced lessons was considered by the learners.

Figure 4

Learners' perceived engagement in individual lessons



Note. The maximum points were 32

Nevertheless, the learners were also asked to provide further explanations for their answers, which provided surprising information about the learners' choices. The statements were translated and then sorted according to the following criteria: *preferred listening*, *preferred reading*, and *enjoyed both*. In addition, the learners' first choice (N.1) and last choice (N.4) were provided for reference.

Some findings provided possible further explanation for the results in chapter 4.8, as learners A002 and B012 mentioned that even though lessons with the use of technology were more engaging, the lessons without the use of technology were perceived as not so far from being similarly enjoyable. (see Table 12) This could be possibly understood as confirmation of the results from the examination of the influence of technology on learners' engagement, as there was an overall low variance between the groups. (see 4.8)

However, there were also some surprising comments that were different from other answers in the group. The unexpected comment was made by respondent C009, who stated that reading on a paper was the most enjoyable and that it made the person think about reading at home. This could be possibly interpreted as very positive, as the lesson was seen as a motivating factor for the particular learner to take up reading in English at home. (see table 12)

Table 12

Further explanations of individual answers

ID	Statement	Translation	N.1	N.4
Preferred listening				
A014	<i>Poslech v lyricstraining mě baví nejvíc a soustředím se asi nejvíc při tom.</i>	I enjoyed listening in lyricstraining the most and I probably concentrate the most while doing it.	LT	RNT
B003	<i>Poslech s notobooky mě baví víc než to číst jenom z papíru.</i>	I enjoy listening with notebooks more than just reading from the paper.	LT	RNT
Enjoyed both				
B006	<i>Protože mě to vždy bavilo více na počítačích než na papíře. Radši poslouchám písničky než si čtu články, ale ty články taky byly fajn.</i>	Because I've always enjoyed it more on computers than on paper. I'd rather listen to the songs than read the articles, but the articles were fine too.	LT	RNT
B012	<i>Bavilo mě pracovat s lyricstraining a newsela, ale ani práce s papírem nebyla špatná.</i>	I enjoyed working with lyricstraining and newsela but working with paper was not bad either.	LT	RNT
A002	<i>I me bavilo nejvíce a 4 nejmene, to neznamená že me to nebavilo</i>	I enjoyed my choice number 1 the most and 4 the least, that doesn't mean I didn't enjoy the rest.	LT	LNT
Preferred reading				
B010	<i>Baví mě čtení článků</i>	I enjoy reading articles	RT	LT
C009	<i>Čtení s papírem mě bavilo nejvíce, zase jsem zjistila, že mě to baví a že bych si mohla přečíst i něco doma. Poslech s papírem mě moc nebavil.</i>	I enjoyed reading with paper the most, I found that I had fun and I could probably read something at home. Listening practice with paper wasn't really fun for me.	RNT	LNT
Undecided				
A008	<i>nevím</i>	I don't know.	LNT	LT

Note. LT = Listening with technology, RT = Reading with technology, LNT = Listening without technology, RNT = Reading without technology, N1 = the first choice, N4 = the last choice

On the other hand, there were also some very positive comments about the use of technology for listening. Respondent A014 mentioned that listening practice using

LyricsTraining was the most enjoyable and it helped with being focused the most. This could point to possibly very high emotional engagement, as suggested by the theory. (see 3.2.2)

In conclusion, the results suggest that the most popular lesson was found to be listening with the use of technology. Some additional comments from the examined learners provided further insights into the already analysed results and provided surprising information about their individual experience.

4.9.2 The learning experience during blended learning

This subchapter observes and describes learners' individual experiences during the quasi-experiment. The learners were asked to provide optional commentary about their experience of blended learning during the conducted quasi-experiment. (see Ib)

The overview is presented in Table 13, with further commentary.

Table 13

Optional commentary about the learning experience

ID	Statement	Translation	Descriptor
Positive			
B012	<i>Poslední 2 týdny mě bavili.</i>	I <i>enjoyed</i> the last two weeks.	<i>Enjoyable</i>
B006	<i>Bylo to zajímavé a naučné.</i>	It was <i>interesting</i> and <i>educational</i> .	<i>Interesting and educational</i>
Neutral			
B003	<i>Tyto dva týdny se mi celkem líbili.</i>	I quite <i>enjoyed</i> these two weeks.	<i>Enjoyable</i>
A008	<i>Poslední dva týdny se mi líbili myslím si že byly dobré jedna hodina byla trochu horší ale zbytek byl dobrý a nevadilo by mi kdyby se takhle pokračovalo</i>	I liked the last two weeks I think they were <i>good</i> . One lesson was <i>a bit worse</i> but the rest was <i>good</i> and I wouldn't mind if it continued like this.	<i>A bit worse</i> <i>Good</i>
No answer provided			
B010	N/A		
C009	N/A		
A002	N/A		
A014	N/A		

Note. The statements are provided with English translation that may not fully reflect the nature of the response.

The learners' statements were sorted according to their perceived feeling into three categories: *Positive*, *Neutral*, and *No answer provided*. As this question was optional, not all the learners decided to comment. ($N=4$)

Two statements were found to be positive, with the main descriptors being *enjoyable*, *Interesting and educational*. (B012, B006) This could mean that the learners found the experience to be possibly engaging and influential on their English learning.

On the other hand, two responses were found to be neutral with respondent A008, who commented that the whole experience was rather positive with only one of the lessons being a bit worse. The lesson was not specifically mentioned in the commentary, yet it could be possibly deduced that the mentioned lesson was lesson (IId), as it was the learners' last choice when ranking the lessons according to the perceived engagement. (see 4.9.1)

In conclusion, the explanations show that the blended learning experience was seen as equally positive and neutral, which further provides support for the used blended learning model.

4.9.3 The desired amount of lessons with technology

As the theoretical framework for blended learning (see 1.1) does not provide an exact answer on what is blended learning and how many lessons a week are needed in order to teach a blended learning course, this subchapter examines the model that was used in the quasi-experiment to provide evidence for the research question Q4. Moreover, hypothesis H5 (see 4.3) is examined.

The data was collected from the post-questionnaire, using a question asking the examined learners how often they would like to experience learning with technology. (See Ib) The following options were suggested: *Every lesson*, *Twice a week (if there were three lessons in total)*, *Once a week*, *Every fortnight*, *Once per month*, and *Something else*. Moreover, the question was followed by a space for additional explanation that provided further insights into the examined matter. The total number of respondents was $N = 8$.

It was found that there was an equal amount of answers (4) between *Twice a week* and *Once a week*. No other answer was used by the respondents. Hence, it could be concluded that there is a desire for a certain balance of lessons with and without the use of technology. This tendency can also be seen in further explanations provided by the students. Four respondents (C009, B012, A002, B010) specifically mentioned that

they would not like to have lessons with technology every lesson but rather occasionally. On the other hand, the remaining respondents answered rather positively, mentioning *enjoyment*, *interest* and *fun*. Hence, these answers were labelled as expressing satisfaction. Specifically, respondent A008 suggested that the model of one lesson with technology per week was ideal.

Table 14

The commentary written about desired amount of lessons with technology

ID	AOL	Commentary	Translation
Satisfaction			
A014	1/3	protože mě práce s tablety baví.	Because I enjoy working with laptops.
B006	2/3	Je to zajímavější a zábavnější.	It is more interesting and more fun.
B003	2/3	Pracování na tabletu mě celkem baví. A na střední je možně že to nebude.	Working with laptops is quite fun. It is highly possible that we will not get to work with laptops at a higher secondary school.
A008	1/3	Myslím si že takhle je to nejlepší když máme tři hodiny týdně tak jednu bych věnoval počítačům.	I would like to have 1 out of 3 lessons a week with the use of technology. I find it to be the best.
Need for occasional change			
B010	1/3	kdybychom měli počítače každou hodinu, tak bychom nic jiného nedělali.	If we had laptops every lesson, we would not do anything else.
C009	2/3	Pracování s počítači mě baví, ale zase abychom někdy dělali i něco jiného.	I enjoy working with computers, but again, sometimes we need to do something else.
B012	1/3	Aby jsme nedělali pořád něco na počítačích, ale zase ta 1 hodina týdně by neškodila dělat něco jiného než normálně.	So that we do not always do something on computers, but then again, it wouldn't hurt to have that one lesson per week doing something unusual.
A002	2/3	Hodiny s pc me bavily ale nedaval bych je uplne kazdou hodinu	I enjoy lessons using laptops but I would not have them every lesson.

Note. 1/3 = Once a week, 2/3 = Twice a week; AOL = Amount of lessons

However, a surprising comment was made by respondent B003. The examined learner expressed certain fear of missing out on the use of technology by stating: *It is highly possible that we will not get to work with laptops at a higher secondary school.* (B003) This statement can be interpreted as attributing a certain uniqueness to the use of technology, which could be possibly seen as the technology being a motivating factor by its uniqueness. However, it could also suggest that if the use of technology is regular, it might lose its exclusivity.

Nevertheless, the data were analysed to examine the hypothesis H5: *The viable blended learning model will have an equal number of lessons with the use of technology and without the use of technology, which will give the learners a feeling of balance, enabling them to stay motivated and engaged by the variety offered through blended learning.* The quantitative data provided evidence to support the hypothesis, as the desired amount of lessons with technology was found to be between *once to twice per week* (4 to 4), which supports the first part of the hypothesis. Moreover, the analysis of learners' statements provided evidence for the viable model of blended learning, where technology is used only as an occasional way of making lessons interesting. (see Table 14) Hence, it could be concluded that hypothesis H5 is supported by the results and the viable blended learning model has an equal number of lessons with the use of technology and without the use of technology.

In conclusion, this subchapter provided insights into the feelings of individual learners about the use of technology in education. The quantitative data suggest that the ideal amount of lessons with the use of technology is between once to twice per week. Moreover, learning with technology was viewed as engaging but also as an occasional way to make lessons more interesting.

4.9.4 Proposed model

As the research suggests, learners found the use of technology as a way of experiencing something unusual rather than something they would want to experience in every lesson. This may be the result of their experience with full online learning that was induced by COVID-19. The results suggest that the ideal ratio of the use of digital technology was found to be between once to twice per week with the use of technology. (see Table 14)

Hence, the author proposes a model where the blending would occur on the mode of content delivery. The blended learning model would encompass regular lessons using

technology once to twice per week depending on the curriculum and the consequent lesson allocation. The learners would experience learning with technology regularly in a blended learning manner. This could provide them with necessary experience with the use of technology, should the lessons go remote in emergency situations, such as the pandemics of COVID-19. (Kovačević et al., 2021).

Last, the author suggests that future research concerning academic outcomes of long-term use of such a blended learning model should be conducted to validate possible general institutional use in the context of lower-secondary EFL learners.

5 Conclusion

This diploma thesis studied the possibility of using a blended learning model in a lower-secondary EFL setting to promote the engagement and motivation of learners via the use of technology, while also inspecting challenges that the participants experienced during the quasi-experiment. Moreover, the thesis focused on the theoretical background of engagement, and motivation and described some of the possible influences on student engagement. The learners' background was inspected to give an overview of the examined groups and the context in which the research was conducted.

The theoretical part provides insight into the problematics of blended learning, where it was found that the term is ambiguous and hard to define. Moreover, some possible blended learning models were described, as found in the literature. The second part of the theoretical part defines the term educational technology and offers a general overview of tools, systems and applications for possible use by educators. The third part then describes the term engagement, its possible classification, measuring tools used by researchers, and some possible influences of engagement.

The practical part reports on the results found in a quasi-experimental research that was conducted in three groups of EFL learners in their 9th grade during the second semester of the school year 2021/2022 at a lower-secondary school in Prague, Czechia. It focused on using a blended learning model, where the use of technology was examined as a variable influencing the engagement of learners. Some of the applications discussed in the theoretical part were used.

A multimodal approach was used to study the data for the research. First, learners' motivation was inspected by analysis of respondents' answers gathered from a pre-questionnaire (Ia). The results show that the majority of learners were rather

intrinsically motivated for learning English, which was disproving to the predictions proposed in hypothesis H1.

Then, a quasi-experiment was conducted to provide data about blended learning challenges, the influence of technology on engagement and the viability of using blended learning in an EFL lower secondary classroom. The main challenges were found to be contradicting to the proposed hypothesis H2, as the results suggest that the most common challenges experienced by learners were in keeping focus. This was a surprising result, as it did not match the challenges that were previously stated as the most common in the literature (Yang, 2014). Moreover, unlike in other previously conducted studies, the category of interaction was found to be the least occurring.

Next, the influence of technology on engagement was examined by using ANOVA single factor analysis of two chosen groups. The results supported the null hypothesis, as there was not any significant support for the influence of technology on engagement in reading ($p = 0.73$) or listening ($p = 0.54$). It was found that the change of mode of content delivery itself is not sufficient enough to influence student engagement. This points to the need of finding further evidence on which variables play the key role in engagement among lower-secondary learners. As the previous research was positive about the influence of technology on engagement in tertiary education (Sun & Rueda, 2012), it may indicate that age may be a possible factor for the influence of technology on engagement.

Nevertheless, the final part of the practical part inspected learners' thoughts about the experienced blended learning and proposed a blended learning model for the specific context of the examined group. The results show that the learners' perceived engagement was found to be higher in lessons with the use of technology, as seen in (4.9.1). However, further explanations by the students suggest that the use of technology, should not be used in every lesson but rather as an occasional way to keep lessons interesting (see 4.9.2). Hence, the data provided evidence for a suggested blended learning model of two face-to-face lessons without the use of technology and one face-to-face lesson specifically dedicated to the use of technology. Moreover, in the context of the theoretical ground (Kovačević et al., 2021), such a model is thought to be beneficial for providing learners with much-needed experience with the use of technology that could help them adapt in case of emergency situations, should the lessons go fully remote.

In conclusion, the research provides insight into a blended learning experience of EFL learners at a lower-secondary school with its challenges and possible influencing factors of their engagement. Furthermore, the thesis works as an inspiration for further development and improvement of the teaching practice connected to teaching lower-secondary EFL learners.

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Annexes

Ia) Pre-questionnaire

1. Uveď své číslo. *

Zadejte svoji odpověď.

2. Vyjádři, svou míru souhlasu s následujícími tvrzeními. *

	Naprost nesouhlasím	Spíše nesouhlasím	Neutrální	Spíše souhlasím	Naprost souhlasím
Angličtina je můj oblíbený předmět.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hodiny angličtiny mě baví.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chodí(a) bych na angličtinu i kdyby se nejednalo o povinný předmět.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Na hodiny angličtiny se těším.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Učím se anglicky ve svém volném čase.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pravidelně se připravuji na hodiny angličtiny.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Vyjádři, svou míru souhlasu s následujícími tvrzeními. *

	Naprost nesouhlasím	Spíše nesouhlasím	Neutrální	Spíše souhlasím	Naprost souhlasím
Anglicky se učím kvůli své budoucnosti.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anglicky se učím kvůli rodičům.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anglicky se učím kvůli sobě.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivují mě známky.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivuje mě pochvala.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivuje mě dobrý pocit z toho, že jsem se něco naučil(a).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Seřad' dle preferencí. (nahore nejvíce preferované, dole nejméně preferované)

Preferuji sledovat filmy/seriály: *

V originálním znění s anglickými titulky

S dabingem

V originálním znění bez titulků (anglicky)

V originálním znění s českými titulky

5. Co čteš nejčastěji? (Nahore nejčastější, dole nejméně časté) *

Knihy v angličtině

Noviny v angličtině

Články týkající se tvých zájmů

Internetová fóra

Příspěvky na sociálních sítích v angličtině

Něco jiného

6. Seřad' dle četnosti poslechu. (nahore nejčastěji poslouchané, dole nejméně poslouchané) *

Anglické písně.

České písně.

Písně cizojazyčné. (Kromě anglických)

Ib) Post-questionnaire

1. Uveď své číslo. *

Zadejte svoji odpověď.

2. Jak ovlivnily přijímací zkoušky negativně moji motivaci v hodinách angličtiny? *

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Minimálně

Maximálně

3. Seřaď, kterou z hodin bys chtěl nejvíce zažít znovu.

(Kritéria: Zábavnost, tvé zaujetí, tvé soustředění, tvá míra pohlcení aktivitou)

*Nahoře ta, kterou bys chtěl(a) zažít nejvíce pravděpodobně znovu a dole ta, kterou bys chtěl(a) zažít nejméně pravděpodobně. **

Poslech s notebooky - Lyricstraining

Čtení - s papírem

Čtení s notebooky - Newsela

Poslech společný - s papírem

4. Vysvětli svou volbu: *

Zadejte svoji odpověď.

5. Digitální technologie ve výuce přináší tyto problémy

	Naprosto nesouhlasím	Spíše nesouhlasím	Neutrální	Souhlasím	Naprosto souhlasím
Technické potíže (připojení internetu, nefunkční vybavení, ...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technologie ruší mé soustředění (Mám problém věnovat se naplno zadané práci)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mé schopnosti práce s technologiemi jsou nedostačující	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technologie ve mě vzbuzují odcizení od ostatních	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technologie ve mě vzbuzují nejistotu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technologie mě odvádí od reálného světa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Je nějaký jiný problém, který zde nebyl zmíněn?

Zadejte svoji odpověď.

7. Jak často bych chtěl(a) zažívat hodiny s využitím digitálních technologií? (PC, tablety) *

- Každou hodinu
- 2x týdně (při dotaci 3 hodiny/týden)
- 1x týdně
- 1x za 14 dní
- 1x za měsíc
- Jiné

8. Uveď důvod, proč jsi zvolil(a) danou možnost. *

Zadejte svoji odpověď.

9. Volné sdělení k uplynulým dvěma týdnům.

Zadejte svoji odpověď.

Ic) Instant feedback questionnaire

1. Zde prosím uveďte své identifikační číslo. *

Zadejte svoji odpověď.

2. Jak mě zaujala dnešní hodina? *

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Nejméně

Nejvíce

3. Prostor pro volné sdělení k hodině. Proč jsem se rozhodl(a) pro předchozí hodnocení? *

Zadejte svoji odpověď.

Odeslat

II) Lesson plans

IIa) Reading without the use of technology

Aims:

- Students will be able to read an article at the level of their choice
- Students will be able to answer the follow up questions from the quiz
- Students will be able to discuss and answer questions about the assigned topic

Age group: 14-15 years old (9th grade)

Time: 45 minutes

Equipment/ Materials: Copies of four different articles in different levels of difficulty, whiteboard

Lesson structure:

1. Introduction (5 min.)
2. Pre-reading activity
 - a) Brainstorming: Jobs (5 min.) – vocabulary connected to jobs
 - b) Discussion: Jobs (10 min.)

The students are asked to answer these questions, that are written on the whiteboard. The teacher asks individual students about their ideas.

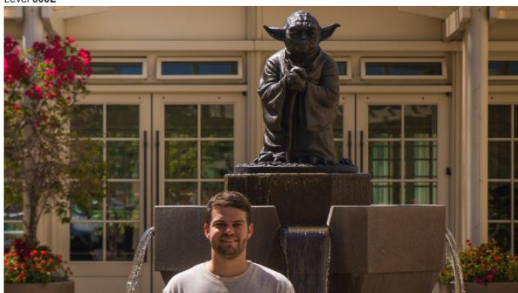
- What jobs do you consider too dangerous?
- What are the hardest jobs in the world?
- What are some of the best jobs you can think of?
- In your opinion, which jobs are the most prestigious? Why?
- Which professions are very well-paid these days?
- Are there any jobs you think are not paid enough?
- What jobs would you refuse to do, even if they were paid really well?
- If every job paid the same amount of money, which job would you prefer to do?
- If you could do one job, just for one day to learn what it is like, what would you do?
- Would you rather choose a well-paid job that is boring or a poorly-paid job that you enjoy doing?

3. Reading – 20 min.

Students read two articles at their own chosen level of English proficiency.

Dream Jobs: Digital artist

By Deborah Todd, adapted by Newsela staff on 09.07.17
Word Count **980**
Level **800L**



Sam Wirth stands in front of the Yoda fountain statue at Lucasfilm, where he works. Photo from: Sam Wirth

Sam Wirth is a digital artist. He works at Lucasfilm's Industrial Light & Magic, a studio that creates special effects and animation for movies. Wirth's job is to create background images and objects for movies using computer graphics. These are different kinds of visual images created using a computer. Wirth has worked on three films: "Jurassic World," "Rogue One: A Star Wars Story" and "Transformers: Age of Extinction."

Dream Jobs: Marine ecologist

By Padmini Parthasarathy, adapted by Newsela staff on 10.02.18
Word Count **855**
Level **800L**



Image 1. Tyler Gagne is a marine ecologist for the Monterey Bay Aquarium in California. He does research and field work to learn about marine animals in the wild. Photo courtesy of Tyler Gagne.

Tyler Gagne is a marine ecologist. He studies ocean animals and the environment they live in. Gagne spends some of his time gathering information about marine life through field work. Then he studies the data to understand the behavior of these creatures and how humans might be affecting them.

Dream Jobs: Airshow pilot

By Hailee Romain, adapted by Newsela staff on 09.20.18
Word Count **1,089**
Level **810L**



Image 1. Sean D. Tucker is a professional airshow pilot. In his death-defying flying routine, he rolls, twists and seems to fall out of the sky in his specially designed plane. Photo: Christopher Mezzavilla.

Sean D. Tucker is a professional airshow pilot. In an airshow, planes perform stunts to entertain and thrill the audience. Some acts showcase a group of planes flying dangerously close together. Others feature a jet plane flying just a few feet above the ground. Tucker's routine is made up of a series of death-defying stunts. He rolls, twists and falls out of the sky, only to pull up at the last second.

Dream Jobs: Professional dancer

By Hailee Romain, adapted by Newsela staff on 09.26.18
Word Count **975**
Level **800L**



Image 1. BJ Randolph takes a flying leap on stage as a dancer with the Mark Morris Dance Group. Randolph travels all over the world to perform with this famous dance company. Photo: BJ Randolph.

BJ Randolph started taking ballet classes in his hometown of Greenville, South Carolina, when he was 11 years old. Today, Randolph is a professional dancer at the Mark Morris Dance Group, or MMDG. MMDG is a very successful dance company based in Brooklyn, New York. Randolph has been with the group for over five years. He has performed with them in shows all around the world.

4. Feedback – 5 min.

The feedback is provided on a piece of paper, answering question about the learner's perceived engagement during the lesson. (Rating 0 to 10)

3. Reading – 20 min.

Students read two articles at their own chosen level of English proficiency on the website Newsela.com, which is assigned through MS Teams LMS. The students are asked to read at least two articles of their choice from the bundle “Dream Jobs” at Newsela.com.

The screenshot shows a Newsela article titled "Dream Jobs: Bridge painter" with a reading level of 850L. The article includes an image of a bridge painter in an orange safety suit and a walkie-talkie. Below the image, there is a caption: "TOP: A bridge worker using a walkie-talkie under a suspension bridge." The article is by Eriend Clouston, The Guardian, adapted by Newsela staff, published on 12/21/2016, with a word count of 714. It is recommended for Middle School - High School and has a text level of 5. The main text begins with "Bob Muir is a bridge painter in a legendary workplace." and "The Forth Bridge crosses the Firth of Forth waterway in Scotland and looks like a rhubarb-colored cobweb. It is 54,000 tonnes of metal built across 8,296 feet (about 1.5 miles".

On the right side, there is a quiz interface. The quiz is titled "Quiz" and shows "Question 1 of 4" and "Correct Answer Paragraph 12". The question asks: "Select the paragraph from the section 'Painting Helps Keep Bridges In Top Shape' that explains why it's necessary to keep the paint on the bridge in good condition." The correct choice is highlighted in green: "I grip the handrail a little tighter. Corrosion is what happens when steel begins to rust through exposure to humidity and oxygen. Muir's job is to keep humidity and oxygen at bay. He does this by scouring off the old red-lead paint and applying epoxy, a glue-like substance. The epoxy skin is expected to last at least 25 years." There are "Back" and "Next" buttons at the bottom of the quiz interface.

5. Feedback – 5 min.

The feedback is provided via MS Forms, rating perceived engagement during the lesson.

IIc) Listening – without the use of technology

Aims:

- Students will be able to fill in the gaps in a listening exercise
- Students will practice their listening comprehension by choosing the appropriate words from the word bank
- Students will be able to predict the message of the song from the title

Age group: 14-15 years old (9th grade)

Time: 45 minutes

Equipment/ Materials: A paper copy of lyrics for every student, whiteboard

Lesson structure:

1. Introduction (5 min.)
2. Pre-listening
 - a) Discussion (5 min.)
 - Who is Elton John?
 - What is he known for?
 - What Elton John's songs do you know?
 - When looking at the title, what do you think will be the song about?
3. Listening – Elton John – I'm Still Standing (10 min.)

The students are asked to fill in the missing gaps. The missing words are available at the bottom of the paper to help learners that need it.

ELTON JOHN – I'M STILL STANDING

You could never know what it's like
Your _____ like winter freezes just like ice
And there's a cold _____ light that shines from you
You'll wind up _____ the wreck you hide
Behind that _____ you use
And did you think this fool could never win
Well look at me, I'm _____ back again
I got a taste of _____ in a simple way
And if you need to know while I'm still standing
You just fade _____
Don't you know
I'm still standing better than I ever did
Looking like a true _____
Feeling like a little kid
And I'm still standing
After all this time
Picking up the _____ of my life without you on my mind
I'm still standing (yeah, yeah, yeah)
I'm still standing (yeah, yeah, yeah)
Once, I never could hope to win
You starting down the road, leaving me _____
The threats you made were meant to cut me down
And if our love was just a circus
You'd be a _____ by now
You know, I'm still standing
Better than I ever did
Looking like a true survivor
Feeling like a little _____
And I'm still standing after all this time
Picking up the pieces of my life without you on my _____
I'm still standing (yeah, yeah, yeah)
I'm still standing (yeah, yeah, yeah)
Don't you _____ that I'm still standing
Better than I ever did
Looking like a _____ survivor
Feeling like a little kid
And I'm still standing
After all this _____
Picking up the pieces of my _____ without you on my mind
I'm still standing (yeah, yeah, yeah)
I'm still standing (yeah, yeah, yeah)
I'm still standing (yeah, yeah, yeah)
I'm still standing (yeah, yeah, yeah)
I'm still standing (yeah, yeah, yeah)

*Mask Pieces Away Blood Kid Time Love Lonely Like Coming Know Again True
Clown Mind Life Survivor*

4. Pre-listening
a) Discussion

What is YMCA?

What does the abbreviation represent?

What is the song about?

5. Listening 2 – YMCA by Village People (15 min.)

Y.M.C.A.

Village People

Young man, there's no need to feel down
I said young man, pick yourself off the _____
I said young man, 'cause you're in a new _____
There's no need to be unhappy
Young man, there's a _____ you can go
I said young man, when you're short on your _____
You can stay there, and I'm sure you will find
Many _____ to have a good time
It's _____ to stay at the Y.M.C.A
It's fun to stay at the Y.M.C.A
They have _____ for young man to enjoy
You can hang out with all the _____
It's fun to stay at the Y.M.C.A
It's fun to stay at the Y.M.C.A
You can get yourself _____, you can have a good meal
You can do whatever you _____
Young man, are you listening to me
I said young man, what do you wanna be
I said young man, you can make real your _____
But you've got to know this one _____
No man, does it all by himself
I said young man, put your _____ on the shelf
And just go there, to the Y.M.C.A
I'm sure they can help you today
It's fun to stay at the Y.M.C.A
It's fun to stay at the Y.M.C.A
They have everything for young man to _____
You can hang out with all the boys
It's fun to stay at the Y.M.C.A
It's fun to stay at the Y.M.C.A

You can get yourself clean you can have a good meal
You can do whatever you feel
Young Man, I was once in your _____
I said I was, down and out with the _____
I felt no man, cared if I were alive
I felt the whole _____ was so jive
That's when someone, came up to me
And said young man, take a walk up the street
There's a place there, called the Y.M.C.A
They can start you back on your way
It's fun to stay at the Y.M.C.A
It's fun to stay at the Y.M.C.A
They have _____ for young man to enjoy
You can hang out with all the boys
Y.M.C.A
It's fun to stay at the Y.M.C.A
Young man, young man there's no need to feel down
Young man, young man pick yourself off the _____
Y.M.C.A. and just go to the Y.M.C.A

Missing Words:

Everything	Feel	Boys	Shoes	Thing	Everything	World	Ways	
Enjoy	Clean	Town	Dreams	Pride	Place	Ground	Dough	Ground
				Blues	Fun			

6. Feedback

The feedback is provided on a piece of paper, answering question about the learner's perceived engagement during the lesson. (Rating 0 to 10)

II) Listening – lyricstraining.com

Aims:

- Students will be able to fill in the gaps in a listening exercise
- Students will be able to complete at least three songs using with appropriate level of support
- Students will practice their listening comprehension by choosing the appropriate words from the word bank

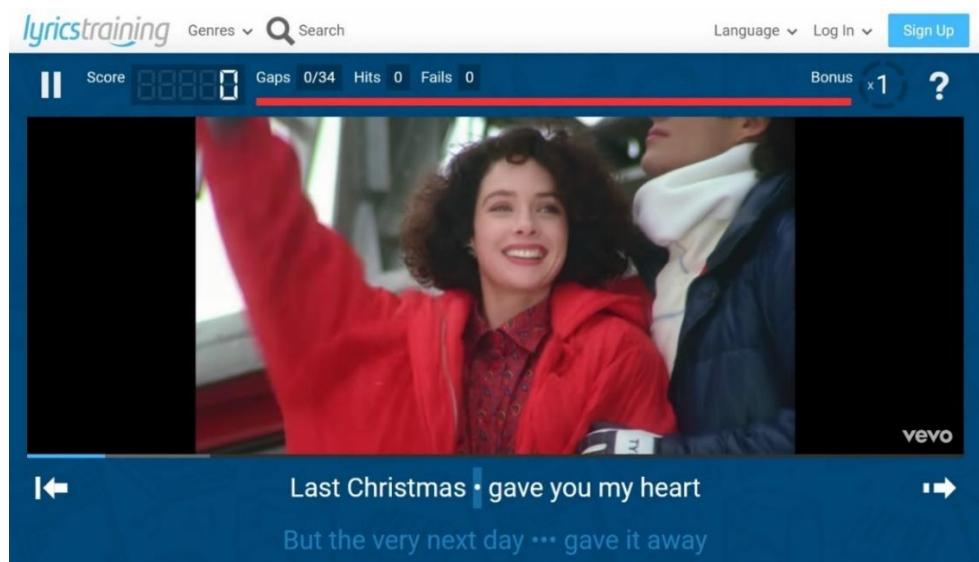
Age group: 14-15 years old (9th grade)

Time: 45 minutes

Equipment/ Materials: Laptops/tablets, headphones, MS Teams, Lyricstraining.com

Lesson structure:

1. Introduction (5 min.) – assigning of laptops, signing in
2. Instructions – assigned through MS Teams (5 min.)
 - The learners must choose at least 3 songs that they will complete on a website Lyricstraining.com.
3. Listening



The song, level and support is decided on by the learners themselves.

4. Feedback
 - The feedback is provided via MS Forms, rating perceived engagement during the lesson.