University of Pardubice

Faculty of Arts and Philosophy

The Use of Modern Applications in English Language Learning

Bachelor Thesis

2020   Vanessa Godárová

Univerzita Pardubice

Fakulta filozofická

Akademický rok: 2018/2019

ZADÁNÍ BAKALÁŘSKÉ PRÁCE

(projektu, uměleckého díla, uměleckého výkonu)

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Osobní číslo: **H17134**
Studijní program: **B7507 Specializace v pedagogice**
Studijní obor: **Anglický jazyk – specializace v pedagogice**
Téma práce: **Používání moderních aplikací při učení se anglickému jazyku**
Zadávající katedra: **Katedra anglistiky a amerikanistiky**

Zásady pro vypracování

Cílem této bakalářské práce je zjistit, jaké motivační strategie jsou využívány moderními aplikacemi rozvíjejícími kompetenci v cizím jazyce, angličtině a jakým způsobem je tyto aplikace používají. V teoretické části práce bude studentka definovat motivaci a motivační strategie v kontextu tzv. m-učení se anglickému jazyku, dále vymezí roli, funkce a způsoby hodnocení aplikací ve výuce anglického jazyka. Na základě východisek teoretické části práce studentka vytvoří soubor kritérií, podle kterých bude vybrané moderní aplikace hodnotit.

Rozsah pracovní zprávy:
Rozsah grafických prací:
Forma zpracování bakalářské práce: **tištěná**

Seznam doporučené literatury:

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Datum zadání bakalářské práce: **30. dubna 2019**
Termín odevzdání bakalářské práce: **31. března 2020**

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ANNOTATION

This bachelor thesis deals with evaluation of modern language learning applications as tools for learning English, mainly from the point of view of motivation. In the theoretical part the concepts of motivation and learning are defined. Furthermore, the concepts are put into the context of mobile language learning. Subsequently, the mobile applications are described and divided based on their functions. Also, the criteria for evaluation of mobile learning applications as learning materials are presented. Finally, the motivational strategies are defined and put into the context of modern learning applications. In the practical part, two chosen applications are evaluated based on the findings from the theoretical part of the thesis.

KEYWORDS

Motivation, mobile learning, language applications, communicative competence

NÁZEV

Používání moderních aplikací při učení se anglickému jazyku

ANOTACE

Tato bakalářská práce se věnuje hodnocení moderních výukových aplikací, jakožto nástrojů k učení se anglickému jazyku, především z pohledu motivace. V teoretické části jsou nejprve definovány pojmy motivace a učení. Dále jsou tyto koncepty zasazeny do kontextu mobilního učení se cizímu jazyku. Následně jsou definovány a podle funkcí rozděleny mobilní aplikace. V této části jsou také prezentována kritéria pro hodnocení mobilních aplikací jakožto výukových materiálů. V poslední části jsou definované motivační strategie, které jsou dále vloženy do kontextu moderních výukových aplikací. Praktická část hodnotí dvě výukové aplikace na základě poznatků z teoretické části.

KLÍČOVÁ SLOVA

Motivace, mobilní učení, jazykové aplikace, komunikativní kompetence

TABLE OF CONTENTS

ABBREVIATIONS

CEFR – Common European Framework for languages

MLA – Modern learning application

ISO – International Organization for Standardization

IEC – International Electrotechnical Commission

Introduction

The technology goes forward very quickly and, nowadays, it can be basically used for whatever purpose. People use it to communicate with other people, to find some information, or even when they only want to "kill the time" while waiting. Based on the fact that technology is ever-present in our lives, I have decided to look at its use in education. To be more specific, the aim of this thesis is to evaluate motivational strategies used in modern language applications in the process of learning English from the point of view of their types and their effect on the learners' motivation to learn the language.

Concerning the structure of this thesis, its theoretical part may be divided into three main chapters. In the first chapter, the concepts of motivation and learning are defined. The concept of motivation is described in general together with the definitions of the terms belonging under the motivation head-term. To be precise, the terms intrinsic, extrinsic, integrative, and instrumental types of motivation are defined in this part. The concept of learning is also defined in general. Moreover, it is specified by putting the general term into the context of social constructivism in language learning and by putting communicative competence in the role of the aim of language learning. Finally, in this part of a theory, mobile learning is also defined together with its advantage and challenges that it can bring to the learning process.

The second theoretical part concerns the mobile learning applications. They are briefly defined in this chapter and divided according to their purpose and used features into seven types: collaborative, location-aware, data-collection, referential, administrative, interactive, microworld. All the types are shortly described and the examples of two or three applications are attached to each type. Furthermore, in this chapter the framework for evaluating mobile applications is presented and each characteristic is briefly described.

Finally, the last chapter of the theoretical part of this thesis concerns the motivational strategies. The motivational strategies are defined in general in this chapter, moreover, each of the strategies that can be found in mobile learning applications such as user-friendly environment, decorative graphics, and features of gamification such as challenges, rewards in form of points or trophies, are briefly characterized there.

In the practical part, two modern learning applications are chosen and evaluated based on the criteria created with the help of the outcomes from the theoretical part. Firstly, the process of choosing the two applications is described. Secondly, Duolingo and Busuu, the chosen applications, are briefly described. Also, the features that are the subject of the evaluation are

mentioned in this chapter. Thirdly, the process of creating the list of criteria needed for the evaluation is described and the data collection and analysis of the two applications follow. Finally, in the last chapter of the practical part, the findings from the evaluation of the applications are interpreted and concluded.

All the gathered data are collected in the appendices from A to I. Appendix A and B show the "home-page" of the applications. In appendix C the type of the applications is dealt with. Appendix D contains data about the practice of communicative competences in the applications and their ability to adjust their exercises according to the learner. Appendix E contains the motivating and demotivating features. In appendix F, the number of features that may help the learner to reach the integrative and instrumental goals is presented. Appendix G presents the stages of motivation that are targeted in the applications. Appendices H and I contain the analysis of the motivational strategies.

THEORETICAL PART

1. Motivation and mobile learning in English

Motivation is present in every person's life. In everything they do, people know, they are motivated to do it, and yet it is rather difficult for them to set one exact definition of this term. Generally, motivation can be described as a power that makes people achieve their goals. Psychologists exploring the field of motivation mostly put this general opinion into the core of their definitions and add some more information to it, to make the definitions more specific. For instance, Harmer (2007, 98) adds the importance of the purpose and aim of the activity and claims that when people do things to achieve something, they are pushed by an internal drive, in other words, motivation. Dörnyei (2001,7) is in his definition of motivation even more specific. For him, motivation is not the reason why people decide to do something. He also believes that motivation influences the amount of effort people put in doing the activity and also the length of sustaining the activity.

However, motivation does not just happen, as it can seem from the definitions mentioned above. It is a complex long-term process with many subphases from initial planning through goal setting, intention formation, task generation, action implementation, action control to outcome evaluation. (Dörnyei, and Ushioda 2013, 6). Brophy (2004, 4) summarizes these processes into motives, goals, and strategies. Motives, according to Brophy (2004, 4) explain why people do what they do and are rather general. Therefore, they can be seen as a hypernym of the terms from the first half of Dörnyei's and Ushioda's definition of complexity of motivation. In contrast, goals and strategies are usually rather specific and can be linked to the second half of the complexity definition.

1.1. Types of motivation

As mentioned above, motivation is a physiological process of willing to do something to achieve a specific goal. Based on the type of the impulse that starts the action toward fulfilling the goal, the motivation can be generally divided into two types – intrinsic and extrinsic. (Murphy, and Alexander 2000, 8) Intrinsic and extrinsic motivations are types which may be found in general situations where the motivation appears. However, Brown (2000, 162) divides the two general types further into integrative and instrumental type of motivation. These two types are directly connected to the second language learning. Also, there are certain motives connected to these types of motivation. All of the types together with their motives are closely looked at below.

1.1.1. General types of motivation

As one of them or both may be found in every situation that requires motivation, the intrinsic and extrinsic motivation types are considered the general ones. Intrinsic motivation, in some publications called self-motivation, is characterized as a motivation "which comes from within the individual. It inspires action even when there is no perceived external stimulus or reward." (Stirling 2014, 51) In other words, intrinsic motivation can be seen as a prescribed tendency to act in some specific manner without an obvious visible reason. This type of motivation is present in every person but the level of it differs from each individual. Also, the definition mentioned above is rather general and to make the term more comprehensible one more term needs to be named.

The term closely connected to intrinsic motivation is called self-determination theory. Basically, it is a discipline which divides motivation based on the inner and outer conditions, if the person works autonomously or if he or she is controlled by something from the outside. (Pedrotti, and Nistor 2016, 473) To connect it with the motivation, Ryan and Deci (2000, 68) claim the task of self-determination theory "is the investigation of people's inherent growth tendencies and innate psychological needs that are the basis for their self-motivation and personality integration". Therefore, since the intrinsic motivation, as mentioned, is sometimes called self-motivation, moreover, it deals with the inner needs; the connection between those two terms should be now obvious. Also, Standage and Treasure (2002, 90) specify this connection by saying that the intrinsic motivation in self-determination theory is the most self-determined process which refers to the participation in the activities and the positive feelings about it.

Therefore, if the phenomenon of intrinsic motivation is taken into the environment of education where the self-determination of the learner is very important, Standage and Treasure (2002, 90) describe the intrinsically motivated learner as a one who does not need to be rewarded, because the reward is the participation in the activity itself. Moreover, the intrinsically motivated learner is more likely to be excited, happy, and generally have positive feelings about the chance to participate and about the challenge that new task or activity represents.

Regarding the motives of intrinsic motivation, there are many theories concerning this subject. But generally, the motives of intrinsic motivation can be called needs and drives. Needs are caused by deprivation or deficiency which must be reduced, and drives are inner instincts that tell the body to reduce the needs – hunger, thirst (Nevid 2009, 263). In his newer publication, Nevid calls the inner motives stimuli, and they can be, according to him, defined as "needs for

exploration and optimal stimulation". (Nevid 2012, 324) The most relevant need for this thesis is the need to learn new things, in other words, the instinct of curiosity.

However, Štefanovič (1985,67) points out that the power of the inner motives to start the activity towards the goal varies, from zero effort to being able to put one's life at stake in extreme situations, with every individual. Therefore, usually, the person needs a push from the outside to support the intrinsic motivation. That push produces a type of motivation that is called extrinsic motivation.

The difference between intrinsic and extrinsic motivation concerns two opposite directions. To show the contrast a bit more, another definition by Stirling can be presented. While the intrinsic motivation is based on inner processes, the extrinsic one is according to Stirling (2014, 51) a type of motivation "which provides an incentive to engage in action which may not be inherently pleasing or engaging, but which may offer benefits in terms of perceived potential outcomes." In other words, extrinsic motivation is based on motives that come from the outside. A similar definition but from a different perspective is shown by Nevid (2012, 294). He claims that intrinsic motivation "reflects a need for internal gratification" while extrinsic motivation "reflects a desire for external rewards." Therefore, in this case, it could be said that even the extrinsic motivation comes from the needs within the individual; however, the real driving force comes from the outside.

The so-called driving forces in the case of extrinsic motivation are called incentives and by Nevid (2012, 292) as "rewards or other stimuli that motivate us to act" but in another way than the instincts do. While the inner stimuli push someone to fulfill their inner needs, the incentives pull people into motivated behavior. He also set some examples. For instance, people can crave a deliciously looking dessert even though they ate the whole dinner. (Nevid 2012, 292) In other words, the instincts make the people eat the dinner to satisfy the hunger, but it is the incentive in the form of deliciously looking dessert that pulls them into eating more than they need.

Taken into the educational environment, these outer motives can be a useful tool to keep the level of motivation high and make the activities enjoyable even when the learners are not intrinsically motivated. However, there may be some disadvantages of extrinsic motivation as well. For instance, according to Brophy (2004, 177), extrinsic motivation does not make participation in the activity more valuable for the learner. What it does make more valuable is some pleasing consequence that will come from putting the effort into the completion of an activity or task. Therefore, the learners who are not self-motivated and if there will not be any

reward or, for them, valuable consequence, they will not be motivated at all. In contrast to the qualities of intrinsically motivated learners that were mentioned in previous paragraphs, the consequence of such loss of self-motivation can also erase learners' willingness to complete the task. Moreover, it can cause changes from, at the beginning, positive feelings to boredom, annoyance, or even aversion towards any activity connected to learning. (Bomia et al. 1997, 4)

1.1.2. Motivation in language learning

As was mentioned in the introduction of this chapter, integrative motivation together with instrumental motivation are more specific that intrinsic and extrinsic motivation. Integrative and instrumental types are designed particularly for language learning. Brown (2000, 162) defines integrative motivation as a behavior started by the desire to integrate into the second language culture and be able to socially interact with people speaking that language. Gardner's definition in Essays UK is more specific and states that integrative motivation mainly refers to the positive feelings and attitudes to the target language community. (Essays UK 2017) In other words, the positive feelings towards the culture and the language itself are the actual driving forces to study the language.

If the learner possesses these qualities and wants to learn the language because of these reasons, he or she is integratively motivated. That means that he or she is more likely to be willing to spend more effort and time in the process of learning the language (Krashen 2002, 39) Moreover, this type of motivation encourages the learners to interact with the speakers of the language and this interaction is highly valued by the learners. (Krashen 2002, 22)

In other words, the learners are happy to learn the language, because they know, it will help them to integrate into the desired group of people and it will give them the opportunity not only to learn the language but also obtain ~~some~~ information about the culture of the people who speak the language. For these reasons, the integratively motivated learner has only positive feelings about the language and the learning process.

The second type of motivation directly connected to the second language learning is the instrumental motivation which is by Brown (2000,162) defined as a desire to learn the language to be able to achieve some instrumental goals such as building a career in the country where the second language is spoken, get more money or even only to be able to read a text written in the second language. In other words, the motivation is based on the final outcome which arises from having learned the language.

To show the difference between the integrative and the instrumental motivation, Krashen (2002, 22-23) compares the instrumentally and integratively motivated learners. The instrumentally motivated learners are satisfied when their communicative needs for the instrumental goal are fulfilled. That means that only some aspects of the language are important for the instrumentally motivated learner and are actually acquired. On the other hand, the integratively motivated learner is satisfied, when his or her social needs are fulfilled. Which means that integratively motivated learner will acquire all or at least more of the features of the language. These are features which are needed for proper communication with the second language speaker. From that, it may be assumed that the integrative motivation drives the learner to acquire more aspects of the language than the instrumental motivation because the instrumentally motivated learner is likely to learn only what is needed for fulfilling the goal.

Even though these types of motivation are mostly considered separately, Brown (2000, 162-164) states that the learners rarely select only instrumental or only integrative motivation. The whole process of motivation is a combination of more forms of motivation. He sets an example of foreign students who learn a language for academic purposes as well as because they want to integrate into society.

1.2. Learning English

Now that the types of motivation connected to learning are defined, the learning as a product of being motivated deserves a definition as well. For that purpose, the general definition by Clark and Mayer (2011, 33) is used. They generally define learning as a process of "strengthening correct responses and weakening incorrect responses, adding new information to your memory and making sense of the presented material by attending to relevant information, mentally reorganizing it, and connecting it with what you already know". Krashen (2002) adds that it is a conscious process. In other words, learning happens when a person is exposed to something unknown to him or her. They consciously take the new information and save it into their memory by making connections to information that they already knew.

1.2.1. Social constructivist theory

In contrast with the definitions, Zounek, Juhaňák, Staudková, and Poláček claim, the learning is not only a process of transporting information from one brain to save it in another. They claim that in learning the social aspects are important as well. (2016, 25) For that purpose, the social constructivist theory is described. This theory created by Vygotsky is important because it works with social interaction and collaboration as well as with the motivation of the learners. (Marzouki, Idrissi, and Bennani 2017, 19)

The interaction here does not have to be strictly between the teacher and student or between students, according to Yang and Wilson (2006, 365) who follow Vygotsky's opinions the interaction is even between a text and its reader. As the learning takes place through a dialogue, which may be external as well as internal, this means the learning is interactive in more ways. Firstly, from the perspective of interaction between the learner and knowledge in social environment and secondly, from the perspective of interaction in their minds. This is closely connected to the topic of the thesis, since there is no teacher in learning through mobile applications.

These inner interactions may also influence motivation. Because in social constructivism, the learners can actively participate in the learning process and adjust it for their needs and goals. (Yang and Wilson 2006, 365) Which may be integrative or instrumental as was mentioned in the previous chapter. This kind of an independence which is given to the learner may make the level of motivation increase.

Another positive aspect of social constructivism which is connected to MLA is so called scaffolding. According to Chang, Wang, and Chao (2009, 32) scaffolding is a process when the learner is challenged all the time. In other words, the cognition of the learners is challenged with information beyond their language level. Krashen calls this the input hypothesis.

Connected to scaffolding, Vygotsky also created a Zone of Proximal Development which is described as levels the learner can achieve with the use of scaffolding (Yang and Wilson 2006, 365) when they are given some further instructions or just a little bit of guidance. (Chang, Wang, and Chao 2009, 32)

To conclude, the social constructivist theory says that the learner stands in the center of the learning where the interactions between other humans, learner and the environment or learner and the learning materials are important. They influence both learning process, using scaffolding to challenge the learner's cognition, and motivation, the opportunity to adjust the learning to reach their goals.

1.2.2. Communicative competence

In connection with the social side of the learning a language and the goals, one more definition may be mentioned. This one concerns the language learning. According to Harmer (2007, 47) "learning is a conscious process where separate items from the language are studied and practiced in turn". To paraphrase it, language learning is a process where the aspects of the language important for communication are acquired and practiced.

From the previous paragraph it may be assumed that the aim of learning a language is to develop an ability to communicate. Meaning, develop communicative competence. Tarvin (2014, 6) defines communicative competence as "the ability to use language, or to communicate, in a culturally-appropriate manner in order to make meaning and accomplish social tasks with efficacy and fluency through extended interactions". Communicative competence can be further divided, which is visible even on the definition above. According to the Common European Framework, the competence is divided into linguistic competence, sociolinguistic competence, and pragmatic competence. A brief definition of all three follows.

The first part of communicative competence is the linguistic one. Linguistic competence, according to CEFR (2001, 13) includes fields of lexicology as well as phonology, syntax, and other skills and dimensions of the language system. However, linguistic competence is freed from the social values of the language and the pragmatic functions of its use. In other words, linguistic competence works with lexical and grammatical features and also with semantics and other disciplines, but it concerns only the ability to use the linguistic components, not the ability to use them appropriately to the social situation the learner is in. Without realizing that some words may be inappropriate in some situations and based on Chomsky's opinion, this competence is generally considered the most important one. This competence can be developed by acquiring new vocabulary, practicing grammar, spelling and pronunciation. (CEFR 2001, 110-118)

The second competence is called sociolinguistic competence and it

> refers to the socio-cultural conditions of language use. Through its sensitivity to social conventions (rules of politeness, norms governing relations between generations, sexes, classes, and social groups, a linguistic codification of certain fundamental rituals in the functioning of a community), the sociolinguistic component strictly affects all language communication between representatives of different cultures. (CEFR 2001, 13)

As linguistic competence is thought to be the most important one, by some people, there are also linguists who do not agree with that opinion and claim that sociolinguistic competence is the one that is the most important. Because the knowledge of words is useless when the person does not know how to use them appropriately in certain social situations. To develop this competence, the tasks concerning using an appropriate language, intonation, politeness and so on in particular situations (greetings, addressing, expressing likes/dislikes etc.) can be useful. (CEFR 2001, 119-122)

Finally, the last part of communicative competence according to CEFR (2001) is the pragmatic competence. In short, pragmatic competence is a "study of language in context". (Domaneschi, and Bambini 2020, 1) In CEFR this competence is specified. It claims that pragmatic competence

> is concerned with the functional use of linguistic resources (production of language functions, speech acts), drawing on scenarios or scripts of interactional exchanges. It also concerns the mastery of discourse, cohesion and coherence, the identification of text types and forms, irony, and parody. For this component even more than the linguistic component, it is hardly necessary to stress the major impact of interactions and cultural environments in which such abilities are constructed. (CEFR 2001, 13)

The examples of tasks used to practice this competence are structuring a text or narrating a story following the rules of coherence, cohesion, logic, etc. (CEFR 2001, 123-130)

As was already said, the aim of language learning is to develop the ability communicate. Therefore, the language learner's aim is to master all these three competencies. In other words, to be able to use words, phrases, and other linguistic features that are appropriate to the social situation the learner is in. Put those words correctly into sentences following the rules of grammar as well as the field of the discourse. Be able to read from the intonation or posture of the speaker to recognize the purpose of the interaction and be able to react properly.

1.3. Mobile learning

The learning of a language may be supported with the environment where the process takes place. For that purpose, the mobile learning is defined. Mehdipour and Zerehkafi (2013, 93) include the m-learning into the e-learning group of types of learning. They claim that it is a process that works with educational technology that puts focus on different contexts of learning. It benefits from the use of mobile devices which enable the learner to experience so-called distance learning. In other words, the mobile learning is not fixed to a particular place. This may help with the motivation of the learner, by stepping out from the stereotypical classroom environment, as well as with communication with other people outside the classroom.

Even though, in the previous paragraph, the mobile devices are mentioned, m-learning does not have to be used with any modern technology. As O'Malley et al. (2005, 7) pinpoint, the mobile learning happens even when learners revise knowledge on the way to school by bus or traveling abroad to learn or just practice a foreign language. Therefore, O'Malley (2005, 7) specifies the definition of m-learning and says that it is "any sort of learning that happens when the learner is not at a fixed, predetermined location or learning that happens when the learner takes

advantage of the learning opportunities offered by mobile technologies". (O'Malley et al. 2005, 7) In other words, mobile learning can be and usually is supported by mobile technologies, but it is not necessary.

Thanks to the fact the mobile learning is not bound by place or time, it is very popular in today's hectic era when the learners do not have the time to attend proper classes or they do not find it pleasant to learn in the classroom among other students. Since this type of learning process is not limited by teachers' or anyone else's needs but only the learner's requirements. It is obviously the learners' choice when they want to learn. They can plan the lessons in advance, or they can be spontaneous. (Crompton 2013, 4) Moreover, according to Mentor (2016, 26), mobile learning can simulate authentic learning situations and social learning, which is a desired outcome for the social constructivism that was mentioned above. In other words, as already mentioned, mobile learning is a process that can take place whenever and wherever the learner wishes to. This fact gives the learners chance to learn in an authentic environment and step out of the stereotype of the learning in the classroom.

M-learning with or without the use of technology has its advantages and disadvantages. The main advantage was already mentioned. It is the freedom of the learner and the flexibility of the learning environment. However, there are many positive aspects of mobile learning. For instance, mobile devices, if used, are more lightweight compared with books or PCs, which is why the students can bring education everywhere. Another one is that "mobile learning supports the learning process rather than being integral to it" and it can be also used "to re-engage disaffected youth". Moreover, mobile learning may deliver a "more rewarding learning experience". (Mehdipour, and Zerehkafi 2013, 97)

Surprisingly, most of the advantages may be converted into disadvantages. Unfortunately, even freedom has its price. It may negatively influence the ability to stay focused on learning because nobody gives the learner any impulse to pay attention. In other words, the learners can get distracted easily. (Kukulska-Hulme, and Pettit 2009, 148) Another challenge is the lack of social interaction. In the classroom, there is a teacher who assesses the students, or the students can help each other, but in mobile learning, there is no such person to do that. (Mehdipour, and Zerehkafi 2013, 97) There is no person to ask for help.

To summarize it, m-learning is a way of learning not dependent on time or space. The learners can self-study without being limited by anything but their own intrinsic need to learn. The learners may or may not support the learning process by using modern technology, but in this

modern era, it is common that they do so. From the information mentioned above, it is clear that this way of learning is beneficial for some learners because of the ability to choose the learning environment that may boost the effectivity of the process. However, it may be also very challenging for others, because of the same reasons.

1.3.1. Mobile technologies for M-learning

For m-learning the technologies are the same as textbooks for schools. They are educational tools and sources of information for the learners. (Maňák 2008, 20-21) They are used mainly because of their mobility. According to Mehdipour, and Zerehkafi (2013, 98) these technologies must be portable, easy to use, and mainly, they must be easily personalized to suit the learners' individual abilities or their learning styles. The authors also list some of these technologies, such as E-books, game consoles, audio players, tablet computers, and mobile phones.

When the devices are used in m-learning, they can be very helpful. As Clough, Jones, McAndrew, and Scanlon (2009, 106) state the advantages are the data collection, noting down thoughts and ideas to think about them later, taking pictures with the camera, or looking up unknown information on the Internet. Basically, thanks to the mobile device, the learner is able to get information and save it in one place for later when the learning process will take place. For example, when the learners hear new vocabulary, they can write it down and practice it later.

If the technical challenges of mobile devices are to be taken into consideration, the literature agrees that one of the main issues are the cost of the device, battery problems, WiFi because they are usually dependent on the access to the Internet. Therefore, when the learner is offline, the learning process cannot take place. Other problems may be the screen size because for older learners the letters might be too small to read. The last difficulty which could be challenging for learners is the fact that technology is constantly evolving, and it is difficult for them to adapt to these inventions. (Kukulska-Hulme, and Pettit 2009, 148; Mehdipour, and Zerehkafi 2013, 97)

To conclude it, the devices should be light, portable, and easy to use. They are usually dependent on the Internet but in this modern era, when the technology advances forward, it is not an insurmountable obstacle anymore. Probably, the mostly used and also the most suitable technology or device for mobile learning is a mobile phone. Because it is the smallest and the lightest device, so every person can carry it in their pocket or bag at all the time.

2. Mobile learning applications

The specific quality of mobile applications is that they can be downloaded on the learners' mobile devices. They are defined by Ravi et al. (2014, 39) "as dedicated stand-alone applications that can run on individual mobile device" In individual learning, these are supposed to replace the role of the teacher in various ways. In other words, the mobile application is a software downloaded to the mobile phone which is coded to mediate the learning process without the need of a person in the role of the tutor.

As there are many ways of teaching and many parts of the language to be taught, there are many types of mobile applications as well. According to Clough, Jones, McAndrew, and Scanlon (2009, 103) and the framework developed by Patten, Sánchez, and Tangney (2006) he used, there are seven types of mobile applications and each of them makes the learning process easier somehow.

The first one is called collaborative and it is based on the learner sharing knowledge, using his or her location and mobility. Examples of this type of applications are Moodle, Mapping Challenge, or Syllable.

The second type is named location-aware applications and the applications belonging under this type are FieldNote or Ambient Wood. This type of application helps the learner contextualize the gained information, for example, with the use of geographical reference.

The third group of applications is called data-collection. As the name of it suggests, these applications enable the learner to record data and use them later. The greatest set of applications serving for data-collection are Microsoft applications such as Excel or OneNote but there are also applications that do not belong under the Microsoft pack and, for instance, that is Clubhouse Digital Narrative.

The referential applications use dictionaries, translators and other tools to deliver the content wherever and whenever the learning process takes place. Even in this type of applications, the examples from Microsoft family may be named. They are Microsoft Reader, Word, Documents. But again, even in this group, there are applications that are not created by Microsoft, such as Adobe Reader, 9.95 Dictionary or Google Translate.

The next type is administrative applications that employ scheduling and planning functions in mobile devices. The examples connected with this type of application that Patten (2006, 296) names are Due Yesterday Student Organizer and Palm Grade Book Assistant.

The sixth type is interactive applications that use both the input and the output functions of the mobile device. Meaning, the learner gives the device some input and in return, he or she will get an output in the form of a response and feedback from the device. Many of these applications are based on "drill and test", where the tests are usually various multiple-choice quizzes. Also, applications of this type are colorful with many animations and graphics. Interactive applications are Study Cards or KidPad and from the language applications, for instance, Duolingo, Busuu, or BBC Learning English.

Finally, the last type, according to Clough et al., and Patten, Sánchez, and Tangney is a microworld application. These applications model real-world situations to enable the learner to come up with some practical solutions through experiencing the problem. This type appears rarely in learning through applications. (Patten, Sánchez, and Tangney 296-299; Clough, Jones, McAndrew, and Scanlon 2009, 103-104) Each type is suitable for a different learning style.

The learning applications are software applications that can mediate the learning process on the mobile device without the need of a person as a teacher. They are divided into 7 types. Probably the most important type of application for this thesis is the interactive one. Most of the universal learning applications, such as Duolingo, BBC English, or Busuu, are examples of this interactive type of applications. Because the learner completes exercises in the applications, based on the right or wrong answers. They are able to provide the learner with feedback, create tests or choose the difficulty of the following exercises. Therefore, the applications create an output based on the input coming from the learner. Moreover, they contain many interesting features, pictures, animations, which can catch the learner's attention and motivate him or her to use the application to keep learning.

2.1. Framework for evaluation of mobile learning applications

The evaluation of the mobile applications in education is as important as evaluation of textbooks. Even though the quality of something is an abstract term and usually hard to define, Zupanc et al. (2015, 1) claim that it can be defined in two different ways: "conformance to requirements and meeting user needs". Conformance to requirements means that the application is evaluated based on its ability to meet the specifications and requirements set by its developers while meeting user needs is evaluated in relation to users' preferences. The users' needs are more important in the evaluation, while the ability to satisfy the needs is characterized by the defectivity and reliability of the software. (Zupanc et al. 2015, 2)

For the purposes of evaluation of learning software ISO (International Organization for standardization) and IEC (International Electrotechnical Commission) created quality standards where they present the characteristics of a quality software. The main characteristics according to Soad, Filha, and Barbosa (2016, 2-4), whose evaluation of the applications is built on the ISO and IEC standards but modified to mobile environment, are pedagogical characteristics, functionality, communication, performance, usability, security, portability, and support. Zupanc et al. (2015, 2) add one more called service level. Subsequently, they take these nine characteristics and summarize them into four main groups: technical, educational, economic and socio-cultural. These four groups are further specified and described in subchapters below.

2.1.1. Technical characteristics

The first group concerns the technicalities of the applications. It contains the functionality, security and performance characteristics. (Zupanc et al. 2015, 2) The characteristics of functionality, which is defined as the "availability of functions that meet the implicit and explicit requirements for the application", are effectiveness of task execution – finishing the task should consume the minimal amount of time, connection and data, communication capacity – concerning the data transmission, screens by task – number of screens seen during the tasks, precision – it should give accurate results, and multimedia resources – using media (video, text, audio, etc.).

The characteristics from the security part are the reliability – the access only to authorized content, the traceability – the ability to save the users' activities and create event paths, the recovery time after disconnection – how fast the connection is re-established and the authenticity – guarantee of authentic actions of the user.

Finally, the characteristics concerning the performance are the loading time – the time the user must wait until the software is fully loaded, the efficiency in energy consumption – avoiding the energy waste, and the memory cleaning – concerns the unnecessary data storage. (Soad, Filho, and Barbosa 2016, 3-4)

2.1.2. Educational characteristics

The second group contains pedagogical characteristics containing features such as knowledge at the right time – teaching content in the right order, avoiding teaching something the learner does not know yet, the reusability of learning content – providing content for reuse, the cognitive effort of activities – acquisition of knowledge and the cognitive effort of the learner, the multimedia complexity – the application should not contain too many multimedia features

since they may be distracting and the content complexity, integration and management – the information in the application should be gradually implemented into the lessons, the content should be integrated in a flow and the user should have an opportunity to control the content.

This group also deals with the usability which refers to "the application's ability to be used by specific users in a specific context, offering ways to enable the application to be understood, learned and used". Usability concerns learning time – time needed for learning how to use the application, homogeneity of the layout and components, the input – adjusting the amount of data to the device, presentation of information – limitations of the screen of the device, and the diversity devices – concerns the variety of devices on which the application can be downloaded. (Zupanc et al. 2015, 2; Soad, Filho, and Barbosa 2016, 2-4)

2.1.3. Economic characteristics

In this group the economic characteristics are examined. The first of them concerns the support that should be offered by the application. Support contains other qualities the application should have such as upgrades and configuration – the actualizations and configurations must be done automatically, or error resolution – if there is an error, the learner can contact technical support to fix the problem or the application should be able to repair it automatically. (Soad, Filho, and Barbosa 2016, 3-4)

The second characteristic is according to Zupanc et al. (2015, 2) the service level. The service level is not described by Soad, Filho, and Barbosa (2016). However, in their research, they deal with the monetarization – if there is any kind of a payment required. According to Zupanc et al. the only characteristic which is important for the m-learning is the cost-benefit. It means that the costs of the application must correspond with the benefits it brings to the learning process.

2.1.4. Socio-cultural characteristics

The last group concerns the social characteristics of the applications, they are communication and portability. Communication is a very important quality since social interactions are essential for the learning process. It can be further divided into individual and group activities, feedback, and interaction between users – the users must have the opportunity to interact with others through blogs, groups, forums, etc.

The second characteristic is portability. The main qualities that are a part of the portability are the device adaptation – the ability of the application to be used by different devices, and installation success – if the software may be installed and deleted easily. (Soad, Filho, and Barbosa 2016, 3)

When evaluating the applications, all aspects (technical, educational, economic and socio-cultural) must be taken into consideration.

3. Motivational strategies in mobile learning applications

Now that all the important terms such as motivation, learning and mobile applications are defined, the motivational strategies that are used in learning applications may be defined, listed and described.

Firstly, motivational strategies in general are frequently used in the learning process. Dörnyei (2001, 28) defines them as a means to start the goal-oriented behavior of the learners. And from the definition stated by Barone, Maddux, and Snyder (2012, 289) that "goals are the foundation of self-regulation in that we attempt to regulate our actions, thoughts, and emotions to achieve some desired outcome", it may be assumed that motivational strategies start the process of self-regulation. In other words, motivational strategies are supposed to arouse the initial positive feelings about the activity and maintain the level of motivation so that the students could proceed further to the achievement of the outcome.

Since the motivational strategies are ways of promoting an individual's goal-oriented behavior and they come from the teacher or, in this case, the application to the learners, the motivational strategies can be also paraphrased as a kind of outer influence. However, everything the learner is exposed to influences his or her behavior. Therefore, to be precise, what is considered motivational strategy is not a random influence; it is the type of influence that is "consciously exerted to achieve some systematic and enduring positive effect". (Dörnyei 2001, 28) To put together the definitions that were mentioned in the two paragraphs, the motivational strategies are consciously exerted influences which are supposed to initiate the desired goal-oriented behavior and maintain the level of motivation so that the learner could achieve these desired outcomes.

Connected to the initiating and maintaining of motivation, motivational strategies may be according to Dörnyei (2001) and Sucuoglu (2017) divided into four groups according to the target phase of motivation.

3.1. Creating the basic conditions

Creating the basic conditions for motivation is the first phase of motivation. In this case, both authors agree that the important aspect is the learning environment. Moreover, Sucuoglu (2017, 191) adds that in this phase of process of motivation the learner is taught about mistakes as a natural part of learning.

If taken into the context of mobile learning applications, the motivational strategy concerning the environment of the application is important as well. The technology should make people's lives easier and so should the applications make the learning easier. From the research done by Gafni, Achituv, and Rachmani (2017) it may be said that the learners find easy access to learning materials, easy way to learn in general, and the simplicity of the application as one of the biggest advantages of learning with language applications. Therefore, if an application does not have a suitable, user-friendly environment, it may significantly affect the levels of motivation of the learner.

Another motivational feature that may be considered as a part of the environment of the applications is decorative graphics. They may be easily described as "visuals used for aesthetic purposes or to add humor." (Clark, and Mayer 2011, 457) They can be pictures and animations that are most commonly used in learning vocabulary to contextualize the words. (Heil, Wu, Lee, and Schmidt 2016, 39) or colorful environment. In other words, anything that will provide the application with something more exciting and eye-catching for the learner.

Lastly, one more strategy belonging to the first phase should be mentioned. Reminders are useful for the learners not to forget that the lesson should take place and to help them continue their learning. (Gafni, Achituv, and Rachmani 2017, 308) These notifications can be set according to learner's time preferences. Meaning, it is up to the learner when the lesson will take place, the only thing he or she must do is set up an alarm.

3.2. Generating the initial dimension for motivation

The second group contains strategies that generate the initial dimension for motivation. Motivational strategies belonging to this group help the learner to choose the tasks and set the goals that are going to be fulfilled. Both Dornyei and Sucuoglu agree that in this phase of learning the implementation of positive quotes and tips about the language is useful. (Dörnyei 2001, 53; Sucuoglu 2017, 192)

In this case, the same may be applied to the MLA. Even in the applications, the motivational quotes and learning tips may be implemented. Based on the instrumental and integrative motives from the first chapter, the quotes and tips may be aimed to show the learners aspects of the language they might find helpful in the future, to integrate or for the instrumental purposes. For the same reason, the quotes showing the positives of the language may be included. Another reason for using the quotes and tips in MLA may be to prepare the learners for complex exercises, to make sure there are no serious obstacles. (Sucuoglu 2017, 192)

3.3. Maintaining and protecting the motivation

Thirdly, there are motivational strategies that are supposed to maintain the motivation and protect it from decreasing for example by personalizing the tasks according to learners' preferences and abilities. Here Sucuoglu (2017, 192-193) divides this group of motivational strategies into the maintaining motivation and sustaining it while Dörnyei (2001, 71) considers it as one group. Both authors agree that in this phase the most important are varieties of the task, to prevent the learning from becoming monotonous. Moreover, Dörnyei looks at this phase from a wider perspective and claims that making the lessons special in some way prevents the learners from being distracted.

The variety of exercises plays an important role in this phase of motivation in MLA as well. Nevertheless, there are more typical features such as gamification that can be found in the applications. Gamification is defined by Lee, and Hammer (2011, 1) as "the use of game mechanics, dynamics, and frameworks to promote desired behaviors" and is further specified by Deterding, Dixon, Khaled, and Nacke (2011,9) by saying that it is a use of game elements in a non-game context.

There are many elements of gamification. Hamzah et al. (2015,31) list game elements such as points, levels, challenges, virtual goods, badges, gifts, etc. Moreover, Detering, Dixon, Haled, and Nacke (2011, 11) add elements such as special environments, with the use of decorative graphics, feedback, competition, or time pressure.

From the elements listed in the previous paragraph, the main parts of gamification may be summarized to challenge – competition, levels, time pressure; and rewards – feedback, badges, virtual goods, points, and gifts.

3.3.1. Challenges and rewards

There is a wide range of challenges in MLA. For instance, in Duolingo (2020), the learner can compete against the time, meaning, they are supposed to finish the task before the time runs out. According to Nevid (2012, 513) meeting challenges boosts people's self-confidence and makes them proceed to other challenging goals. However, the goal of the challenge must be achievable; otherwise the motivational impact will be rather negative.

After completing something challenging, there is usually a reward for the learner. Rewards, as a part of gamifying the learning process, may be found in various forms such as points, trophies, etc. For instance, in Duolingo, the learners get imaginary money when they complete a task. The coins enable them to pass to another level. (Duolingo 2020) The harder the learners work,

the more coins they get, and they are allowed to proceed to more complicated aspects of the language.

3.4. Encouraging the positive self-evaluation

Finally, in the last stage, the strategies help to encourage the students to positively self-evaluate themselves. This may be achieved with appropriate feedback or a moment to celebrate the achievements or when the students are able to use the aspects they have learned. (Sucuoglu 2017,194; Dörnyei 2001, 126)

The strategies used by MLA in this phase are exactly the same as Dönyei and Sucuoglu listed. In the applications, after finished exercises or lessons there is a time for praising or getting trophies if the application contains gamification features.

These four phases of motivation are a necessary part of the learning process and therefore, all four of them should be more or less present in learning with the applications. The aim of the motivation strategies in both formal learning and learning with MLA are the same. They are supposed to help the learner to stay motivated, rise positive feelings toward the learning in the learner. Because as mentioned before in the definition of motivation, the more positive experience the learner has, the more he or she is motivated and the more likely he or she will learn something.

PRACTICAL PART

4. Selecting the applications

This part of the thesis evaluates two chosen mobile language learning applications. The process of choosing them started by picking Duolingo as the first application. It is the best-known language application and even some of the sources from the theoretical part used it. After I tried to learn with Duolingo to get acquainted with the mechanisms, tasks and its environment, I downloaded other applications and tried to find the one which has similar features and descriptions as Duolingo. I searched for an application that would aim on the full spectrum of the language aspects (vocabulary, grammar, pronunciation etc.), contain similar motivational strategies in it and work on similar principles as Duolingo. The application that I found the most suitable for the purposes of this thesis was Busuu. I chose Busuu also because it is briefly compared to Duolingo by Rivera, Tesoriero, and Gallud (2018, 208).

4.1. Description of the chosen applications

Firstly, the general information about the applications is described. Subsequently, the environments and the division of the language levels are described and finally, the variety of tasks and exercises from each application is named and briefly described.

4.1.1. Duolingo

Duolingo is a multilingual free American language learning application, founded in 2012. Since 2012 the application reached over a hundred billion downloads and won many prizes. In Duolingo, the user may learn not only English but also 94 more languages such as Spanish, French, Japanese, German or even Czech. Moreover, the application offers courses of fictional languages such as Klingon. To be able to learn, the users must be online, in other words, Duolingo needs the internet to function.

Concerning the environment of Duolingo, the whole environment of the application is full of colors, pictures, animations and, since the application is free, advertisements as well. Everything in the application is divided into sections. Each section of the application has its symbol (Appendix A). There is a section where the learner can see his or her progress, finished lessons and achievements. Another icon enables the learners collect their rewards in form of "lingots". Lingots are coins that enable the user to buy premium lessons in the shop. The symbol of the shop also offers clothes for Duo, Duolingo green owl avatar, so that the learner may personalize it according to his or her tastes. Last but not least, Duolingo provides the learners with opportunity to add their friends and share their success with others. As each section of

Duolingo has its icon, each lesson has its symbol as well. Each symbol represents the topic of the lesson. For instance, the symbol of a lesson aimed at practicing food vocabulary is a hamburger, a lesson called "Basics" is symbolized by an egg and the symbol of "Basics 2" is an egg with a crack in it.

When speaking about the "Basics", this lesson is the first lesson of the whole course. The course is divided into five stages where different topics are learnt and practiced. Each stage has eight or more topics and each topic has five levels which contain three to ten lessons. Before each lesson there are useful tips for the user to make the learning more effective. The tip for the lesson is followed by approximately ten tasks. The demandingness of the tasks increases with the stages. In other words, the first stage concerns only few fundamental phrases and the use of basic vocabulary and grammar while the last stage contains topics such as politics, abstract qualities etc. and advanced grammar. If the users are familiar with the language in any way, they may take a test at the beginning of the course and the application allows them to start on their language level. Therefore, they do not have to go through all for them already known information. This, on the first sight, complicated structure is designed to develop the communicative competence. It is based on the Common European Framework of Reference for Languages even though it is not obvious from the environment of the application.

The development of the communicative competence is ensured by various exercises that are found in Duolingo. There are tasks practicing pronunciation when the learner reads a phrase out loud and the device records it and provide the learner with immediate feedback. The vocabulary is taught with the use of pictures and phrases. Other tasks practice translation of words, phrases and sentences from the native language to the foreign language and vice versa. These phrases are translated from the written or spoken form. Another type of translation task is the one where the learner has few words and he or she is supposed to choose the right ones. In this modification, the application reads the chosen words out loud so the users may either compare it with what they heard, or they may simply adjust to the sounds of the language and practice basic listening and pronunciation.

4.1.2. Busuu

Busuu is, similar to Duolingo, free multilingual learning application. However, free is in this case only the basic version of only one language course. If the learners want to use the full spectrum of the activities, exercises, review tests and languages the application offers, they must pay a fee. Busuu was founded in 2008 in Spain and since then it was awarded many prizes for the best learning application. Currently, Busuu allows the user to learn 12 languages. This

number contains English, Spanish, French, German and others. Similarly, to Duolingo, the learning can take place only if the learner is online, with an access to internet.

If the environment of Busuu is concerned, the whole application is in English, therefore, those who want to learn English from the basics may have a problem with orientation in the application. Nevertheless, the environment of the application is a combination of blue and white color. It also corresponds with the blue and white symbol of the application. Also, these two colors are used in the tasks and on the homepage with real life pictures representing the topics. On the home page, there are also symbols that represent user's profile, notifications, other language courses and social interactions, reviews and the currently studied course (Appendix B). On the profile, the users can follow their progress, see the tasks they had finished and the mistakes they had made throughout the whole learning. On the page of social interaction, the learner can share the progress and the responses are shown in the section of notifications. The icon of reviews serves as a way to remember the vocabulary and grammar that the learner had mastered. Finally, on the main page, the learners can find the currently studied course and pick lessons and topics they want to practice.

The whole course is divided into stages named after the levels of language from CEFR. Therefore, the stages are, again, arranged from the easiest ones to the advanced ones. Each stage has from twelve to thirty-two lessons and three to five review quizzes, concluded by one final review test. Each lesson deals with one to three topics that are further divided into levels of practice. Nevertheless, because the free version is restricted, the ordinary learners may get to the B2 level stage as those users who have the premium account, however, they are not allowed to practice all the parts of the lessons and topics. Moreover, they are not allowed to take the final review test at the end of each stage. To be able to keep learning, the fee must be paid. Another feature of the course is the tips. The tips, in Busuu, are placed not only before the lessons but even in between the tasks and they are mainly guidelines to following exercises not the tips that are supposed to motivate the learner nor those which provide the user with extra ways to practice.

If speaking about the exercises, the range of them is much bigger than in Duolingo. There are exercises based on the tips the application gives. These are true or false exercises or picking suitable words from more options. Furthermore, the users of Busuu are given the opportunity to watch videos and listen to the conversations to practice the listening and after watching or listening fill in the gaps in text, guess the hidden meanings of some sentences from the video or dialogue or even try to imagine themselves in particular situation from the podcast and come

up with their own reactions. Write them down or say them out loud to the microphone and send them to native speakers for correction. This way, the learners are able to test their listening comprehension.

5. Creating criteria for analysis

To follow the aim of this thesis, I have decided to divide the analysis of the applications into two parts. In the first part, the applications are analyzed generally, from the perspective of learning the language and their effect on motivation. For that purpose, I created a set of questions based on the chapters of the theoretical part.

The second part of the analysis of the applications concerns specifically the motivational strategies that are or are not used in the applications. These strategies are listed at the end of the theoretical part. Furthermore, I have taken into consideration the frequency with which the strategies occur in the applications and if they really impact the user's motivation.

5.1. Set of criteria questions

For the first part of the analysis, I created the criteria by going through chapters and subchapters of the theoretical part and asking questions concerning the problems they deal with. Considering this, I created nine questions. These questions serve as the criteria for the overall evaluation of the applications.

- **Are the applications of the same type? What type (see chapter 2.)?**
- **Do the applications require any kind of monetarization? What kind (see chapter 2.2)?**
- **Do the applications practice all aspects of communicative competence (linguistic, sociolinguistic, pragmatic)? Which one the most?**
- **Is the content of the lessons personalized according to the learner? How?**
- **Is there anything distracting in using the application? What?**
- **Are the applications motivating in any way? How?**
- **Are the applications able to fulfill the aims of integrative or instrumental motivation? How?**
- **Are all the four stages of motivation involved in the applications (see chapter 3.)? How?**
- **Is there something demotivating about the applications? What?**

All the questions of the criteria are YES/NO questions that require further specification in form of a comment answering questions: How? What? In the first, the second and the third question, the comment contains a multiple-choice answer where one of the terms from a list in the theoretical part must be selected.

The second part of the evaluation of the applications concerns only the motivational strategies and going through the theoretical part I was interested mainly in the following:

- **Are the strategies from the theoretical part used in the application?**
- **How many times does the strategy occur?**
- **In what part of the lesson does it occur?**
- **Does it make the level of motivation increase?**

This set of criteria is a combination of simple YES/NO questions, the first and the fourth question, and a question concerning frequency, the second question, and a multiple-choice question with more possible answers, the third question.

6. Analyzing and discussing the findings

To begin with the first part of the analysis of the applications, I went through one lesson from A1 language level and one lesson from B2 level and collected data to be able to answer the questions I have created. To answer the first question, the occurrence of the characteristic features of the application types was observed so I would be able to determine the type of the chosen applications. (Appendix C) In the same manner, the exercises from those lessons were examined to find out what competence is practiced the most. Furthermore, I tried to find out if the applications are able to adjust the exercises to their user. (Appendix D) The same way, only the A1 lesson was observed to find out if the applications contain features that might be motivating or demotivating.(Appendix E) To find out if the goals of integrative and instrumental motivation can be fulfilled, I observed only the lesson from the B2 level, because the B2 level is the highest the applications practice. In the lesson, the specific features (phrases, tips) that might be helpful in integrating into the culture of the language or reaching the instrumental goal were observed. (Appendix F) Finally, to find out if the applications include all stages of motivation, I again observed the A1 and B2 lesson and looked for the strategies that the stages include. (Appendix G)

In the part concerning only the motivational strategies, one topic from each level was observed and I searched for the motivational strategies named at the end of the theoretical part (see

chapter 3). For the purposes of their evaluation, I created three groups of strategies with their head terms. The first of them is the decorative graphics. This is a head term for pictures and animations. The second head term is the gamification which contains challenge and rewards. The last group is the quotes and tips. I observed how many times and in what part of the lesson each of the strategies occurred, and if they really altered the motivation of me as a user. (Appendix H, I) The environment and the reminders are evaluated differently because their frequency cannot be measured. Therefore, the simplicity of use of both applications is compared. Concerning the reminders, I looked only at the possibility to set a reminder at a certain days and time.

6.1. Analyzing the applications

Firstly, when I looked at each application as a whole, I found a difference in monetarization types. Even though both applications contain the premium parts of the courses, as was mentioned in the brief description of the applications (chapter 4.1.), in Duolingo the full courses are free and only if I would want to learn offline, gain more points to my score or learn without the in-app advertisements, the fee would have to be paid. Nevertheless, the payment in Duolingo does not affect the structure or availability of the course in any way. Even though I did not pay any money, I had the access to all the languages and all the lessons without restrictions. On the other hand, in Busuu, the payment is necessary to be able to access the whole course. Busuu requires a subscription for a year, six months or one month otherwise, the user is allowed to learn only one language at a time. Moreover, the lessons are incomplete because some of the review tests and parts of the lessons are only accessible with the premium account.

Another aspect was observed in one lesson of A1 and one lesson of B2 language level and it concerned the communicative competence. The creators of Duolingo probably belong to the group of people with the opinion that the linguistic competence is the most important part from the whole concept of the communicative competence. Based on the exercises I have observed, Duolingo teaches mainly vocabulary, grammar, pronunciation and how to put words together to create a correct sentence. The linguistic competence is practiced in all the exercises in both A1 and B2 lessons. Moreover, it is all taught in the most basic forms, using short sentences and phrases. In contrary, the creators of Busuu consider the social aspects of the language as well as the linguistics ones. This is accomplished by adding learning tips concerning particular social situations and practicing the phrases that should be used in those situations. While observing A1 lesson, I found three exercises dealing with sociolinguistic features and seven dealing with

linguistic ones. In B2 lesson, all ten exercises practiced linguistic competence. Also, the tasks to develop the competence are more demanding than the ones in Duolingo. Busuu uses more advanced structures, dialogues and reading exercises whose aim is to practice the linguistic aspects of the communicative competence such as vocabulary, grammar, syntax as well as the appropriate reactions in particular situations. That is a part of a sociolinguistic competence.

Together with the communicative competence, the ability of the applications to adjust to the learner was observed and the data were collected in appendix D. Both applications have their ways to personalize the content according to the user. Firstly, Duolingo as well as Busuu start their courses with a question concerning the purpose of the learning (school, job, to be able to integrate etc.). Secondly, also at the beginning, the applications ask yet another question, this time concerning the level of the language. Subsequently, based on the answer to this question, the learner is either sent directly to the list of the lessons and may start to learn or they are sent to a test. After completing the test, they are sent to a level that they have not mastered yet and start learning. Third way of the adjustment of the application to the learner appeared only in Duolingo. Duolingo enables the learner to adjust the content of the exercises based on the environment where the learning process takes place. In other words, if the learner cannot speak or listen at that moment, Duolingo will include only textual exercises and turn off those which require speaking out loud (exercises for pronunciation) and listening (spelling exercises, translation).

Another aspect that is partly connected to the communicative competence and was evaluated by observing only the B2 lesson, is the integrative and instrumental motivation. Based on the theoretical part (see chapter 1.1.3. and 1.1.4.) the applications should be able to help the user integrate into the society of the language and reach the instrumental goals connected with the language learning.

If speaking about the integrative motivation, based on the data from the observation of the exercises where thirteen of them contained useful phrases for integration, Duolingo is able to help the user to integrate into the language society. However, the exercises use very basic structures and it only teaches vocabulary and grammar. If I wanted to participate in a group of people speaking English, I would know the vocabulary, but the crucial problem would be that I would not know how or when to use them to properly fit into the group. If the integrative goals were the only motivation the users had, they would not be so motivated after going through a couple of lessons. Busuu, on the other hand, works with the sociolinguistic competence as well as with the linguistic one. Therefore, after going through the lesson, even though the useful

phrases were not so frequently used there, I felt that I could use the phrases to fit in the society of English-speaking people easier and that kept me motivated. So, if I compare Duolingo and Busuu from the perspective of the ability to meet the goals of integrative motivation, Duolingo is able to meet them, but only partially, while in Busuu the goals are more likely to be met fully.

Considering the instrumental motivation, this depends on the area that the learner wants to improve in. If the aim is to learn a basic group of vocabulary and grammar connected to the job or the studies, then both applications may be useful in a way. However, when I observed the B2 level lesson, the exercises I considered helpful for reaching instrumental goals were the ones that contained the sociolinguistic features. Duolingo does not contain these types of exercises at all. Not only does Duolingo lack the social side of the language, but it also uses very basic language structures for a person with an advanced language level, as myself (B2 and higher). Therefore, I say that Duolingo may be helpful but not for people with a higher language level. In Busuu, on the other hand, I observed six exercises of the B2 language level. There was one exercise that included features of sociolinguistic competence (dialogue with gaps to fill in appropriate words/phrases). Based on this observation, I assumed that Busuu is much more likely to help the learner to reach the instrumental goals even with a higher language level.

Apart from the monetarization, parts of communicative competence practiced in the applications and the ability to help to reach the integrative and instrumental goals, the qualities of the applications are, more or less, the same. They are both integrative type of applications. In both applications and the lessons, I observed in them, all the exercises were based on the input-output relationship. They both provide an output in form of feedback based on the input from the user.

Finally, the last aspects to be evaluated all concern motivation. Even in this area I found the applications very similar to each other as each of them has something that motivates the learners as well as something that may demotivate them. However, in each application the motivation is caused by something else. In Duolingo, I was mostly motivated by the praising which occurred in all twelve exercises, and motivational quotes and language tips which appeared in three exercises out of twelve. After each lesson there were in-app advertisements which were a little bit distracting. But what I found absolutely demotivating, were the exercises themselves. I found them boring and monotonous. Same as in Duolingo, in Busuu the most motivating features were the motivational quotes, tips, in six exercises, and praising, in five exercises. But there were also real-life pictures used in six exercises of the lesson. Moreover, Busuu provided me with a little bit of a challenge in every exercise and that kept me motivated. Nevertheless,

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some demotivating features occurred in Busuu as well. Again, it had something to do with the monetarization. In Busuu, the demotivating features were the instant notifications about the premium access and all the restrictions connected to it. The advertisements and notifications, in general, were very distracting and it even made the learning harder.

If concerning the stages of motivation, both applications seemed to cover all four of them. As can be seen in appendix G, the creating of basic motivational conditions was mediated by the user-friendly environment, pictures, colors etc. The second stage, the initial motivational dimension, was present in the form of motivational quotes and learning tips. To maintain and protect the motivation the applications used variety of exercises to keep the learning interesting. Finally, the stage where the learners should positively evaluate themselves appeared in the applications as feedback, trophies and little celebrations of each completed exercise or a lesson. Even in this aspect, Busuu seemed to surpass Duolingo. Even though Duolingo gives a positive feedback after each lesson, the rest of the stages is targeted rather scarcely. Only two pictures and animations occurred in the lessons, same as the motivational quotes and tips. Both lessons contained only three types of exercises. Busuu, on the other hand, used pictures and animation seven times, the quotes and tips six times, and positive feedback five times in A1 lesson. Also, ten types of exercises were used in A1 lesson. In B2 lesson, the pictures were used five times, same as the quotes. There were eight types of exercises and the positive feedback was used three times.

6.2. Analyzing motivational strategies

In the first part of the evaluation and its part concerning motivation, I found out that the applications are motivating in some way. In this part, I looked closer at the motivational aspects of the applications. I observed the motivational strategies that are the mediators of the motivation between the application and the user. As I said before, I tried to find out if all the three groups of motivational strategies I created (decorative graphics, gamification and quotes and tips) are included in the learning process in MLA, how often they appear in the lessons, in what part of the lessons and if they have the presumed effect on the motivation. Below, I list the strategies together with the user-friendly environment and reminders that I evaluated differently than the three other strategies. Under each strategy, I describe my findings.

6.2.1. User-friendly environment

From my experience with the application, I can say that the orientation in both applications is easy. I did not get lost, the applications always told me what to do in the exercises and the icons in both applications were also easy to understand. The materials provided by the applications

were understandable and the exercises doable, even the more complex ones. There is only one area where I see a possible problem. The whole environment of Busuu is in English and that might be a huge demotivating obstacle for complete beginners that do not know a single word in English.

6.2.2. Reminders

Concerning the reminders, from my observation of the applications, I found out that both applications provide the learner with the opportunity to set an alarm to know when the learning should take place.

However, in Busuu the reminders are a part of the premium version and I would have to pay to be able to create a study plan and set reminders according to my time preferences. Duolingo does not have this problem since it is a completely free application. So, the only thing that must be done is enter the settings and set an alarm for a suitable time of the day. But even Duolingo is not perfect in this matter, in Duolingo, I could set only a time when I want to be reminded not days. Therefore, the notifications are coming every day even when I do not want to learn every day. I find this rather annoying.

6.2.3. Decorative graphics

The decorative graphics are the most frequently used strategies in both applications. In Duolingo, there are animations in form of Duo at the beginning of each lesson and in the middle of the lesson after a certain number of correctly finished exercises. Anytime Duo appears, it appears together with a quote or a tip. Apart from that, there are no other pictures or animations in the application.

To contrast the two applications, Busuu uses pictures and animations even inside the exercises to enable the learner to imagine the situations and make the learning more interesting. The frequency depends on the types of the exercises used in the lessons, not on the length of the lesson (number of exercises). Therefore, the number of pictures and animations varies with each lesson and from my findings Busuu also uses the decorative graphics more often than Duolingo.

If the impact on the motivation is concerned, even though, I found the use of decorative graphics sort of motivating in both applications, I must say that Busuu motivated me more than Duolingo. Mainly because it did not have a strict order and each lesson was special in a particular way. Therefore, the process of going through the lessons did not become predictable, monotonous and boring.

6.2.4. Gamification

Probably the most significant difference between the two chosen applications and their motivational strategies can be found while analyzing the use of features of gamification.

While Duolingo contains features of gamification in the middle and after each lesson (lives that disappear with a wrong answer, getting coins for finishing a lesson) and even outside the lessons (buying extra points for the coins earned by completing exercises), Busuu does not work with gamification at all.

However, even though Duolingo seems to be a one big game serving to make the learning interesting, I did not feel motivated by those features used in the application. In my opinion, they were used monotonously, and it had zero effect on my motivation. Therefore, I find the use of gamification features in the way Duolingo uses them to be rather pointless.

6.2.5. Motivational quotes and learning tips

The use of motivational quotes and learning tips was already mentioned in connection to decorative graphics in Duolingo.

As I already mentioned, in Duolingo, the quotes and tips are almost every time used in combination with an animation of Duo at the beginning and in the middle of the lesson. So, the number of the frequency is more or less the same. Therefore, what was said about the graphics in Duolingo can be applied for the quotes and tips in the same application as well. Still, I found them too monotonous to be properly motivating.

In Busuu, on the other hand, the quotes and tips were used throughout the whole lesson, independently, and based on the type of exercises or the social aspects of the learned topic (informing about formal and informal expressions). Moreover, the quotes in Busuu were not dependent on how the learner did during completing the exercises. Therefore, Busuu managed to avoid the monotony and kept me motivated even though I made mistakes.

7. Final evaluation

To summarize the evaluation, I think both applications have its positive and less positive aspects.

From the perspective of learning English and the overall evaluation of the applications, I would say that Busuu is more useful for learning the language. The reasons are as mentioned before. Similarly, to Duolingo, it teaches the users all linguistic aspects that they need to be able to communicate, but in contrast to Duolingo, it also includes the social side of the language which

is very important not only for everyday communication but also for a future career. Moreover, when to be compared with Duolingo, Busuu includes a greater variety of exercises which are also more challenging. These qualities also make the application more valuable in a field of motivation. The sociolinguistic features taught by Busuu help the user maintain the level of motivation as well as supporting the integrative and instrumental motivation.

If the use of motivational strategies is concerned, both applications have a certain system when using them. In Duolingo, there is a rather strict pattern of when the strategies are used and how many times they are used. The decorative graphics are usually used together with a tip or a quote at the beginning of the lesson and the frequency of using them in the middle of the lesson is dependent on the number, not on the type of the exercises. The gamification is always place in the middle and at the end of the lesson. In Busuu, there are similar rules, but the difference is that Busuu does not work with gamification and the rest of the strategies are used not based on the length of the lessons but on the type of the exercises the lessons contain. Before each complex exercise there is a tip and/or a quote. This creates a kind of unordered order in the strategies, and mainly because of the lack of monotony I felt more motivated by the way Busuu used its strategies even though the option to set a reminder was possible only in premium version.

As I see it, from the data I collected and analyzed, Busuu seems to be more sufficient for both learning the language and keeping the learner motivated.

Conclusion

This bachelor thesis deals with the modern mobile language learning applications. It observes the use of these applications in mobile language learning together with the impact the motivational strategies used in them have on the learners' motivation. The thesis is divided into theoretical and practical part.

The theoretical part defines terms connected to the topic of the thesis. Furthermore, it serves as a theoretical framework for the evaluation of the chosen applications. The first chapter of the theoretical part introduces the motivation and its four types. The types are divided based on where the motivational impulse emerges from into intrinsic, extrinsic, and the goals of the learning process into integrative and instrumental motivation. The second important term which is defined in this chapter is learning. In this subchapter, the concept of social constructivism which is important for the quality of the learning process as well as for the motivation is presented. Social constructivism brings the social aspects into the learning process. It deals with social interactions and collaboration between the learners and this is what influences not only the learning but the motivation as well. Moreover, the aim of the language learning is to be able to communicate so even there, the importance of social constructivism is visible. The ability to communicate is defined with the use of CEFR and the communicative competences described in it. Taking all the mentioned before and adding the place and environment where the learning process takes place, the last term defined in this chapter is mobile learning. M-learning is not fixed on a place or even time and it usually uses mobile technologies.

The second chapter of the theoretical part continues with the mobile technologies used in m-learning, more specifically, with the mobile learning applications. In this chapter, the applications are defined and divided into seven types based on their purposes and features that they work with. The types are collaborative, location-aware, data-collection, referential, administrative, interactive, and microworld. Collaborative applications work with the possibility to share knowledge and one of the examples of this type of application is Moodle. Location-aware type of applications makes use of the geographical reference and an example is FieldNote. Data-collection applications enable their users to save the information for later use, Microsoft applications. Referential applications such as Adobe Reader work with dictionaries and translators. Administrative applications are organizers. Interactive applications are based on the interaction between the application and the users. Examples of this type are Duolingo and Busuu. Finally, the microworld applications simulate the real-life situations. Microworld type is very rare. After this division, the criteria for their evaluation made by

International Organization for Standardization and International Electrotechnical Commission are listed and described. Concerning the quality of MLA, they must contain specific functions to fulfil the needs of not only the users but also of the developers.

Finally, the last chapter of the theoretical part deals with the motivational strategies in mobile learning applications. In this chapter, the strategies are defined and divided into four groups according to what stage of motivation they aim at. The first group is strategies which create the basic motivational conditions. These are mainly the learning environment and preparing the learner for making mistakes. The second group contains strategies such as positive quotes or learning tips to help the learner set a goal he or she will follow. These strategies aim at the phase of generating the initial dimension for motivation. The third phase is maintaining and protecting motivation and strategies belonging to this phase are mostly connected with keeping the learning interesting in some way. Therefore, the varieties of exercises are very important in this phase. The task of the fourth group of strategies is to encourage the learner to positively evaluate themselves. This is accomplished with the use of feedback or little celebrations of success after finishing a lesson. Further in this chapter, the motivational strategies that can be found in learning applications are named and briefly described.

The second part of this thesis is the practical part in which the applications and the motivational strategies used in them are evaluated based on the information from the theoretical part.

This part contains the description of the process of choosing Duolingo and Busuu as the applications to be evaluated together with a brief description of the general features of each application. Subsequently, the list of criteria, created by going through chapters and subchapters form the theoretical part, is presented. Finally, with the use of this list the applications are evaluated, and the collected data are recorded into appendices from C to I.

The findings of the research showed that both applications are interactive type because they both work on the input and output principle. The learner gives an input in form of completing an exercise to the application and based on that, the application gives the learner an output in form of feedback. Also, both applications require some kind of payment. However, unlike in Busuu, in Duolingo the payment does not affect quality of the learning. In other words, I the premium version is not payed, the user still has access to all the exercises, lessons and levels. In contrast, the payment in Busuu is a condition for accessing all the features of the application. Without it, the lessons are incomplete, and the learner cannot take review tests. If the language aspects are concerned, both applications practice mainly linguistic competence, vocabulary,

grammar, pronunciation, spelling, etc. However, Busuu informs the learners about specific situations when some expressions are appropriate or inappropriate to use and therefore, it touches the socio-linguistic competence as well. The content in both applications can be customized according to the user's language knowledge and they can start with the highest language level they have not mastered yet. Moreover, in Duolingo, the exercises can be turned on or off in connection with the environment of learning. Concerning the motivational aspects, both applications were motivational and demotivational in a way. Both followed the four stages of motivation and also both contained distracting and annoying advertisements.

Speaking about motivation, the observation of the motivational strategies showed that while Duolingo contains all of the strategies named in the theoretical part, Busuu completely lacks the features of gamification. However, this did not seem as a problem because the system of using the strategies was more effective than the one used in Duolingo. In Busuu the strategies were not used monotonously and in predictable moments, this made using the application more interesting and less boring. Duolingo on the other hand used its strategies in strict patterns which made the learning rather boring.

Resumé

Tato bakalářská práce se zabývá moderními mobilními výukovými aplikacemi a motivačními strategiemi, které tyto aplikace využívají ve výuce angličtiny. Práce je rozdělena do dvou hlavních částí – teoretické a praktické. Úkolem teoretické části je vytvoření teoretického podkladu, ze kterého je následně čerpáno při vytváření kritérií v praktické části. Praktická část se poté zabývá hodnocením výukových aplikací a motivačních strategií, které jsou v nich použité.

Obě části jsou dále rozdělené na kapitoly a podkapitoly. V první kapitole teoretické části jsou definovány pojmy motivace a učení. Pojem motivace je dále v podkapitolách rozdělen podle místa vzniku impulsu na vnitřní a vnější motivaci a podle cílů učení se cizímu jazyku na integrativní a instrumentální motivaci. Druhý pojem definovaný v této kapitole je učení. Také ono je nejprve obecně definováno a poté zasazeno do kontextu učení se anglickému jazyku. V této podkapitole je také zmíněna teorie sociálního konstruktivismu, která je důležitá jak při motivaci, tak při učení. Zabývá se totiž interakcemi mezi studenty, které ovlivňují jejich motivaci a je při nich zapotřebí komunikovat. A právě schopnost komunikace je cílem učení se cizímu jazyku, které je v této podkapitole vysvětlena za pomoci definice komunikačních kompetencí, jak je popisuje Společný evropský referenční rámec pro jazyky (CEFR). V poslední části této kapitoly jsou výše zmíněné pojmy zasazeny do kontextu mobilního učení. Mobilní učení není vázané na místo ani čas a většinou a k jeho realizaci často bývají využívány mobilní technologie.

Druhá kapitola teoretické části navazuje na mobilní učení a zabývá se mobilními aplikacemi, které se při něm využívají. V této kapitole jsou mobilní aplikace definovány a rozděleny na sedm typů podle jejich účelu a vlastností. Prvním typem jsou kolaborativní aplikace, které studentům umožňují sdílet informace, a tím umožňují spolupráci i v případech, kdy studenti nemohou spolupracovat tváří v tvář. Aplikace, která je příkladem tohoto typu je například Moodle. Druhý typ aplikací využívá toho, že mobilní zařízení jsou schopna zaznamenávat geografické informace. Příkladem tohoto typu aplikací je FieldNote. Třetí typ aplikací využívá možnosti ukládat data a využít je později, příkladem jsou aplikace od společnosti Microsoft. Dalším typem jsou aplikace jako například AdobeReader. Tento typ charakterizuje práce se slovníky a překladači. Administrativní aplikace, Due Yesterday Student Organizer, mají funkce kalendářů a plánovačů. Šestý typ jsou takzvané interaktivní aplikace, které jsou založené na interakci mezi aplikací a jejím uživatelem. Příklady tohoto typu jsou aplikace Duolingo a Busuu. Posledním typem jsou aplikace, které simulují situace z každodenního života. Tento typ

aplikací je používán velmi vzácně. Po rozdělení aplikací následuje seznam kritérií k hodnocení výukových aplikací, vytvořený Mezinárodní organizací pro normalizaci a Mezinárodní elektrotechnickou komisí. Aby byla aplikace považována za kvalitní, musí splnit požadavky jak vývojářů, tak cílových uživatelů.

Poslední kapitola teoretické části spojuje motivaci z první kapitoly a výukové aplikace definované v druhé kapitole. Tématem třetí kapitoly jsou motivační strategie používané v aplikacích. V této části jsou strategie všeobecně definovány, detailněji popsány a rozděleny do čtyř skupin. Tyto skupiny jsou vytvořeny na základě fází motivace, které by měli být přítomny při učení. Tyto fáze jsou vytvoření základních podmínek pro motivaci. Do této fáze patří například prostředí aplikace nebo příprava studentů na případné chyby, které jsou nezbytnou součástí procesu učení. Strategie v druhé fázi, vytváření počáteční dimenze motivace, mají za úkol pomoci uživateli stanovit cíle, kterých se bude snažit v procesu učení dosáhnout. Toho může být docíleno motivačními citáty, aby byl podpořen kladný vztah ke studovanému jazyku. Ve třetí fázi, udržení motivace, je nejdůležitější, aby byl proces učení zajímavý a nenudil uživatele aplikace. Proto jsou v této fázi využívány především různé druhy cvičení a úkolů. V poslední fázi motivace by studenti měli být schopni se pozitivně ohodnotit. Motivační strategie, které tomuto procesu mohou pomoci jsou pozitivní zpětná vazba či pochvala za drobné vítězství v podobě dokončených úkolů a lekcí.

Druhou částí celé práce je část praktická. Cílem praktické části je pomocí kritérií vytvořených z teoretické části ohodnotit vybrané mobilní výukové aplikace a motivační strategie v nich použité. V této části je nejprve popsán proces vybírání výukových aplikací. Poté jsou tyto aplikace stručně charakterizovány. Následně jsou prezentovány seznamy kritérií vytvořené z kapitol a podkapitol teoretické části podle kterých jsou nakonec vybrané výukové aplikace a motivační strategie hodnoceny. Data sesbíraná v průběhu hodnocení jsou zaznamenána v přílohách C až I.

Výsledky hodnocení aplikací ukázaly, že obě jsou interaktivního typu, protože obě jsou založené na principu vstupu ve formě vyplněného cvičení od uživatele a následného výstupu ve formě zpětné vazby ze strany aplikace. Dále obě aplikace obsahují prémiovou verzi, která však vyžaduje poplatek. Zatímco neplacená struktura aplikace Duolingo není rozdílná od té v prémiové verzi a všechna cvičení jsou přístupná i bez zaplacení poplatku, v aplikaci Busuu je přístup k úplným lekcím podmíněn zaplacením prémiové verze. Pokud Busuu není zaplacená, uživatel nemůže vyplňovat všechna cvičení a dokončovat některé lekce a také nemůže otestovat své znalosti pomocí opakovacích shrnujících testů. Pokud jde o jazykovou stránku těchto

aplikací, obě aplikace se nejvíce zaměřují na lingvistickou kompetenci. Uživatel se učí převážně slovíčka, gramatiku, výslovnost, aj. Nicméně, Busuu informuje své uživatele i o specifických situacích, kdy je vhodné naučené výrazy a slovíčka použít a kdy to vhodné není. To znamená, že tímto aplikace bere v potaz také společenské aspekty užívání jazyka, a tím své uživatele učí také prvky ze socio-lingvistické kompetence. Obě aplikace také mohou určitým způsobem upravit svůj obsah na základě potřeb uživatele. Prvním způsobem je uživatelova volba cíle učení a poté následuje rozřazovací test. Navíc v aplikaci Duolingo je možné vypnout některé druhy cvičení. Pokud se uživatel nachází na místě, kde nemůže mluvit či poslouchat, Duolingo vypne cvičení, kde je těchto činností zapotřebí. Co se týče aspektů motivace, obě aplikace jsou určitým způsobem motivující a zároveň demotivující. Obě aplikace obsáhly všechny čtyři fáze motivace a zároveň obě obsahovali prvky jako například reklamy a nabídky na prémiovou verzi, které byly rozptylující až nepříjemné.

Druhá část hodnocení aplikací se zabývá pouze motivačními strategiemi. Tato část hodnocení ukázala, že zatímco Duolingo využívá všechny motivační strategie, které byly zmíněné v teoretické části, Busuu ve svém programu naprosto postrádá prvky gamifikace. Na druhou stranu motivační strategie v Busuu byly používány častěji a rozmanitěji, čímž se předešlo tomu, aby aplikace byla nudná a předvídatelná. Tudíž ač v Busuu zcela chybí prvky hry, celkově pozitivně ovlivní motivaci uživatele více než Duolingo.

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Appendices

Appendix A *Environment of Duolingo*

Appendix B *Environment of Busuu*
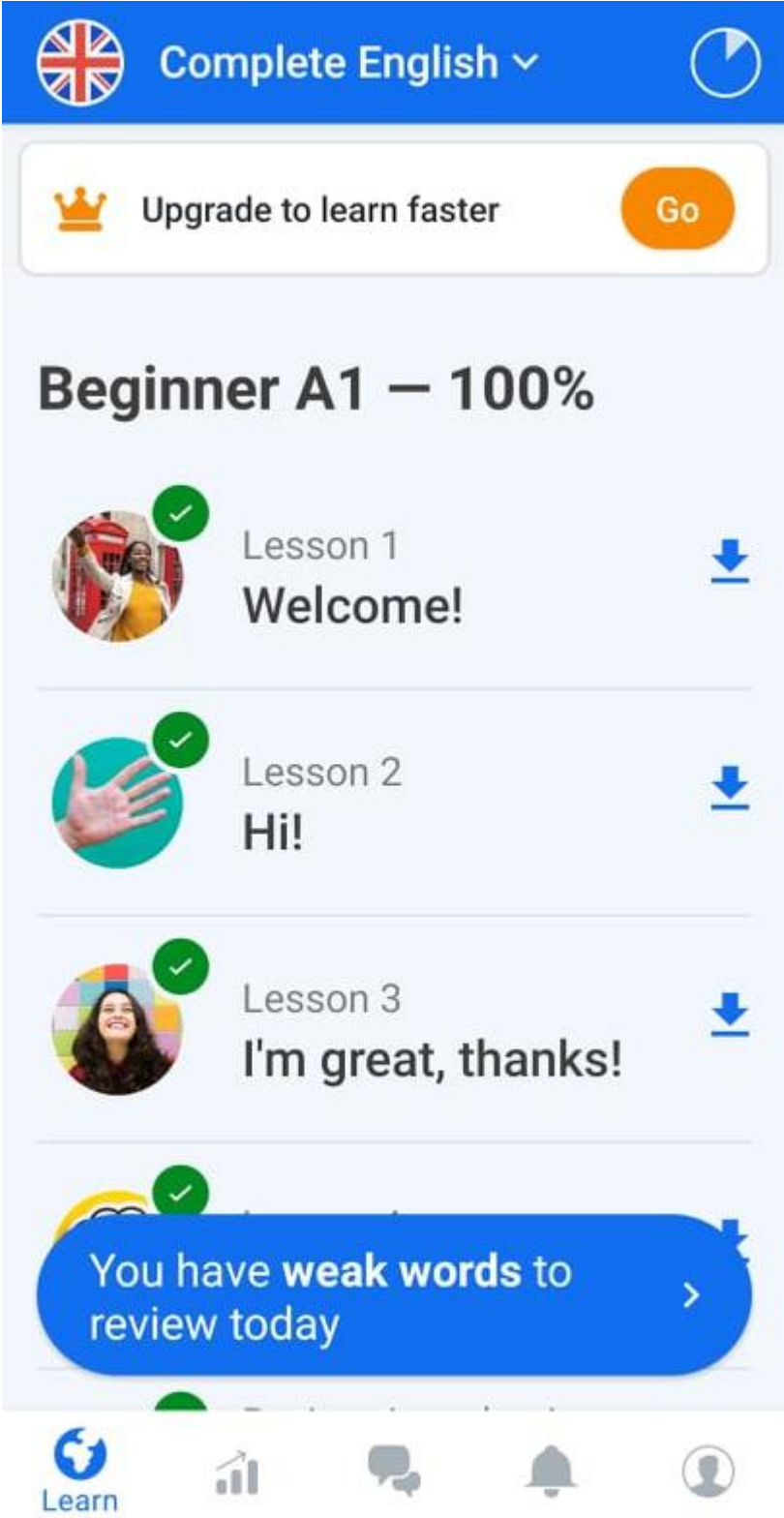
Appendix C *Type of the chosen applications*

Characteristic features	Sharing knowledge, collaboration	Geographical reference	Saving data for later use	Dictionaries and translators	Planning, scheduling	Input, output	Real world situations
Duolingo						A1 – 12 B2 – 13	
Busuu						A1 – 10 B2 – 10	

Appendix D *Communicative competence and ability to adjust the exercises*

	Linguistic	Sociolinguistic	Pragmatic	Adjustments	Comments
Duolingo	A1 – 12 B2 – 13			Overall – 2 Exercises - 2	- mostly translating, repeating words, phrases, sentences (grammar, phonology, translating) - adjustments: overall – test at the beginning, choosing the aims; exercises: in form of skipping listening or speaking exercises, the application turns those off and after an hour it turns them on again
Busuu	A1 – 7 B2 – 10	A1 – 3 B2 – 0		Overall – 2 Exercises – 0	- vocabulary, phonology, spelling - the applications show differences in formality (Hi X Hello), asks what response is suitable - no adjustments of the exercises possible

Appendix E *Motivating and demotivating features*

	Motivating	Demotivating	Comments
Duolingo	Praising – 12 Quotes, tips – 3 Pictures – 0	2	- motivating quotes, Duo informing about the progress (after 5 and 10 correctly finished exercises in a row), praising after each exercise - demotivating in-app advertisement after each lesson, the exercises themselves were demotivating
Busuu	Praising – 5 Quotes, tips – 6 Pictures – 6	1	- motivating tips about the language and exercises, there are real life pictures to each exercise - the instant reminder of the premium version is demotivating

Appendix F *Integrative and instrumental motivation*

	Integrative	Instrumental	Comments
Duolingo	13		- the application contains useful phrases for integration to the language group in each exercise - to fulfill the instrumental goals, the exercises are too easy for my language level (basic structures, only limited vocabulary)
Busuu	5	1	- the division of the lessons is more detailed (more topics) so the integration to the language culture might be easier, useful phrases in this lesson were not so frequent - the instrumental goals are more likely to be met than with Duolingo, because Busuu contains dialogues (practice interaction, see how it is done, phrases, …) and more advanced vocabulary, structures, …

Appendix G *Stages of motivation*

	Animations and pictures	Motivational quotes and tips	Variations of exercises	Positive feedback	Comments
Duolingo	A1 – 2 B2 – 2	A1 – 2 B2 – 2	A1 – 3 B2 – 3	A1 – 12 B2 – 13	- the environment is neutral, the animations make it more motivating (Duo) - the variety of exercises is not very motivating (only three types in the lesson), positive feedback after each exercise
Busuu	A1 – 7 B2 – 5	A1 – 6 B2 – 5	A1 – 10 B2 – 8	A1 – 5 B2 – 3	- the real-life pictures create good basic conditions - the exercises are much more motivating (each exercise is different) - there are learning tips with praising almost after every exercise

Appendix H *Motivational strategies in Duolingo*

	YES/NO	Frequency	Part of the lesson	Motivation increase?
Decorative graphics	A1 – YES A2 – YES B1 – YES B2 – YES	A1 - // A2 - /// B1 - /// B2 - /	A1 – start, middle A2 – start, middle B1 – start, middle B2 – start	A1 – YES A2 – YES B1 – YES B2 – NO
Gamification	A1 – YES A2 – YES B1 – YES B2 – YES	A1 - // A2 - // B1 - // B2 - //	A1 – middle, end A2 – middle, end B1 – middle, end B2 – middle, end	A1 – NO A2 – NO B1 – NO B2 – NO
Quotes and tips	A1 – YES A2 – YES B1 – YES B2 – YES	A1 - / A2 - // B1 - /// B2 - /	A1 – start A2 – start, middle B1 – start, middle B2 – start	A1 – NO A2 – YES B1 – YES B2 – NO

Appendix I *Motivational strategies in Busuu*

	YES/NO	Frequency	Stage	Motivation increase?
Decorative graphics	A1 – YES A2 – YES B1 – YES B2 – YES	A1 - // A2 - /// B1 - /// B2 - ////	A1 - middle A2 – start, middle B1 – start, middle B2 – middle, end	A1 – YES A2 – YES B1 – YES B2 – YES
Gamification	A1 – NO A2 – NO B1 – NO B2 – NO	A1 A2 B1 B2	A1 A2 B1 B2	A1 A2 B1 B2
Quotes and tips	A1 – YES A2 – YES B1 – YES B2 – YES	A1 - ///// A2 - // B1 - /// B2 - //	A1 – start, middle, end A2 – start, middle B1 – start, middle B2 – start, middle	A1 – YES A2 – YES B1 – YES B2 – YES