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GAMIFIKACE VE VÝUCE ANGLICKÉHO JAZYKA

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Thesis

GAMIFICATION IN ENGLISH LANGUAGE EDUCATION

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Prohlašuji, že jsem práci vypracoval samostatně s použitím uvedené literatury a zdrojů informací.

V Plzni, dne 25. června 2023 **…..……**

Jan Petr

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ABSTRACT

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This thesis attempts to describe gamification, one of the emerging research topics of modern education, and its use for English language learning. Gamification is the application of game elements in non-game environments with the aim of influencing attutides and behaviors of the target group. This thesis examines approaches and attitudes towards gamification of English language learning of Czech teachers of elementary and secondary schools. The data were collected by online survey with twenty-one teachers from Western Bohemia region. The study has shown that Czech teachers view gamification positively and find it to be a viable tool to increase engagement and motivation of their students. The improvement of the learning outcomes was also suggested as a possible positive outcome of the gamified teaching. The participants showed interest in gamification becoming part of teachers´ theoretical training in the future.

Keywords: gamification, game elements, games, motivation, engagement

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I. Introduction

Gamification represents concept that is increasingly proposed as ideal tool to improve learning while taking the expecations of modern language education into an account. The theoretical portion of this thesis attempts to compile existing definitions of gamification and other concepts related to its use to summarize how gamification should be understood. It summarize the potential gamification presents for learning and specifically for language learning as well as propose platforms and tools that can be used to gamify learning. Finally it summarize findings of research done on gamification and the implications of those studies for the understanding of gamification.

The research portion presents the aim, research methods and participants included in the study in the Research Methodology section. For the purpose of this thesis, a questionnaire survey among teachers of English language in the classes of the elementary and the upper secondary education of Czech school was conducted. The gathered data shows trends in the use of gamification of English language learning and are further analyzed in Results and Commentaries. The chapter Implications proposes the implications that can be derived from the study and the potential for further research. In the final part of the thesis, Conclusion, the main outcomes of the works are summarized.

II. Theoretical background

This chapter presents theoretical background for the analysis of gamification and its use in education. Firstly, it explores various definitions of gamification and elements included in learning as well as typologies related to the understanding of its effects. Secondly, it focuses on the advantages the use of gamification represents for education and ways gamified content can improve the quality of learning. Additionally it describes what are the methods and tools to gamify learning. Lastly, it contextualize issues with research and literature related to gamification and what can existing research show in regards to attempting to gamify language learning.

1. Gamification as a concept

1.1 Historical development of the term

The use of games in education to support learning is not a new concept, in fact the first mentions can be traced as back as ancient Rome where Quintilian recommended the use of games as means to combat the dislike children showed towards learning and to make the instructions more amusing (Retherford, 2020). Academic literature works with the term gamification at least since the year 2002, when logician Johan von Bethem argued that „any logical task can be gamified“. As his comments were related to games and their players, it can be described as the first proposal for gamification of content (Landers, 2014). The first traces of the term online, according to Deterding et al. (2011) claims, go back to the year 2008 but gamification gained wider use only in the second half of 2010s. Originally the use of gamification was limited to the areas of digital media industry. Only later is gamification also used in connection with advertisement, training and education and many other areas of human activities.

1.2 Defining gamification

The issue with trying to define gamificaion in the sense of its use within training and education can be summarised by relative recency of the research into the topic. The growing body of literature and research was unable to come to clear conclusions about the term and its intricacies, thus many varying and sometimes overlaping definitions of the term and its

effects have been created and used over time. Kyriakova et al. (2020) present the most commonly used definition, which states that gamification „is the use of game thinking, approaches and elements in non-gaming related contexts“. Authors also offered alternative definition as „using game-based mechanics, aesthetics, and game thinking to engage people, motivate action and promote potential learning and problem solving of the audience“. It would be incorrect to think of gamification as inherently connected to video games and technology, despite the clear connotations. Games and game designs are as easily applicable to other media outside of technology (Deterding et al., 2011). As S. Kim et al. (2018) point out, gamification have can be implemented just as succesfully in traditional classrooms with the use of common school supplies, such as cardboards, pencils or stickers. The lack of technology may inherently limit teachers´ abilities to directly monitor their students´ behavior but can. still showcase all the potential positive outcomes of gamification. The term gamification in education should be understood as the use of elements from all types of game within classroom, with or without the support of technology.

Gamification is also differentiated from game-based learning and serious games by various authors. Rivera and Garden (2021) state that gamification can be viewed as a different concept, because it is only employing game elements and not turning into fully fledged games. As such, the further definitions of terms serious games and game-based learning are necessary for analyzing the potential gamification offers to teachers and educators. They are not viewed as examples of gamification by researchers, but they are closely related to the core concept of gamification so their understanding cannot be ignored in the scope of gamified learning. Sometimes, as Abrams and Walsh (2014) notice, the term edutainment is used as a synonym or proposed to cover the same concept. However the two terms describe admittedly related, yet still distinct ideas. While edutainment merely presents information to the target users with the help of basic game structures and let them absorb it, gamification is based in problem solving and mainly aims to encourage curiosity and exploration of content by the users.

Landers (2014) suggests that gamification is the augmentation of already existing concepts or processes with elements and compenents that are borrowed from games. The end result is not merely created for the purpose of gamification but with certain targeted outcomes. As Deterding et al. (2011) state, gamification can be understand as a system of rules that limit and guide the performance of participants as well as the factor that encourages

the competition or aim for certain outcomes and goals. It does not need to be a game on itself and does not require all components that make up a game.

1.3 What is a game

Games are among the concepts that everyone encounter during their life but coming up with precise definition may be very complicated due to relative vagueness of the term. The understanding of what constitues a game and what elements make up a game are necessary while trying to research and analyze the impacts of gamification. A famous and very often repeated description of games comes from a video game designer Sid Meier. He describes games as „series of interesting and meaningful choices made by the player in pursuit of a clear and compelling goal“ (S. Kim et al., 2018, p. 31). Authors present additional definitions created by researchers and experts. According to those games can be described as „rule-based plays with predeterminated goals“ or alternatively as „systems in which players engage in artifical conflicts, clearly defined by the rules, resulting in a quntifiable outcome“ (S. Kim et al., 2018, p. 32).

Gamification and its understanding of what constitues a game is connected to the identification of the polarity of gaming activites. Fischer and Barabasch (2021) describe the idea, originally presented by Caillois in his 1960 text *Man, Play and Games*, as the difference between two types of gaming, game and play. Game (categorized as *ludus*) is rules-based gaming characterized by its structure and most of activites that would be considered a game are objective-oriented. By contrast play (*paida*) is based in free-form improvisation and the activites are unstructured. Gamification follows the game rule components, although it is not a necessary rule. Most of the activities from which gamification insert elements are thus categorized as games rather than plays. Objective-oriented games can be transfered to learning outcome-oriented games and elements of rules and structures can be applied to traditional lessons.

1.4 Game inspired design and serious games

Game inspired design and serious games are concepts that are often presented within research and literature dealing with gamification and should be explained for the better understanding of issues with the research of gamification. Game inspired design, as Kyriakova et al. (2018, p. 665) understand it, is „the use of ideas and ways of of thinking that are inherent in games“. Unlike gamification it is not concerned with adding game elements, but only using playful designs. Borges et al. (2014) prefers the term playful design

to describe usage of game elements in non-game context with the aim of drawing attention and causing emotional reponse in the target audience. Both of these definitions are very closely related to gamification and overlap yet literature and research usually understand them as separate concepts.

S. Kim et al. (2018) equate the term serious games with the term applied games. They view them as games that are developed for another purpose than entertainment. Serious games are meant meant to induce specific outcomes related to government or corporate training, public policy, health and of course, education. Example of such game would be The Oregon Trail, with the sole purpose of teaching students about the reality of life in 19th century America. The entertainment dimension of the game is unrelated to the desired outcome and acts as a mere positive motivator, however its existence is in no way required for the game to function properly. Kyriakova et al. (2018, p. 665) describe serious games as „games designed with a specific purpose other than players enjoyment“. Serious games are usually concerned with predetermined objectives related to training while showcasing all game elements and resembling games in all other areas. Serious games offer, as Borges et al. (2014) explain, the possibility of real-world scenario simulations without the potential risks and costs. Serious games are adopted to be used for variety of uses from economics, engineering, politics to health, military training and education.

1.5 Elements of games

For the purpose of gamification the terms game and game elements have to be analyzed from varioius different viewpoints. As the elements of games are used to gamify learning, understanding what components make up games is very crucial when deciding how to gamify which portion of learning. Teachers need to know what parts can be considered game elements and how do they interact with players, each other and other concepts. Game elements can be categorized in the framework of their function in the game or as a concrete examples of objects that exist within the game. The issue with elements of games, as Toda et al. (2019) note, is that different frameworks for understanding and analyzing gamification have a different definitions. There seems to be no common understanding of elements that can be used for gamification and there is a continuous discussion on how to apply them to a specific activity or learning content. Deterding et al. (2011) agree with the issue of identifying game elements. As authors point out, game elements are not unique and virtually all of them exist outside of the medium of games as well. Therefore the attempts to isolate

and identify components of large structures as elements of a game can be very difficult and the understanding of their impact might not be properly quantifiable.

Framework for analyzing motivation triggered by gamifications presents the most basic approach to analyze games from the point of its structure. Boudadi and Plana (2020) simplify games as consisting of three main interconnected areas: dynamics, mechanics and components. Components are the most simple and basic features of games, such as achievements, avatars, badges, teams, quests, content unlocking, social graphs, and other singular elements within a game. Components and it use generate mechanics, processes that progress actions of games forward to specific outcomes or set goals. Challenges, competition, cooperation, resource acquisition, rewards, turns and win states are examples of what would be considered type of mechanics. Dynamics are products of mechanics, aspects that are produced by the playing itself and are labeled big-picture outcomes of the game. Dynamics that are expected to emerge include emotions, relationships between players, progression, constraints and narratives of games, among many others.

Dehghanzadeh and Dehghanzadeh (2020) use Bunchball´s division of game element with mere two categories for the purposes of gamification. Bunchball defines game mechanics as fundamental actions, processes and control mechanisms, which while integrated into activities or tasks, should foster creative and engaging environment for the players. Authors categorize elements such as badges, levels, storytelling, challenges or leaderboards as belonging to the category of mechanics. Game dynamics then stimulate participants and lead them towards emotions and experiences the game wants them to undergo.

Authors attempts to streamline the definitions to find components that could be described as fundamental for the existence of games. Stieglitz et al. (2016) propose the use of McGonigal´s fundamental features. Namely, clearly defined goals that players strive for, a steady and precise feedback systems used to guide progress, consistent and clearly defined sets of rules, and free will of players to participate in games that is both required and expected for following the rules to reach the expected goals. Free will of participants is the key fundamental feature that could be argued as potentionally lacking in gamifying education. Wilson et al. (2009, p. 229) present compilation of many alternative views of key elements which all games display and can be defined by. Dr. Svasailam Thiagarajan asserts that „conflict, control, closure, and contrivance are the key components that make up games“.

Felix and Johson in their *Learning from video games* argue that games are „composed mainly of dynamic visuals, interactivity, distinct and clear goals and rules that bound the game together". Jesper Juul proposes that there are six key elements that create games, „rule sets, players´ effort put into the processes, outcomes that vary and are also measurable, valorization of those outcomes, negotiable consequences of actions and the attachment of players to the specific results or outcomes of their participation". Rosemary Garris defined game features that are necessary for the possibility of learning as „fantasy, sensory stimuli, challenges, goals, mystery and control". Kyriakova et al. (2018) identify features of games that play an important part in the use of gamification. They describe them as participation, expecting all users of gamification to play a role in engaging with the content; challenges and tasks that users perform to progress towards specific goals, points that are awarded as a result of accomplishing objectives and executing desired tasks, levels that are reached by accumulating points which illustrate players their progress in the game, badges which are additional rewards for completing more complex actions, and ranking used to visualize comparisons between users´ achievements and accomplishments.

Deterding et al. (2011) cite *Ten Ingredients of Great Games* to propose that games consist of self-representation of participants with the use of avatars, three-dimensional environments, narrative context, feedback, reputations, ranks, levels, marketplaces and economies, competition that is done under predeterminated explicit and equally enforced rules, existence of teams and team cooperation, parallel communication systems that can be easily configured and time pressure for the completion of objectives. Authors also aruge that analyzing different approaches and categorizations of game elements and their potential impact on education requires game elements to be viewed as building blocks of games. They claim that game elements are features that can be found and examined in vast majority of games, but cannot be viewed as necessary conditions that the existence of games rely on.

2. Models for understanding Gamification

2.1 Theories of learning outcomes

Playing games and its connection to learning is often attempted to be understood through the lense of analytical models and frameworks of learning outcomes. Those models are crucial for broader analysis of outcomes of learning and impacts of gamified content or game

elements on the learning process. Connolly et al. (2012) present and compare several of these models related to analyzing to learning outcomes of gamification. Garris, Ahlers and Driskell model separates learning outcomes to three major areas of interest; skill based learning outcomes, cognitive outcomes and affective outcomes. Skill based learning outcomes include technical and motor skills that can arise as products of completing tasks or activites. Cognitive outcomes describe various types of mental functions improved by gamified content, such as declarative, procedura lor strategic knowledge; and alongside skill based learning outcomes are connected to the content of learning. Affective outcomes are related to relationships, emotions and beliefs that player experience due to their participation in games. O´Neill, Wainess and Baker propose the categorization of the effects of gamification into content independent skills and content specific skills. Skills that authors view as independent of the content are collaboration, teamwork, communication and self-regulation. Content understanding and problem solving are then placed into the content specific skills category. Wouters, van der Spek and Oostendorp outline alternative framework for all the learning outcomes that can be isolated as results of the use of games. Firstly, cognitive learning outcomes are recognized as all knowledge and cognitive skills that can be developed due to the use of games. Secondly, the category of motor skills is established. Thirdly, relationships and emotions are placed to the affective learning outcomes of relatedness. And lastly, the cooperation of games and all types of interactions that happen result in communicative learning outcomes.

2.1.1 Achievement goals theory

Effects of gamification can be analyzed from the point of types of achievements of learners that gamified content allows. Stieglitz et al. (2016) propose the theory of Achievement Systems (AS) that is gaining popularity in the area of literature on gamification. AS represent methods of creating games within games. Those meta-games provide target users with additional challenges and tasks that exist independently of the main goals of the gamified content. Their main purpose is to enhance users´ engagement. The features of AS display different functions within the gamified content which are used for their grouping. Instructors are types of achievements that guide users through learning and ensure the mastery necessary for progression. Quests should ensure that learners will follow the correct paths of progression. Achievements that represent additional challenges and their awarding is meant to continuously engage learners and to not make engagement too streamlined. Content discovery achievements encourage exploration of limits of the game systems and possibility

of performing available actions. Grinder and herculean tasks represent achievements aimed at supporting mastery; grinder tasks achievements are awarded after users repeat certain tasks several times, enticing mastery of specific skills; herculean tasks achievements are meant to be awarded for exceptionally difficult and hard to perform tasks that might be otherwise discouraging. Last groups of achievements are focused on cooperation and competetivness. Socialiser achievements are awarded for community oriented tasks that single user cannot perform without the help of others, thus promoting cooperation. And trophies are limited achievements reserved for only the top performing users, mutually excluding other players from obtaining them and thus supporting competition among learners. In conclusion, different types of achievements can influence different users or support different activites and enhance different kinds of behavior that teachers want to focus on. Choosing appropriate achievement can enhance learning in specific wanted category.

2.1.2 Engagement Flow theory

Games are engaging activities and attempts to explore gamification from the point of engagement of users is relatively contentious topic. The most famous theory is the theory of flow, created by Hungarian psychologist Mihaly Csikszentmihalyi. S. Kim et al. (2018) compare theory of flow to Vygotsky´s theory of zone of proximal development or Piaget´s theory of cognitive development. Theory of flow propose four mental states players of videogames may experience. Those mental states are anxiety, apathy and boredom, with the state of flow being the desired and optimal state for effective learning. Flow represents complete absorption in activities that are both challenging and enjoyable. Authors argue that individuals are motivated to engage with activities that show interesting challenges and the possibility of completing those challenges. If the activities are created too effortless, players´ mental states transform to bored or apathetic categories and their engagement suffer as a consequence. If the activities are too demanding, players may abandond the state of flow and became anxious, subsequently lowering their engagement with the content. Authors agree with Csikszentmihalyi´s suggestion that teachers should aim to keep their students mental state in the proximal zone of flow, alternating difficulties of tasks to ensure the ideal learning outcomes.

2.1.3 Social learning and situated learning theory

Gamification, just as modern language learning, require some level of interaction between students. Learning that is gamified virtually always containt social aspects in its outcomes. Theories dealing with the social effects of learning are the two competing theories of social

reciprocitation. Social learning is the type of learning that happens due to observation and mimicking of others and their behaviors. Social learning can be broken down in four generalized steps; the attention phase, in which behavior and its outcomes are observed; the retention phase, which should allow students to memorize the information and internalize it; thirdly the reproduction phase, where students use bevahiors observed in others for their own actions; and lastly the motivation phase, where students repeat the behaviors or use selected behaviors for desired outcomes of their own learning. Social learning is not limited to peers. Actions of teachers, parents and others in and out of class can show its effects as well. Games are the ideal medium for social learning. In games the users learn by interacting with other players of the game or game characters that exist. Gamified learning thus presents interesting tool to incorporate social learning in the lesson

Situated learning theory comes from the assumption that learning occurs through social interaction. Learning is inseperable from activities, cultures and contexts. If contexts that are used for education lack authenticity, the application of obtained knowledge in real life scenarios is made difficult and learning is negatively impacted. Knowledge must be presented in authentic contexts and social interactions and collaborations are required components for effective learning. Certain gamified activities and tasks are greatly interested in increasing collaboration and interactions and thus are relevant in combination with situated learning theory. The use of virtual realities and gaming platforms can be used to generate more authentic scenarios, as oxymoronic such claim can sound at first. The creation of more realistic scenarios leads to better learning outcomes (S. Kim et al., 2018).

2.2 Types of players

As gamification of learning deals with applying game elements to education, the understanding of different types of players from games is also relevant when constructing specific activites or gamifying language lessons. Because each type of player is influenced in a different way and their enjoyment stems from a different parts of the game, students and their responses to gamified content can be widely different in the same or at least similar ways. The more gamification exists within lesson the more the ideas behind gamer types will be relevant to the learning that occurs. Teachers can also attempt to assign different types of players different roles in more complex activities, thus giving each students better chance to excel and fully engage with the gamified content. Those concepts are however only theoretical and real students will usually display characteristics of more than one type of a player.

There are many different typologies of players. The most commonly used typology comes from Bartle´s study on gamer types, defining eight different classes of game players*:* *opportunists*, *politicians*, *planners*, *friends*, *hackers*, *networkers*, *griefers* and *scientists*. *Opportunists* usually engage more with the aesthetics of the game without specific objectives and tend to avoid obstacles rather than finding a way to overcome them. *Politicians* enjoy a good reputation and are long-term goal oriented in their actions. *Planners* like to set themselves certain objectives and their enjoyment stems from progress and fulfilling the self-appointed objectives. *Friends* get enjoyment from building relationships through the game. *Hackers* like to be in full control and act intuitively; they are most interested in the new content provided by the game and love to explore anything they are not familiar with. *Networkers* are similar to *friends*, however they are more interested in creating new relationships. *Scientists* are invested in the functionality of the game and love to experiment with ways the game can work in their favour. *Griefers* are specific types of players whose focus is detrimental to other playes and thus will be discussed separately alongside *rule breakers* (S. Kim et al., 2018).

B. Kim (2015) presents Marczewski´s typology, which modified Bartle´s original one specifically for the purposes of analyzing gamification. The advantages of Marczewski´s typology lie in correctly identifying that effects of games and gamification will differ based on players´ motivators; some will be motivated by extrensic rewards and some will not. Extrensic rewards are main motivators for so called *players* types. Other groups need intrinsic motivators that can be found within the gamified content. *Socialisers* are interested in relatedness and relationship building. *Free Spirit* players value autonomy and the ability to choose their own path; *achievers* desire mastery of the game content and concepts. The fifth type, *philantropists*, are motivated by the very purpose of the game. They can more easily internalize with the game just by being interested in the goal or outcome itself.

Alternative Bartle´s typology can be found in Stieglitz et al. (2016). Authors separate players into four different groups: competetive users who enjoy triumph over others, known as *killers*; users who are motivated to level up and get higher rankings through the gathering of points labeled *achievers*; *socialisers* who use the community as the main stimuli and are mostly interested in interaction and relationships; and *explorers* that want to explore and test the bounds of the system that games exist in.

2.2.1 Griefers and rule breakers

Griefers and rule breakers are two type of gamers whose enjoyment and engagement with the content is not directly tied to the goal of the game itself and in vast majority of cases can be detrimental to others and the quality of gamified content. It is important to understand these types of gamers and their types of behaviour if gamification of learning is to be incorporated into a lesson plan. Analyzing issues and failures of gamification is very important for continuous improvement and understanding of players that want to actively disrupt playing can prevent the activities from offering them chances to do so.

Importantly, griefers and rule breakers may both disrupt the lesson but the causes for their behavior are very different. Griefers are defined as types of players who „gain pleasure from harassing and teasing other players over advancing in the game“ and rule breakers as „players who attempt to make their mission easier while showing other gamers their abilities“. While rule breakers are common even in traditional setting, griefers are potentionally new types of disruption teachers may face in gamified lessons. The more gamification and interaction among players is allowed, the more chances for griefers to emerge is there. Study of Woolfolk from 2006 creates a new classification of two main types of negative gaming behaviors in educational settings, those focused on instrumental agression and those focused on hostile agression. Hostile agression includes overt agression and relational agression. While overtly agressive griefers attempt to hurt other players or their work and stuff, relationally agressive griefers are attempting to disconnect the social relationships of others (S. Kim et al., 2018, p. 88).

Rule breakers are more common in traditional class setting, but their existence within gamified lessons have its specificities. „The motive of rule breakers is associated with the performance objectives. They attempt to find an efficient way to achieve the performance objectives with less effort and they view the use of rule breaking as a way to show others their abilities“ (S. Kim et al, 2018, p. 88). In this way, rule breakers bypass the atempt to increase motivation and engagement that gamification usually aims for. Authors also state that „technologies such as mobile apps, databases, or networks can provide teachers with tools to help keep negative experiences to a minimum, but when gamification does not use technologies that monitor students´ behaviors, rule breakers are more active“ so teachers need to make an effort to decrease the impact rule breakers may have on the gamified lessons.

3. Advantages of gamification of learning

3.1 Gamification as the tool for modernization of learning

Some of the biggest problems of current education are connected to the lack of motivation of students and their insufficent active engagement with the learning content. Teachers are trying to implement new techniques and approaches that would effectively enhance students´ activity and motivate them to participate (Kyriakova et al., 2018). According to Maloney, the biggest issue with traditional methods of education is the fact that they were designed for passive students recieving information. Gamification can be used as the tool to transform passive students into active ones (Retherford, 2020). Kim B. (2015) however believes that gamification can be used to benefit mainly students with lowered motivation and argues that it is more effective for underperfoming ones. As such, gamification should be used mainly as supplementory tool rather than replacement of traditional teaching systems and methods.

Gamification is described as a great tool to shape the „skills of the 21st century". Most games are social games at its core and thus demand certain level of cooperation and communication between the players involved. Gamification necessarily leads to improvement of cooperation and communication within the classrom. Respectful and appreciative interactions in specific teams or among all players help to build social connections within the classroom. As they are part of solving the problem presented by the game or gamified content, they help students to interact in situations that appear more credible and the building of communication and cooperation happens more naturally. Teachers are able to transform individual learning activites into team quests or teamwork-oriented tasks to evoke higher level of communication and cooperation required to fulfilling them; and can involve digital technology which adds aditional media and technology literacy skills to their lesson corresponding to another modern principle of learning. Namely action-oriented and competence-oriented learning are greatly supported by gamified content. The quests may be also designed with different levels of learners taken into account and prepared with varying difficulties and several potential paths of completion to allow for individual learning paces. (Fischer & Barabasch, 2021).

Dichev and Dicheva (2017) argue that gamification addresses attitudes, activites and behaviours directly related to learning. Namely participatory approaches, collaboration, self-guided study, completion of assignments, making assessments easier and more effective,

integration of exploratory approaches to learning and strengthening student creativity and information retention. Rafiq et al. (2019) claim that gamification leads to larger scope of learning experiences which in return support independent learning done by students. Independent studying produced better results in the area of information retention and the self-interest of students in the target language content. Goethe (2019, p. 14) agrees that popularity of gamification stems from its ability to improve information retention. As he points out, „encouraging users to accumulate rewards all through their journey can constantly enhance their involment with any product or service“. Gamification allows the users to fulfill many of their natural desires: desire for learning, socializing with peers, achievement, mastery and status.

3.2 Gamification of learning outcomes

Kyriakova et al. (2018) speak in favour of gamification because of the logical connection between games and education. Notably learning objectives, which are achieved by students performing certain learning activities, and objectives of the game, which all users´ actions in games are attempting to achieve while overcoming presented obstacles. Finding a path to gamify objective of learning presents solid opportunities to gamify the entire learning process. Furthermore, both education and games are concerned with tracking progress of participants. While games need to track the progress to modify next steps and moves, education tracks learners´ progress to ensure that learning objectives are being fulfilled. Gamifying learning outcomes is thus preferable way for the easiest types of gamification that can happen in a lesson.

3.3. Assessment of behavioral changes in gamified lessons

Gamification is a relatively new topic of research and as such, there is only a handful of studies and works measuring the precise impact of gamification on learning. While gamification encourages behavioral changes and promote desired attitudes, influence on users differs based on their background. Therefore, as Stieglitz et al. note (2016), cultural influence also impact application of gamification for desired outcomes. Furthermore, Kim B. (2015) states that assessing educational games or gamified content impact is intricate, since there are many variables that influence the outcomes that must be taken into account. Educators have to be aware whether or not is the specific content of the lesson suitable for gamification, what type of game is suitable for the learning content they want to focus on, what pre-existing level of knowledge do students have about the gamified learning content and what are their preferences for games. Landers (2014) presents the idea that gamification

can affect learning behaviors in two main processes, both of which are centered around the intention to influence attitudes of learners towards learning. The more direct process is called mediation. In mediation, gamification is used as a method to encourage and increase behaviours and attitudes that will positively influence learning outcomes. In moderation, the less direct approach, the augmented elements only improve pre-existing teaching materials or concepts and have no impact on the learning if the original instructional designs are not already sound. Low quality of the original medium cannot and is not impacted by the addition of game elements.

3.4 Mistakes and assessments within gamified lesson

Gamification necessarily involves elements related to real-time feedback which are presented withing games. The feedback of gamified lesson, according to claims by Abrams and Walsh (2014), help to mold concrete challenges and objectives that are more tailored towards students and their expanding skills. This immediate feedback not only add to the fluency of learning but also allow students to use creative and critical thinking in order to progress their own work. Lynch and Gerber (2017, p. 89) however criticize reductionist views of gamification in regards to feedback and evaluation. Authors point out that mistakes and failures are necessary components of games, because they lead to self-regulation of progress and self-reflection of shortcomings. Failure elicits experimentation and adaptation and is thus integral and vital part of all videogames. When players fail in well-designed gaming experiences, they are prompted to reassess their own progress and attempt to complete their missions, quests or battles using different and ideally improved methods. The progress rely on reflection and meta-awareness of failures rather than simple redoing of tasks in the same manner with hopes of different results. Teachers however tend to use gamified types of feedback and evaluation just for binary signaling of correct-incorrect outcomes. If gamified feedback and evaluation are to produce any positive results, teachers are required to look beyond encouraging simple repetition that leads to corrections. They need to develop systems that allow students to look for different ways to solve problems. With mentioned prerequisites the failure can be reframed as experimentation rather than incorrect steps on predetermined correct paths.

4. Path to gamifying language learning

Players can provide teachers with unexpected responses, according to S. Kim et al. (2018). Some players can be motivated and fully engaged in the game, other players will reject participation and will show no signs of motivation. Testing how specific gamified activites or elements work within the time frame of the lesson is the best way to analyze and improve the gamified portions of the lesson. There needs to be awareness of the fact that gamification on itself does not automatically guarantee motivation and engagement. The players or actors must be active and willing participants if gamification is meant to have impact on their behavior and language learning.

4.1 Process of gamifying lessons

Kyriakova et al. (2018) establish four main steps for gamifying content for education. Those steps include determination of learners characteristics, definition of learning objectives, creation of educational content and activites for gamification, and adding game elements and mechanics to the content and activities. The authors insist those to be key components that allow gamification to happen. They proper execution should be followed when teachers attempt to gamify their lessons or parts of lessons. Students´ characteristics influence the way they will interact with presented content and thus teachers need to factor in profiles of their students while aiming for their full participation in the learning process. Additionally, the teachers should anticipate the different skills required to achieve the learning objectives, especially if they require distinctive skills from students. Gamification of reading tasks has very different demands than gamification of speaking tasks. Those demands shape students´ motivation, as very easy or very complicated tasks lead to demotivation and negative outcomes for the learning processes. Teachers have to clearly define specific learning objectives for gamification. If there are no learning objectives, then the gamification aspect of the content serves no purpose. The defined objectives determine the type of activities and educational content that will be included in the learning process and game mechanics and techniques that are appropriate for achieving those objectives. Education content and activities meant for gamification are expected to be engaging, interactive and include large range of multimedia elements. Content and activities must allow for multiple performance that students use to achieve the objective if their attempt was not successful at first, improving students´ skills through repetition; multiple paths that students can explore and use for establishing their own strategies and developing their own skills; and continuously increasing difficulty with each subsequent tasks requiring more effort and the use of skills

and knowledge that students acquired by accomplishing previous tasks. The content is also necessarily tailored towards students´ potential and skill level. The last step is the addition of specific game elements and mechanisms to the lesson. The selection of elements and mechanism is contingent on the established learning objectives, the knowledge, and skills students are expected to acquire.

4.2 Augmenting language learning with technology

Because technology influences the way modern students view education and their learning styles, Dehghanzadeh and Dehghanzadeh (2020) argue that technological immersion and technologies themselves are viewed as key components of learning by the learners and teachers. Educational institutions thus have to create new ways to incorporate technologies into the teaching of new languages.

The gamification of language learning displays advantageous results in several key areas in comparison to traditional classroom settings and methods. Dehghanzadeh and Dehghanzadeh (2020) propose that areas in which gamification shows the most improvements and desired outcomes are creating positive classroom atmposhere with stress-free learning opportunities, increasing motivation, growth of self-reported confidence of learners, and engagement with the content. Gamified lessons also provide better scaffolding for new concepts, naturally incline towards higher amount of peer interaction among learnerns, and are more suitable for content language learning. Learners also display more autonomy in their learning, reports higher satisfaction with their own work and their self-efficacy is higher than that of students of traditional school settings.

4.3 Gamification of engagement

Engagement is gamified to keep students fully focused on the topic. The degree of involvement in the activity and its outcome cannot be fully connected to gamification, yet there is measurable impact of game elements on engagement. Narratives and storytelling offers ideal tools to improve students involvement and engagement with content. The use of feedback also relates to overal engagement. In gamificaiton, visual cues, sounds and rewards can be used to track progress and induce sense of accomplishment. Both progress and accomplishment are feelings that can influence students focus and keep them involved in the learning and the learning outcomes (Angst, 2023).

Retherford (2021) reinforces the idea of the instructional model of 5E in connection to gamification and the analysis of its effects on engagement. Engage, Explore, Explain,

Elaborate and Evaluate are modeled as the five steps of engagement that connect learning content with learners´ competences. Gamification not only increases engagement with the use of game elements but allows for simulations of real-life scenarios. Learning in these scenarios further allows students to be fully immersed during practice of the target skills. This immersion keep students in the state of flow throughout the lesson. Immersion in real life scenarios add to the relevancy of language practice and more precisely mimic the ways students use language outside of school.

4.4 Gamification of motivation

Most obvious impact on behavior of users is via motivation. Angst (2023) views motivation as the main driving force of students actions and behaviours. The author presents the effects of gamification on both extrinsic and intrinsic motivation. Intrinsic motivation refers to volition and satisfaction, both of which can be influenced by gamified language content. If the gamified content presents challenge, students are more likely to engage with it and find the completion of tasks satisfactory. The main motivators of all games is fun and if gamified content can induce the sense of fun in learners it undoubtedly fosters intrinsic motivation of learner. Extrinsic motivation is motivation by outside factors such as rewards and recognition. Gamification of motivation is usually viewed as extrinsic type of motivation. Earning badges or points for completing assignments or tasks is the most commonly used type of gamified content for extrensic motivation. The use of gamified rewards or mastery points as potential replacement for marks in language learning is however underresearched.

However, extrinsic motivations by itself cannot create sustainable learning environments and consistent motivations, as Stieglitz at al. (2016) point out. Extrinsic motivations can compell users to start tasks; the desired results are however completion of tasks leading to users realizing the intrinsic value of performed tasks and their volition to perform given tasks without further extrinsic motivations. If performances rely on extrinsic motivations only, users may easily revert back to the state of no motivation to perform any tasks. Retherford (2021) however insists that gamification allow for better motivation of learners compared to traditional type of activites or tasks presented within school lessons. While mistakes in traditional, common type of activities may decrease the number of repeated attempts, gamified activities motivate students to repeatedly try and master the target skills or tasks. Other works show evidence that gamified activities were more effecting students who were described as „non-studious“ learners. Author also cite work by Xi and Hamari, which establishes that achievement-related features of gamified learning showed

strong correlation with satisfaction of learners in the areas of needs, autonomy and competence. Students learning language in gamified environment show motivation towards using language despite mistakes and flaws their performance may show, battling one of the most commonly cited issue of language learning.

4.5 Gamification of behavior and emotional components of learning

Gamification induces mental states such as self-efficacy, flow, positive and negative emotions, feeling of group-belonging, and the sentiment of equity among players. Existence of those mental states leads to desired outcomes. Cooperating on particular goals and tasks builds up the feeling of in-group affiliation and loyalty (Stieglitz et al., 2016). Gamification also showcase the ability to significantly lessen the impact of negative emotions, such as anxiety or depression (Retherford, 2021). Positive environment and increased cooperation improves the quality of language interaction that can happen within classroom.

Rafiq et al. (2019) argue that increased motivation during gamified tasks inherently leads to improved confidence and boost of self-esteem of students. Self-esteem is then deemed as a key feature ensuring the success of second language learning. Improved self-esteem and confidence lead to more fluent use of language by students´ and the anxiety from using new language items is much lower than in traditional setting. Gamified activities or games used for learning allow new users of the target language to perform without the fear of embarassment as games can be made anonymous and learners have the opportunity to hide their identities. Furthermore, students engaging in gamified learning show themselves to be better-behaved and their attention span appears to be prolonged than those of traditional learning.

Authors such as Angst (2023) argue that gamification is inherently connected to behavioral psychology. The idea of external rewards having impact on behavior is directly tied to the implementation of gamification for language learning. The use of goals or achievements shape required behavior of students. Punishments in the form of point deduction may also influence behavior but current gamification focuses only on extrinsic motivators inducing positive and wanted behavior.

4.6 Advantages of gamification for cognitive skills

Playing games supports divergent types of thinking. Playing is understood as the opposite of every day life and studying, allowing players to interact with information in completely new environments and interacting within new ecosystems. These conditions lead to free

associations and the ability to abandon previously established and internalized ones. Players are forced to leave the bounds of their routines and knowledge and experiment, leading to new ideas, perspectives and solutions. This phenonema, named unlearning by the authors, leads to further desired outcomes, such as self-efficacy, increased creativity and improved problem-solving. By gamifying language content, same process of unlearning can be achieved in language learning setting. Presenting the same grammatical structures or vocabulary within new gamified task provides students with opportunities to enrich their thinking patterns (Stieglitz et al., 2016).

4.7 Gamification of specific language areas

4.7.1 Vocabulary

Problem of learners of English as second language, when it comes to vocabulary, is that learning of correct forms of verbs can be discouraging and tedious despite the fact that it requires full mental and emotional involvement from the students. Gamified platforms allow students to learn with higher motivation and also work with failing without fear. The use of mechanics and dynamics from games is considered to be enjoyable, engaging and effective mean to improve the quality of the learning process. Gamification also reportedly decrease anxiety and fear of failure (Dehghanzadeh et al., 2021).

Retherford (2021) claims that gamification allowed for using additional visualization as a support for learning vocabulary in English as a second language. Graphics or pictures allow students to bridge the gaps between their first language and the target language. Gamification promote students´ ability to learn vocabulary at their own pace, effectively equating the classroom in proficiency and richness of vocabulary. Analysis of students´ learning process using Bloom´s taxonomy as a frame of reference shows favourable results with gamified teaching of vocabulary. Students performing the low-level tasks of gamified learning display rememberance, understanding and application of the vocabulary in correspondence to Bloom´s taxonomy. Similarily; mid-level of game progress expects students to analyze and evaluate the learned terms and highest levels of performance rely on students creating new language structures using the learned vocabulary. Gamified tasks of vocabulary thus follow Bloom´s idealized evolution of language competence

4.7.2 Grammar

The games used within English lessons, stated by Rafiq et al. (2019), helped students within certain areas of English Second Language learning, such as phonics and grammar. Gamified

content allowed for better self-monitoring by students, which further allowed them to focus on problematic areas of learning and kept them fully engaged with the target language items.

4.7.3 Language skills

The variety of game elements that can be used for gamification allows for different areas of the use of language to be targeted. B. Kim (2015) explains that card games are connected to promoting ability to match concepts and recognize patterns; arcade-style games promote speed of responses and visual processing; adventure games build students´ hypothesis testing and problem solving. Narratives and stories within games as a whole present tools to improve declarative knowledge; games oriented towards matching and sorting will help improve conceptual knowledge; games with high amount of immersion can impact students´ affective knowledge. Linking correct game elements with the type of cognitive skills teachers want to focus on is crucial, however there is a lack of clear connection between singular elements and precise skills.

5. Tools for gamifying language learning

5.1 Software for gamification of language

There is a large selection of readily available tools for teachers to use for gamification of their lessons. They include pre-existing content or gamified mechanics that can be used from any location at any time, but show limitations on what teachers are able to accomplish with their toolkits. Kyriakova et al. (2018) name web-based tools that can be used without the need of special software prerequisites as the most commonly used ones. These tools include Kahoot, allowing for creation and usage of multiple-choice quizzes; a wide range of gamified applications for foreign language training based on translating and quizzes of Duolingo; platform Socrative for formative assesments done via questions polls and exit tickets; Class Dojo platform that teachers can use to create online community space for sharing content with all their students and their families and collaboration platform for teachers, students and parents revolving around achieving specific learning goals and gamifying instructions and feedback given to students called Goolbook. Authors also name several tools created specifically for gamification of feedback and evaluation. Mozilla Open Badge Project and BadgeOS™ are among the most popular platforms that teachers can use to track and display their students progress using badges, levels, points and other gamified elements of feedback. Boudadi and Plana (2020) list different commonly used apps with

gamified elements, such as Babbel, Busuu or Memrise. The motivational factors language learning apps provide are adressed as essential components for Second Language Acquisition success. Motivation and improvement of engagement are still the most notable advantages of gamified products for learning.

Learning Management Systems (LMS) are very popular for the creation of online courses in many educational institutions. LMS are equiped with number of tools for tracking progress and results which allows for their use in gamified education. Furthermore, they encourage students to actively engage with the content of the lesson. LMS are also being constantly updated with new tools which further enlarges the area of learning that can be gamified. Those are usually add-ons and secondary features related to creation of badges, rewards and leaderbords for displaying and tracking progress. Among LMS currently in use, Moodle is one of the most popular. Authors list features of Moodle that are already gamified, such as the availability to use avatars or profile pictures for students, visibility of students´ progress via progress bar, visualization of quiz results with the possibility of comparing results in a group which fuels the competitive nature of learning, levels and badges which providing extrinsic motivation and also additional ways to display students´ progress and adding competetive ranking of performances within the group, and finally the ability to provide instantenous feedback by the teachers varying from binary right-wrong correction to more specific and personalized verbal one.

Abrams and Walsh (2014) additionaly offer the advantages of gamified vocabularies with the use of online platforms such as Dictionary.com or TheChallenge. According to authors the gamified platforms promote problem solving, increase collaboration among students; but also improve independent learning of individuals. Furthermore, multimodal representation of words and existence of annotations and other supportive materials related to newly displayed words support vocabulary development of learners. Website-based vocabulary related games provide engaging ways to incorporate repetition and learning word meanings through context clues to students´ vocabulary development.

Interactive or gamified e-books are also proposed by some to help in developing literacy and reading comprehension in current digital age. They represent the amalgamation of familiar interactive and visual media of videos, games and apps with potentionally less familiar medium of text. Kingsley and Graber-Hagen (2015) argue that e-books, digital media and other gamified content can be provably linked to have positive impacts on readers´

ability to incorporate newly acquired vocabulary into their usage and further work with its meaning. The posibility for multimodal representation of concepts is in line with modern students expecting technologies to be part of their learning process. Combining print and digital texts with elements of gamification elicit deep understanding of the presented content and further helps students to improve their skills related to digital technologies and their use in educational settings. Stieglitz et al. (2016) however critique the use of e-books with gamified content which in limited amount of studied cases show no significant aid in reading comprehension and negligible impact on overall quality of vocabulary. Furthermore the positive effects of multimedia can be completely erased, leaving them to act merely as distractions. In conclusion; e-books may appear as enticing alternatives to traditional texts, however their impact on learning outcomes appear to be negligible and further research would be needed to determine their usefulness.

5.2 Hardware for gamification

Use of technologies within the lesson is increasingly popular. Devices such as smart phones, laptops, computers or tablets are common tools that teachers employ while teaching. Despite the limits of cost and availability of those items, their use has a huge potential in gamifying content and teachers should be aware of the existing gadgets and their advantages.

The most popular devices used for gamification are wearable devices. Those devices, as S. Kim et al. (2018) explain, allow users to engage with websites, mobile apps, and social network services. Wearable devices introduce interaction by the means of voice, gestures and gaze of its users. The most popular wearable device is Google Glass, transparent glass that can be controlled by voice or a touchpad and display information in the vision field of the users, straight on the glasses. They work well in combination with platforms such as Sight System, creating virtual reality scenarios that can be oriented through with wearable devices. Sight System allows its users to perform real life tasks and skills in controlled environments. The most interesting version for English education is the „gamified dating“. Simulating face-to-face conversation oriented towards asking and answering questions, talking about personnal life, hobbies or plans for the future could see a meaningful use during English lessons.

6. Research on gamification

Borges et al. (2014) point out that there is a very large body of research of gamification of higher education, while elementary education is vastly underrepresented. Studies that authors analyse also show that majority of research objectives of gamification studies are focused on engagement, socialization and behavioral changes. The lack of experience and validation oriented studies, which are not presented in the body of research, is singled out as a potential areas for future improvement. Dichev and Dicheva (2017) go as far as claiming that there is not enough sufficient evidence that gamification produces reliable, valid and long lasting educational outcomes or does so better than traditional educational models. Authors criticize the lack of empirical work investigating the education potential of gamification in a rigorous manner and call for the increase of randomized controlled trials or quasi-experimental studies focused on gamification.

Meta-analysis of research of gamification by Wilson et al. (2009) indicates that the use of games for learning in general leads to improved general learning, increased motivation, and improved performance of learners. As authors identify, there is not a sufficient amount of research into effects of specific elements on desired outcomes and whether the connection between games or gamified content and learning is direct or indirect. Studies that Fischer and Barabasch (2021) present similarily show that gamification significantly improve students´ skills related to critical thinking and problem-solving as well as creative thinking. Authors admit that there are no empirical studies researching the influence of gamification on creativity of its users, so the verdict on its full impact on creativity is still pending. In one of the most recent and comprehensive studies, as Retherford (2021) presents it, the World Government Summit comes to the conclusion, that gamification allows students to fail, experiment, assume different identities and extert effort as the biggest advantages of gamified learning. Gaming elements reportedly increase motivation and allow for more differentiation and feedback than traditional setting would.

Abrams and Walsh (2014) compile specifically research on gamification of language learning. Study on impacts of video games suggests that games as a medium provide great platform to support students´ learning by applying visual context to accompany vocabulary and schema. This amalgamation leads to better educational outcomes of factual information. Research however also shows that specific design characteristics and game elements

unrelated to vocabulary can act as distractions and hinder students´ engagement with the learning content.

Research attempts to focus on presenting the impacts of other factors on motivation and engagement in gamified lessons. Types of learners, the gender and age of students and cultural backgrounds influence how gamified content motivates and engages learners. Female students show to be only 35 percent as likely to enjoy competetive aspects of video games as their male counterparts. Similarily, younger students seemed to prefer excitement of games while older generations were more focused on relationships and community building. Those findings show that adults have different preferences when it comes to games, however children and teenagers seem to be in agreement what the most important parts of games were for them. Studies also prove that collectivists and individualists cultures display different patterns of expected outcomes for games. Cultural backgrounds play a role in the way gamification of learning will affect students´ and the class dynamic as a whole (B. Kim, 2015).

6.1 Players preferences

Rafiq et al. (2019) study focuses on students´ perspective and preferences of gamification. Study explores students of Malaysian secondary schools. The questionnaire survey attempts to gather general opinions and feelings of students towards gamified language learning. The conducted research reports increased confidence in using and learning English and strong preference of gamified learning among the majority of students. Students show increased motivation and engagement in completing presented tasks and activities. Gamified learning is viewed as „fun and interesting“.

Frameworks for understanding game elements needs to be created to conduct a research on preferences of players. S. Kim et al. (2018) present Playuful Experience (PLEX) framework for their study of players preferences. The framework categorizes playful experiences into 20 categories, each with different component influencing players. Research shows that students prefer challenges, explorations, relaxations, completions and discoveries. Research further confirms that suffering, sadism and control are much less desirable and commonly cited as favorite. Study confirms the existence of gender differentiation in preferences. Male students display affinity for challenges, completions, explorations and simulations; female students rank explorations, relaxations, discoveries, completions and fantasies as types of engagements they prefer to experience in games. The

major difference appear in the categories of fantasy and nurture. The authors suggest that the different types of fun preferences should be considered during the gamification of activities and transformed in regards to the gender ratio of the target group.

6.2 Tools and platforms for gamification

Retherford (2021) compiles studies on the impacts of gamification for specific educational games or platforms used for gamified learning of several other authors. Among them, the study of Figueroa-Flores from 2015 evaluates commonly applied tools such as Duolingo, Class Dojo and Socrative. Figueroa-Flores concludes that meaningful learning experiences are created due to the use of gamification within the platforms for learning. Students additionally show more confidence in using the language and intrinsic and extrinsic motivations both increase.

6.3 Negative outcomes of gamification

Most works and studies of gamification analyse positives and potential advantages of gamification. Nevertheless, in recent years many authors and researchers start to study the negative outcomes that can happen in gamified learning and the dangers that incorrect use of gamification presents for education.

The commonly reported issue lies with motivation that gamified learning aims to induce. The problem is particularly present in learning of younger children. As B. Kim (2015, p. 33) points out, „in a large meta-analysis of 128 studies on the effects of extrinsic rewards on intrinsic motivation, Deci, Koestner and Ryan show that rewards contingent on engagement, completion and performance in the process lower students' intrinsic motivation, but also negatively impact interest, as reported by students themselves". Tangible rewards appear to have „a bigger negative impact on elementary and high school children compared to university students", which further supports the arguments that gamification in elementary schools might actually undermine motivation of students, instead of improving it. The extrinsic rewards and motivation that are always present in gamified content can negatively impact intrinsic motivations of students and damage their engagement. In the summarization of the World Summit´s 2017 study Retherford (2021) shows that games and game elements can act as disctractions rather than motivators when poorly designated or implemented. Furthermore; the games present classroom atmosphere problems due to the nature of competetivness within the game and force teachers to adopt strategies of classroom management to solve newly createed issues. Lastly, gamified content

reportedly increase value of extrinsic motivation when game elements see to be the main parts of lessons rather than the content to be learned. A study of Chinese university students by Chen et al. (2022) similarily shows that gamified learning presents no change to anxiety of foreign language use as well as cognitive demands placed on learners by the course. Observed game elements produce contradictory effects on students emotions and proficiency. The main key inconsistency seem to stem from game competitions which evoke anxiety and stress in certain students rather than motivation.

Toda et al. (2019) claim that studies show disconnect between teachers´ interest in using gamification and the actualization in their lessons. Teachers can understand the potentional benefits of gamification; yet the lack of resources and time to differentiate between game elements and their effects on the learning outcomes mean they use gamification rarely or not at all. Without proper time and resources teachers cannot decide which game elements are appropriate to use for specific learning objectives and any gamification that may be attempted is not connected to meaningful learning outcomes. Dehghanzadeh and Dehghanzadeh (2020) similarily find reported issues of gamifying language learning lessons among teachers. Most commonly cited are the technological issues related to the unavailibility of devices such as smart phones or tablets for the purpose of the lesson. Other reported issues are related to pedagogical challenges; mainly lack of scaffolding opportunities, low accuracy of translations and overal lack of communicative tasks. Many teachers also report the potential time wasting of gamified learning lessons which they view as slowing down the usual learning process.

Kim B. (2015) reports findings on the use of gamified and traditional means of education used for learning. The study focuses on narrative effects of games and their influence on learning. In this study a narrative game, non-narrative game and regular PowerPoint slide-shows teach students the same concepts, e.g. the working of electromechanical devices and the spread of pathogens of diseases within human population. This study shows that gamified content can work as a distraction and both groups learning through PowerPoint slide-shows demonstrate better learning outcomes and understanding of the topic. Author argue that results exist mainly due to the choice of game elements which were not useful for the learning objectives rather than failures of gamification. Further research would be needed to confirm the proposals.

Summary

Gamification is the use of elements of games in the context of education. The theoretical part presents other definitions of gamification, gamified content, game and elements of game, all of which are necessary for the understanding and research of gamification. As none of the used terms is presented by one defition within literature and research, attempts at measuring impacts creating methods for gamification prove to be difficult. Theoretical chapter further displays several frameworks and theories regarding the contents and mechanics of gamification which are applied to areas of human activities including education. It suggests that gamified content can help with motivation, engagement and feedback of learning. Furthermore, gamification shows to positively influence behaviors and emotions of language learners and helping to develop different thinking skills while using new language. There are mentions of several platforms and tools that offer language teachers simple strategies to gamify their learning with pre-existing content and gamified mechanics. Lastly the theoretical section discusses findings of studies and meta-analysis of gamification. The studies show that there seems to be correlation between the use of gamification and engagement, motivation and self-confidence of learners. However several studies with contradictory results present the issues with quantifying the impact of gamification. The research suggest that further and more comprehensive studies must be conducted in order to assess concrete advantages and disadvantages of gamified learning.

III. Research methodology

The theoretical portion of this thesis shows that gamification can be used in variety of ways to enhance language learning. While the exact impacts of specific elements cannot be confirmed, there are noticable effects of gamification on engagement, motivation, learning environment or feedback. There are many tools teachers can use and many platforms that allow for the gamification of their lessons with various potential learning outcomes. For this study´s part, the following research questions have been formulated:

Q1: In which phases of learning and for what purposes do English language teachers utilize gamification?

Q2: What are the overal attitudes of English language teachers regarding the effects of gamified learning?

Q3: What are the tools and methods that English teachers use to gamify their lessons?

This chapter describes the methodology used to answer the study´s questions. Firstly, it explains the aim of the research. Secondly, it presents the information about the participants of the study. Lastly, it assesses the tool used to gather data from the participants and the collection and overview of the gathered data.

The Aim of the Study

The study attempts to gather and present data regarding the use of gamification in English language teaching among the teachers of the West Bohemian region elementary and secondary schools. Teachers of English language responded to the online questionnaire survey attempting to generalize their views of gamification of English as well as the precise methods they use to gamify the content of English language lessons. Furthermore, the study tries to answer what are the main goals of teachers that use gamification in their language lessons and presents their observations about the effects of gamification on learning and students. Lastly, it explores what are the commonly used tools that Czech teachers of English language use to gamify their lessons. The gathered data is analysed in comparison with previously done research.

Respondents

The respondents of the survey questionnaire are teachers of English language of elementary and secondary schools. The twenty-one willing participants represent ten different schools

from Western Bohemia region. The respondent group contains thirteen teachers of schools in large cities as well as eight teachers from smaller village schools. For the purpose of this study the approbation of the teachers was ignored, the length of their English teaching experience was valued more. Only one answer is from a teacher that does not use gamification in language learning which may potentionally influence several of the answers given. The group of respondents comprises of fourteen females and seven males. The age of respondents is deemed to be of no importance and was not a part of the survey´s seeked answers. Eleven of the participants teach English at elementary schools, ten at secondary schools. Both primary and upper secondary level of education teachers are involved in the study.

Research method

The quantitative method employed for this study is a questionnaire survey in order to gather data from large group of respondents. The questionnaire contains mainly close-ended questions and allows for additional information to be given when respondents feel it is necessary to provide more context or explain their answers in full. Other questions are multi select multiple choice questions with open answer options available. The predetermined list of items acts as scaffolding when respondents might have difficulties with conceptualizing what type of answers is wanted and still allows for additional answers to be added by respondents. The questionnaire is conducted in Czech to minimalize potentional misunderstanding of the asked questions. Google Forms is the platform used for the online data collection and further analysis. Since it deals with the topic which is not part of the usual teacher education, questionnaire is accompanied by commentary explaining terms that might not be known by the participants, such as gamification or gamified platforms. Commentary and the provided explanation do not influence the researched questions in meaningful ways and exist just for the clarity of questions.

The questionnaire contains fourteen questions in total. It can be split into five parts with different topics of research being explored. The first part deals with the personal information about respondents. It collects data about the lenghts of experience with teaching English at primary and secondary schools, the respondents awareness about the term gamification and lastly the frequency of adding gamification to be used in their teaching. The second part contains questions about teachers´ attitudes, observations and opinions about the use of gamification in their lesson. The third part probes the methods and tools

teachers use for gamification of their language lessons. It compiles the most commonly used applications for gamification and also the answers on how often do teachers change and update the gamified elements they use in their lessons. The fourth part focuses on teachers goals and aims in using gamification. It explores the type of language skills gamification is used for and also what learning methods it is connected to. Lastly, the questionaire asks teachers about their attitudes towards the potential of gamification becoming part of teachers training in the future. The questions used for the survey were created and selected speficially for the research questions.

Data collection

The questionnaires data came from the survey responses collected during June of the year 2023. The teachers were contacted about the possibility of participation in the survey via email. If they agreed to fill in the survey, their responses were collected by the toolkit of Google Forms. The return rate of questionnaires fluctuated among schools and never crossed 60 % of respondents. Teachers participating in the study had the option to ask follow up questions or give more context in questions which they felt did not properly represent their views or attutides. They agreed to participate in the study if their data was presented anonymously.

Data Analysis Procedure

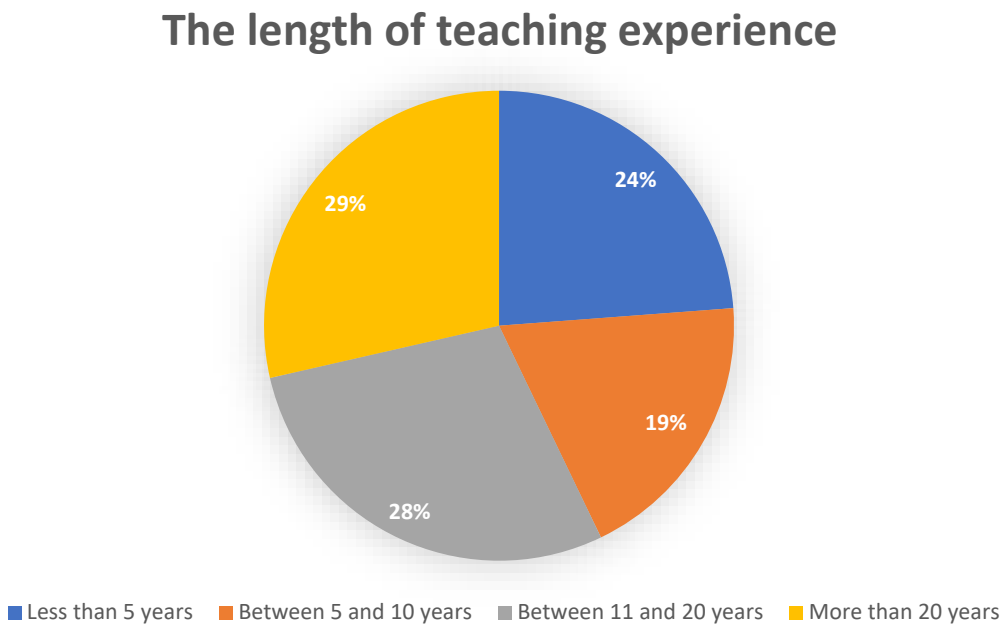
The data from respondents was collected using the Google Forms toolkit and further analysed and categorised. Responses were then compared to previous research outcomes of foreign researchers and existing literature on the topic of gamification. Where it was deemed as relevant, the gathered data is presented visually with the help of graphs to illustrate comparison of answers and percentual occurence of specific answers. Lastly, commentary and comparison of the results within the respondent group based on selected criteria was provided. When selected criteria presented results of a relevant significance of research questions, the details on the comparison are provided in the commentary. The important variables included the length of teaching experience, the gender of respondents, their attitudes towards gamification, the awareness of theory of gamification and lastly whether the answer comes from teachers of elementary or secondary schools.

IV. Results and commentaries

This chapter presents overview of the recieved data, analyses and compares the results from the respondents againt each other and additionaly comments on the findings in comparison to older research and works on gamification of education.

I. The length of teaching practice

The first question assesses the respodents groups belonging based on the length of their experience with teaching English. The teachers can choose from four potential answers representing different ranges of experiences. The four predetermined selectable groups are defined as *Less than five years of experience* (A), *Between five and ten years of experience* (B), *Between eleven and twenty years of experience* (C) and *More than twenty years of experience* (D). The response variance is represented by the following graph:



Graph 1

The results demonstrate that balanced group of teachers is selected as the respondent group. Six teachers represent groups C and D. Five teachers belong to the group A. The smallest sample of four teachers is categorized under the group B. The balanced representation of all

groups provides for more balanced analysis of the results. Comparison of answers shows that the group B is represent by three females and only one male. Group A contains three males and two females. Group C contains three males and three females. The group D, the oldest group, is the group with only females being presented, precisely six of them.

Commentary

The presented data shows that respondents provide variety of lenght of teaching practice. This is important in regards to gamification being viewed and described as a relatively recently developed area of research, especially in connection with education. While the use of games for learning has a long history within the Czech educational system thanks to Jan Ámos Komenský´s works, the awareness and use of gamification can manifest very differently based on the recency of the training that the specific teachers underwent. Less experienced teachers have greater chance to encounter gamification as a part of their training within their respective departments of pedagogy or specific approbations while more experienced teachers have to rely on self-study and exploration of the concept on their own.

II. Awareness of gamification

Next question deals with the binary yes-no question regarding the awareness of the term gamification of respondents. Only eight of twenty-one respondents have previously encountered the term gamification according to their answers. Out of these eight, four belong the group with lowest amount of teaching experience, the group A. The group D contains no teachers who knew the term gamification prior to this survey. The gender ratio of the positive answers is very uneven towards males. Five out of seven of males are aware of the term gamification but only three females. Out of the eight respondents aware of gamification, three are teachers at elementary school.

Commentary

The results confirm some of the overall trends from research and literature of gamification. As a relatively new and emerging topic of research, there is higher recognition of the concept among younger teachers with less teaching experience. Teachers with longer experience of teaching English may use gamification or gamification adjacent techniques in their learning but they are not aware of the term and some of the theories and implications regarding the use of gamified content for language learning. The results also seem to suggest that males

are more likely to be aware of gamification. These findings correlate with the statistically higher popularity of video games and the use of technology among men. The larger percentage of the awareness of gamification among teachers at secondary schools does not correlate to the frequency of use, however there seems to be a more in depth theoretical knowledge being present. Theoretical knowledge does seem not to correlate with observed outcomes and effectiveness of gamified learning.

III. Frequence of the use of gamification

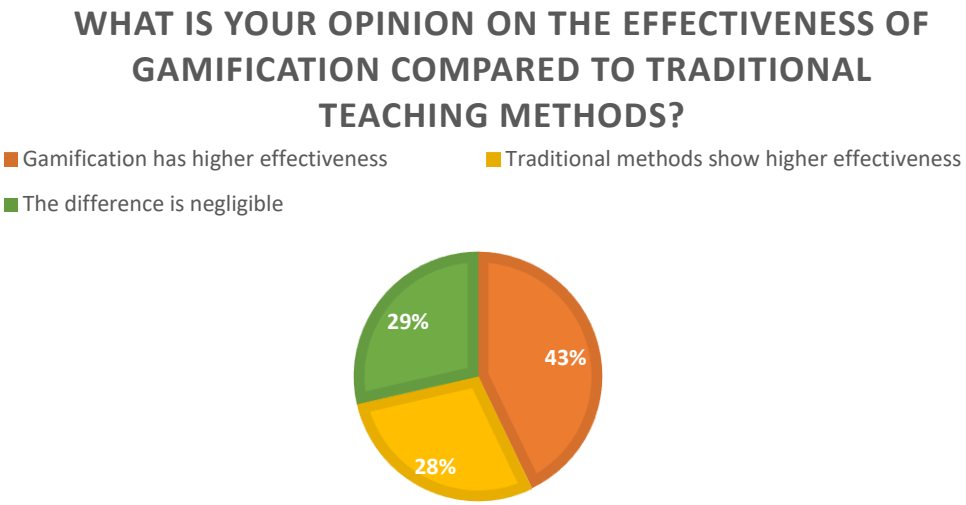
Next question of the survey attempts to quantify how often do teachers use gamification in their lessons. The selection of answers tries to approximate the likeliness of use of gamified learning during the school year. Nearly half (10 teachers) of respondents use gamification at least once a month. The second largest group (6 teachers) admits to using gamification at least once a week. Three respondents claim to gamify their learning at least once per school term. One teacher offered more specific answer of using gamification about two or three times a month. The last remaining teacher alleges to never use gamification in their language learning lessons.

Commentary

Despite the low awareness of the term gamification, the results of this portion of the survey demonstrate that gamification of language learning is very popular among English teachers represented in the questionnaire. The higher rates of use of gamified content are represented by the majority of answers. There seems to be no correlation between the awareness of the concept of gamification and the frequency of its use within English learning.

IV. The comparison of gamification and traditional methods

Following question probes the comparison of traditional teaching methods and gamified learning from the point of its effectiveness for teaching practice based on teachers´s subjective opinions. The teachers selected one of three potential answers: *Traditional methods have higher effectiveness*, *Gamification has higher effectiveness* and *The difference in effectiveness is negligible.higher effectiveness*, *Gamification has higher effectiveness* and *The difference in effectiveness is negligible.*



Graph 2

Nine of the teachers believe that gamification has higher effectiveness compared to traditional methods. Six of teachers claim that traditional methods show higher effectiveness in comparison to gamification. Same number of respondents (6 teachers) propose that the difference between gamified learning content and traditional teaching methods is negligable.

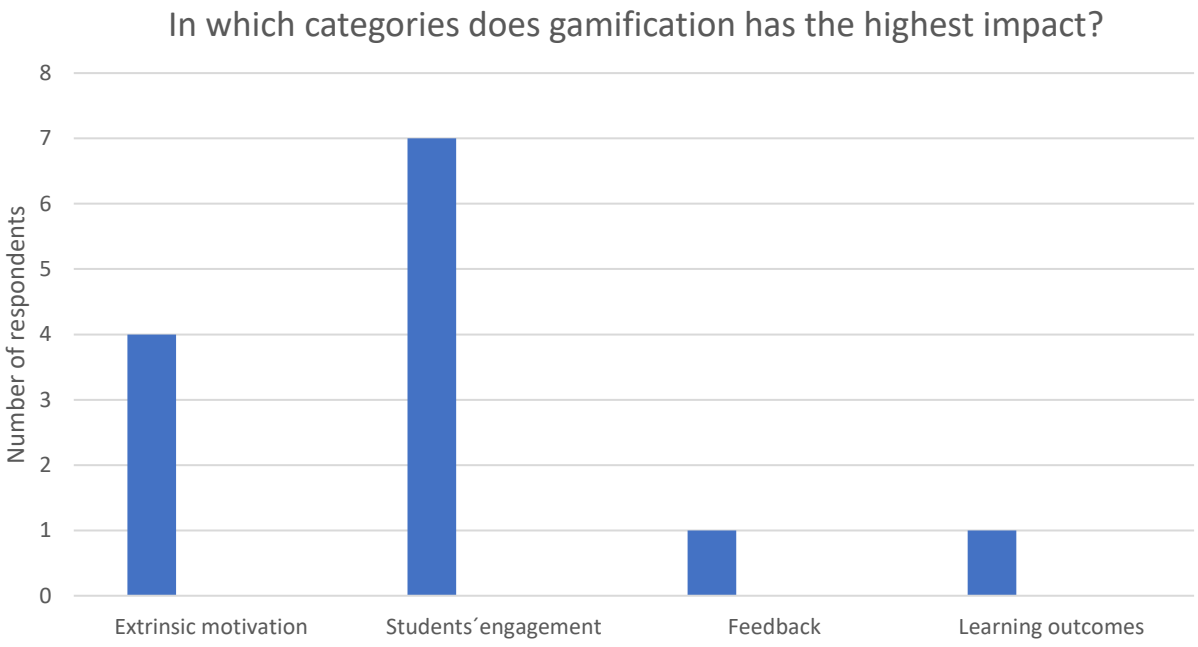
Commentary

The outlooks of teachers on effectiveness of gamification somewhat correspond to the results from previously conducted research. There is slightly more positive outlook on effectiveness of gamification represented in the survey, especially among teachers that use gamification more often. The teachers that tend to use gamification more rarely have negative or neutral stance on the effects of gamification on language learning. The only teacher that describes never using gamification for language learning views gamification and traditional teaching methods to present no significant difference between them. There is noticable overrepresentation of males in the pro-gamification group. This follows the trend of males being more aware of gamification and also utilizing gamified content in their lessons more often compare to female respondents.

V. Effects of gamification on learning

The follow up question presents only responses from teachers which selected categories in which they noticed the highest impact of gamification on the quality of learning. The section contains thirteen responses with some of the teachers who believe that the difference is negligible also giving their answers.

The largest group (seven teachers) assesses that gamification shows the highest impact on engagement of students. Four teachers believe that gamification positively impacts extrinsic motivation of their students. One respondent claims that gamification demonstrate positive outcomes in regards to the feedback by the students. One respondent connects gamification to improved learning outcomes of students.



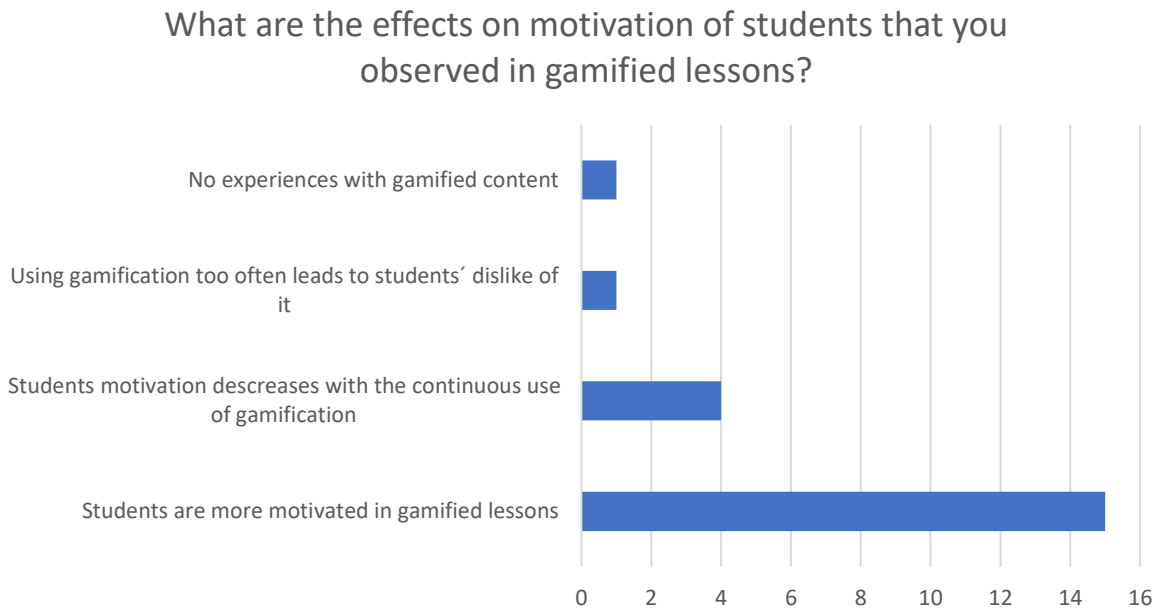
Graph 3

Commentary

Survey confirms the previous findings of older studies which also view engagement of students and extrinsic motivation as the most affected and improved observed categories. The one respondent who claims that gamification has largest impact on learning outcomes of students uses gamification more frequently, about once a month and also is not aware of the gamification as a concept. The connection between learning outcomes and gamification of English language learning cannot be proven and is still depending of future research.

VI. Motivation in gamified lessons

The next question of the survey deals with the observable effects on motivation of students while using gamification. The overwhelming majority (fifteen teachers) report that



Graph 4

motivation of their students increase when using gamification. Four teachers admit that with the continuous use of gamification the motivation of students seems to decrease. One teacher adds that students appear to dislike gamified content if it keeps being used frequently. This respondent belongs to the group who use gamification very often and his observations might be relevant for long term offects of gamified content. One of the respondents admits to never using gamified content and thus having no chance to observe potential influence of gamification on students´ motivation.

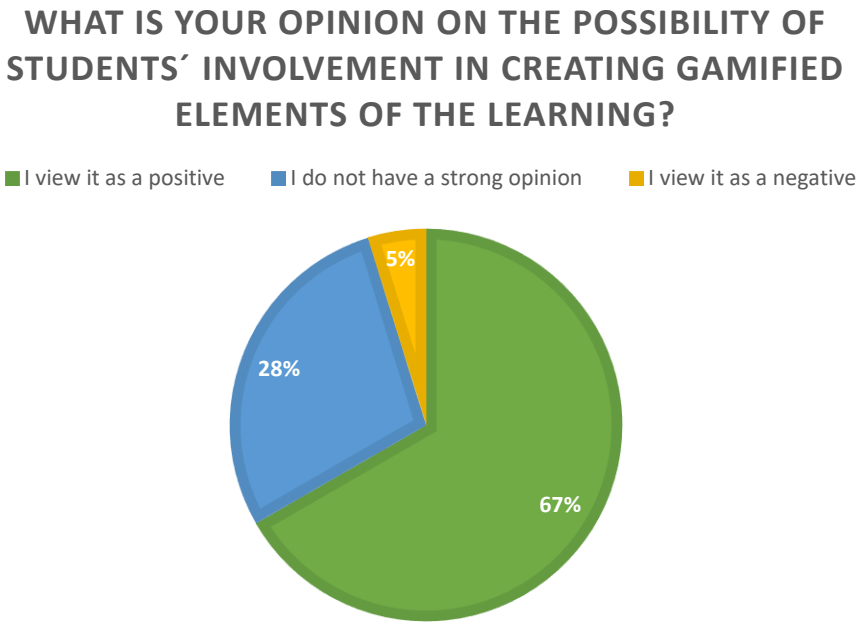
Commentary

The overwhelming majority of teachers using gamified content report results in line with previous research. The precise process might not be applicable to specific game elements, however the use of gamification appears to increase extrinsic motivation of students. There is a question whether or not i tis the gamification itself or just the novelty of the method. As the remaining respondents point out, the motivation appears to decrease when the gamification is used more often or for longer period of times. It is hard to determine if this is the effect of gamification itself or if the gamified content used by educators does not fit

the requirements for succesful gamification. As the respondent groups contains mostly teachers unaware of gamification and its theories, further research would be required to determine the cause of the decrease in motivation.

VII. Cooperating with students in gamifying lessons

Survey also attempts to discover what are the attitudes to the potential of students´ involvement in gamifying language learning. From the gathered data, fourteen teachers view the involvement of students as a potential positive while only one teachers describe it as negative. Six respondents do not have strong feelings regarding the possibility.



Graph 5

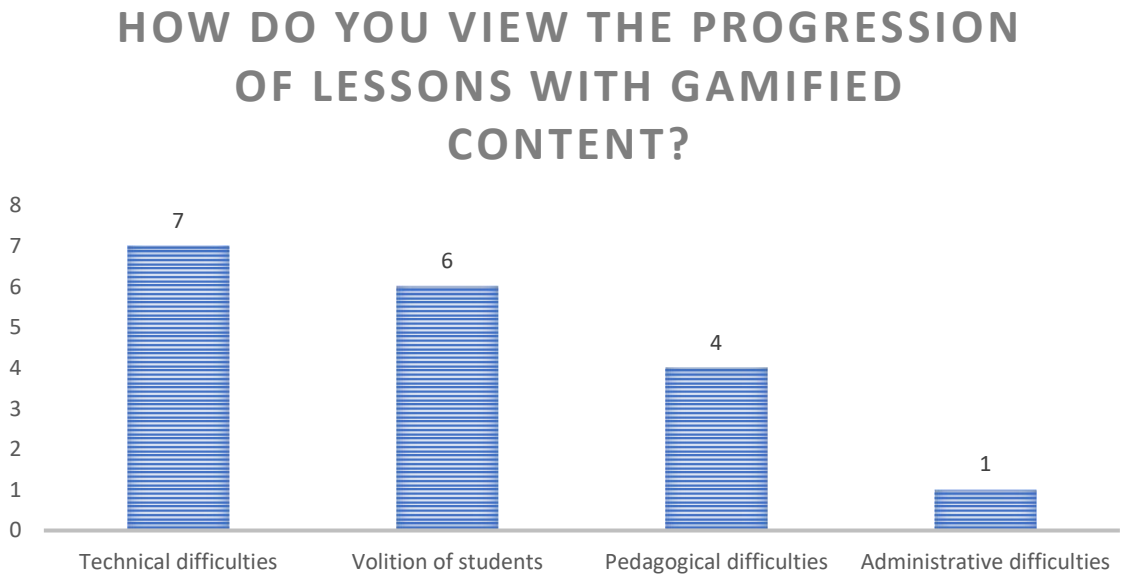
Commentary

The teachers overwhelmingly appear to be in favour of allowing students´ inputs when gamifying language content. The clear advantages of cooperating with the students lie in allowing for gamified content tailored more towards specific needs and preferences of the class. Students may also be more connected to the desired learning outcomes and understand the reasons for gamification as well as the desired outcomes. The only answer which labels cooperation with students in preparation of gamified content as a negative is the answer of

the respondent who has no experience with gamification. As such, the answer can be seen as a prejudice rather than observation of the facts and matters of the lesson.

VIII. Effects of gamification on the lesson

The next question compiles the teachers´ perception of development of English language lessons with gamified content. The majority (thirteen respondents) ascertain that their gamified language lessons consist of greater engagement of students. Two teachers additionally claim that gamified lessons evince improvement of learning outcomes. Three teachers however report deterioration of learning outcomes. Three teachers believe that there is no noticable change from their usual lessons with traditional teaching methods and activities.



Graph 6

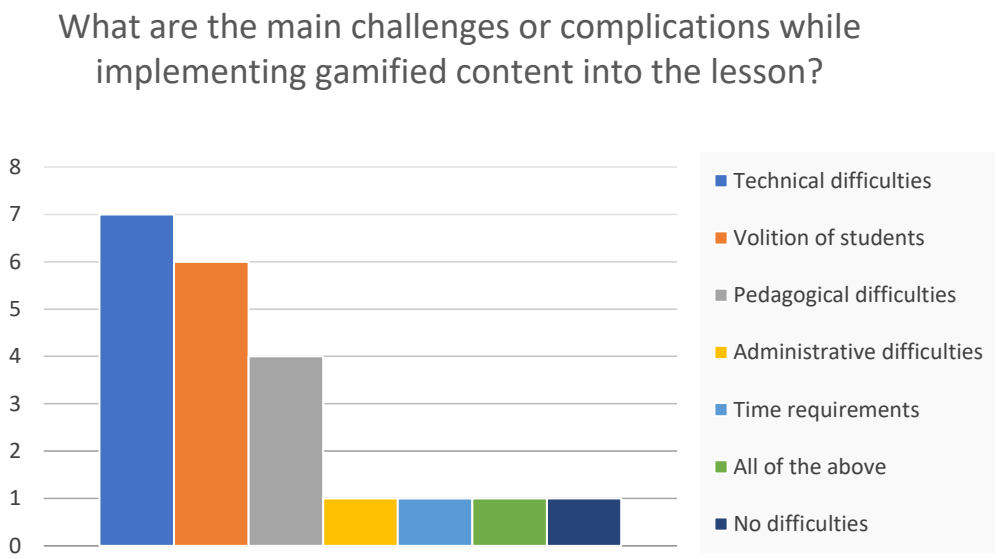
Commentary

The observed improvement of engagement again proves validity of the previously done research. Even teachers without the knowledge of gamification who applied game elements or using gamification tools report the positive changes in students´ engagement with the learning content. The discrepancy in viewing the influence of gamified learning on learning outcomes cannot be explained by belonging to certain subgroup of respondents. The sample size is too small and there seem to not be any clear factors such as frequency of use, the gender of teachers, type of schools they teach at or the amount of experience with teaching English. The choice of implementation of gamification can be potentially responsible as well

as students´ specificities and volition of students. Further and more comprehensive research is require to determine whether or not gamification influences learning outcomes positively or negatively.

IX. Issues with gamified lessons

The questionnaire allows teachers to comment on challenges and complications that gamification of learning presents for their teaching. There is a large variety of challenges and complications that emerge while attempting to gamifying language learning. Seven teachers report technical difficulties related to the lack of IT devices in the classroom or schools. Six teachers label student´s volition as being the biggest obstacle in gamified learning. Specifically the lowered attention and decreased performances in using language seem to be the key issues. Four teachers agree on pedagogical limitations presenting the greatest issue, the lack of preparedness and knowledge of gamification prevents the use of gamification for specific purpose and specific learning outcomes. One teacher claims that gamification is too time consuming to be implemented. One response names administrative difficulties related to expected learning outcomes and educational aims being difficult to connect to gamified content. One teacher lists all of the afforementioned issues as being relevant answers and one teacher does not experience any difficulties while gamifying their teaching.



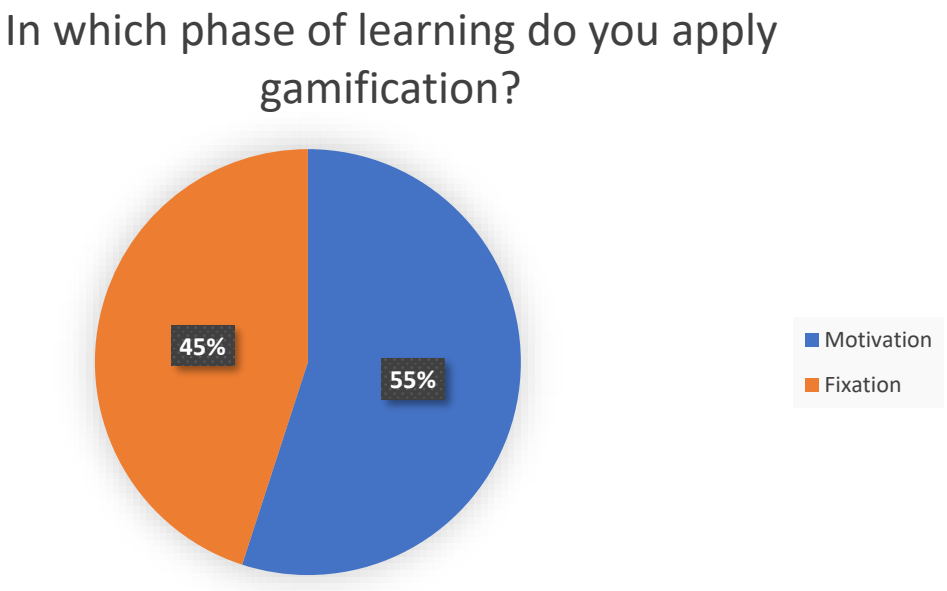
Graph 7

Commentary

The variety of answers do not indicate particular trend in the difficulties regarding gamified language learning. Most teachers expectedly view technical limitations as the biggest challenge in gamifying language learning. As literature on gamification state that technology is not a necessary component of gamification, this issue may be removed with methods and alternative ways of gamifying content being made common. This would also cover reported pedagogical issues related to uncertainity and lack of proper techniques to gamify language learning.

X. Gamification with concrete aims

For the purpose of the survey, the theoretical division of learning process into four core phases commonly used in the Czech Republic is applied. The teachers specify in which of the phases of learning do they implement gamification. Out of all the answers, the phases of exposition and diagnosis are not represented in the answers. Eleven teachers claim to use gamification for the fixation of learning content, which would be called retention in foreign works, and nine teachers for the motivational phase of learning. One respondent does not state the answer due to the lack of gamification in their lesson.



Graph 8

Commentary

Only two out of four phases of language learning are presented. The focus on fixation of language items corresponds to one of Kim B.´s proposed difficulties of gamification mentioned in theoretical portion of the thesis. According to the author gamification is influenced by some pre-existing background knowledge regarding the content. With the focus on fixation of content, there is always the pre-concept being present and gamification acts as means to keep students engaging with the content. As research states, gamification allow for impactful work with mistakes and motivates students to engage with the content continously aiming at mastery, effectively supporting the fixation of new items.

The connection to motivation and engagement is discussed in previous answers of the questionnaire and there is logical connection to motivating phase of learning. Gamified activity can positively influence students interest towards specific topics and help to start a discovery type of learning. Whether or not is this succesful and what is the precise role of gamified content in this is impossible to say at the current state of research and understanding of functions of gamification.

XI. Gamified language skills

Next questions deals with the precise language skills that teachers hope to improve and train while using gamification. Virtually all respondents (nineteen teachers) apply gamification for the purpose of teaching vocabulary. Eleven teachers report to practice grammar with gamified activities. Group of four teachers attempt to gamify reading related and same number use gamification for speaking related language skills. Three teachers believe that pronounciation can be practiced with the use of game elements and similarily three responses add listening related skills. One answer of „culture, geography and history“ represents the outcomes of English language learning in the Czech Republic in relation to graduation exams in upper secondary schools of the education system.

Graph 9

Commentary

With the exception of the respondent that does not gamify content and the respondent which prefer to gamify factual information about the Anglophone countries which are required as a part of graduation exam preparation, all other respondents allude to gamification being useful for teaching vocabulary. The existing literature agrees and hints towards the improvement regarding anxiety of new learners and the advantages of alternative representation of the learned vocabulary via visualisations or alternative supportive elements. Most existing platforms for gamification are also useful for the teaching of new vocabulary or potentioanally improving the retention of the already known. Around half of teachers (eleven responses) use gamification for teaching of grammar. All theories regarding learning new vocabulary can be applied to some of the grammar items and thus the popularity of gamified grammar teaching correlates with popularity of vocabulary teaching.

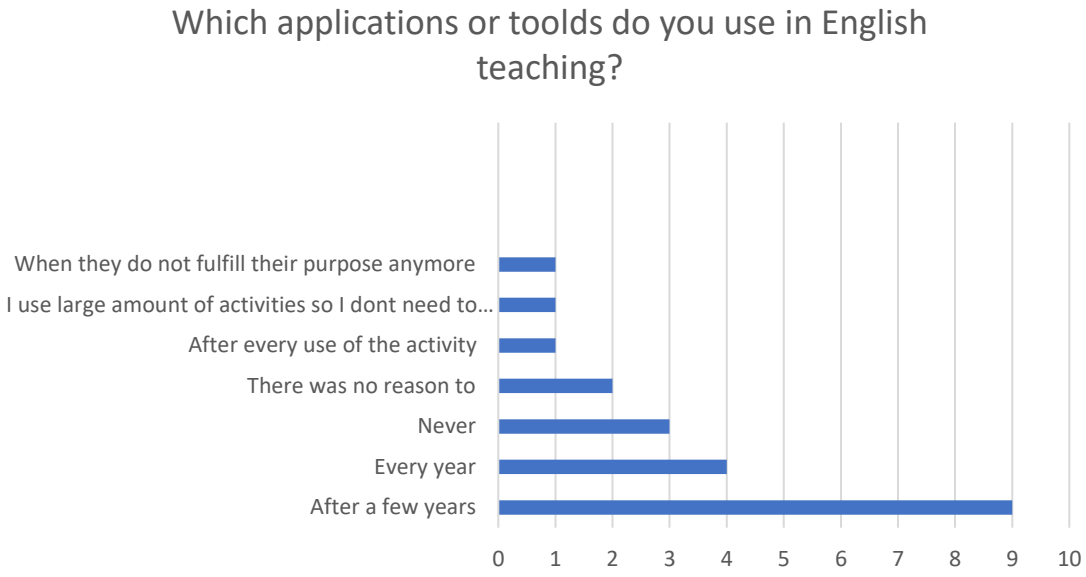
For the language skills that are used to present learning outcomes within Czech educational and curricular documents, reading, speaking and listening are presented in similar proportions. Writing is however noticably missing. What might be the cause of this would require additional research. Writing does not present separate language skills that gamified platforms or activities would not allow teachers to practice. In fact, as modern learners use writing mostly in electronic communication, gamified writing possess a viable option of combining engaging and motivating gamified activity with conditions for writing which would more closely mirror real-life scenarios of the usage. The tools for

gamification of writing might not be as commonly present but their development might be potential addition towards the framework for gamification of English education of Czech students.

Pronounciation is closely related to speaking, which is further supported by teachers that gamify speaking also gamifying pronounciation practice. There are clashing interests of the ideas behind pronounciation being less relevant than in the past and in the same time gamification and its build-in methods of supporting repetition and mastery. Pronounciation appears to be a great candidate for the use of gamification yet its overall purpose is being reviewed and discussing among educators. Additional research on the potential of gamification for drill practice of pronounciation is required to give a more clear answer on the value of gamified pronounciation practice activities.

XII. Language learning gamification tools

As gamification tools might not be known as such in the conciece of English teachers, list of popular gamified tools is presented as a scaffolding. All the platforms and apps listed originate from the research on popularity of tools of gamification in the theoretical portion of the thesis. Kahoot is the most used tool (fourteen responses), followed closely by Wordwall (twelve responses). Four teachers admit to using no tools and platforms of premade gamified content. Then there are single answers for the use of Duolingo, Didakta, Jeopardy and Bamboozle. One teacher lists several of the tools and platforms, namely Jeopardy and Quizlet and other prefers to teach using Quizlet and LearningApps. One respondent names liveworksheets, itools and islcollective as the gamification tools of choice.



Graph 10

Commentary

The results show that gamification platforms and tools are very popular among Czech teachers of English. Dominance of Kahoot and Wordwall correlate with the preferences in using gamification for improving information retention in the fixing phase of learning. Kahoot and Wordwall present software with toolkits allowing for creation of various activites mostly related to repetetive work with the same topics and language items. Teachers using these softwares belong to the group using gamification more often in their lessons. The mechanics of these tools allow for constant updating of activities with the input of currently used language items which corresponds with the frequency of use of gamification.

The group which use no gamification software contains the teacher that does not gamify their lessons at all but also three teachers that do. Two of them gamify their learning about once per month and the last claims to use gamification around once per school term. The further evaluation of these teacher´s claims would be required to ascertain whether or not is the use of game elements for their learning in the category that literature and research would label as gamification or if it is just a simple using of game-like activities. However literature agrees that IT devices or learning programms are not requirements for gamification to happen and their claims should not be dismissed.

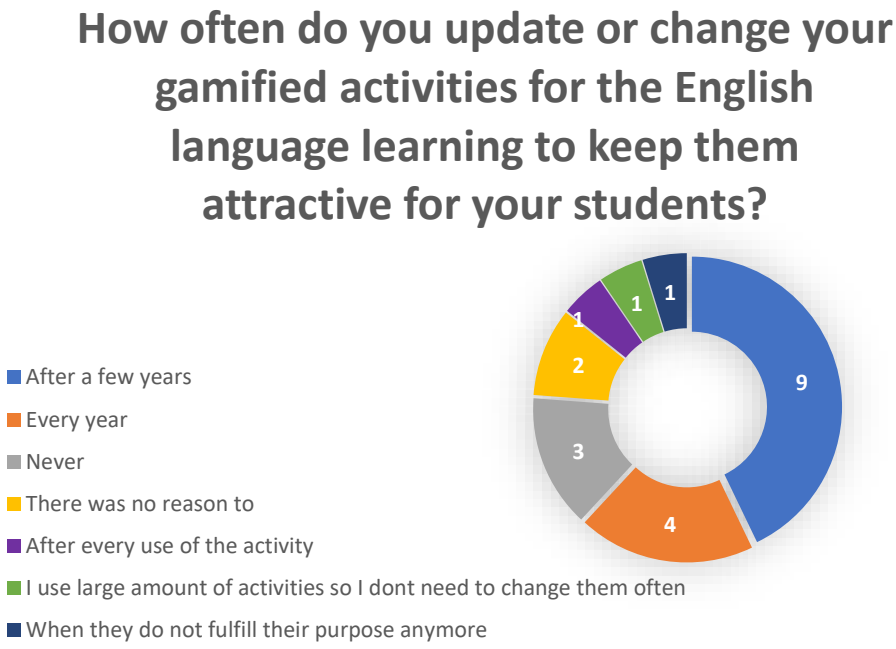
The rest of named gamification tools represent wide range of toolkits. Their use is connected to teachers that gamify their lessons more often. As such, their teaching profits from a broader spectrum of platforms available to be use for teaching language. Teachers

can use these tools for very specific learning outcomes and implement strategies for concrete learning objectives. Additional research with larger sample size may point towards reliable learning outcomes being achieved by the use of specific gamification platforms.

XIII. Updating gamified activities

The penultimate question attempts to gather data about how often do teachers change and udpate the gamified content. The most common response (9 teachers) state that the updating happens every few years of the gamified content being used. Four teachers change their activities every year. Three teachers admit to never changing or updating gamified lessons, however one is the teacher using no gamification at all.

The rest of respondents present more context for their answers. One respondent claims that there is no current reason to update gamified content, similar to one other teacher, who cite his short length of experience as the main reason. Different respondent changes their activities after every use. One of the answers points towards the large quantity of activities which can allow for constant rotation and require no further updates and changes to keep the content engaging and interesting for their students. Last teacher states that the updates and changes happen whenever the gamified content no longer fulfills the expectations they have.



Graph 11

Commentary

The frequency of updates fluctuate between teachers when type of schools or awareness of gamification is used as a comparison. The frequence of use is not clear predictor of the frequency of changes and updates according to the survey´s results. Teachers that use gamified activities every week do not necessarily update or change their activities. The proven methods and strategies might be viewed as too enticing to be alternated. The updates appear to be done more consistently and more often by female respondents. Experienced teachers in general agree to update and change the gamified content the utilize in their teaching.

XIV. Gamification in teachers´ training

The last question of the survey asks teachers another yes-no question regarding the potential of the teaching of gamification theory during teachers´ training in the future. The questions states *In your opinion, should gamification be a part of teachers training, e.g. as an elective subject.* The question is provided with contextual info, detailing that the teaching of gamification would focus on advantages and disadvantages of gamification, basic methods of implementation for learning process and overview of various strategies and gamified tools and platforms that can be used for gamification.

Out of all respondents, the majority (15 responses) state that they would be in favour of teaching gamification as a part of pedagogical training of teachers. The remaining 6 respondents disagree with the proposal of gamification as a subject of universities curriculum.

Commentary

The majority of respondents seem to agree that teaching of gamification, in the form of elective subject, should be a part of teachers´ preparation for working in our current educational system. All respondents that would welcome gamification theory for future teachers use gamification very often and equip their teaching with variety of gamification tools and platforms so activate engagement of their students and motivate them to work.

V. Implications

This section probes the possible implications of language teaching and gamification survey. Additionally it presents potential limitations of the research and suggestion for improvement for future research of the topic.

Implications for language teaching

The survey shows that gamification is popular among the teachers of English language. Majority of teachers view gamification as a positive influence on the quality of the lesson. They cite engagement and motivation of their students as the largest advantages of using gamification for language learning. Teachers can use gamified activities or approaches to keep students´ engagement with the target content for a long time and help to ensure mastery of the language items. Most teachers cite technological limitations as the biggest obstacle they need to pass in order to gamify their lessons. As school modernize, the acquisition of tablets, smart phones, ensurance of stable interent connection seem to bet he areas the focus should be on. Teachers also overwhelmingly agree that gamification should be a part of teachers´ training. The tools they use portray clear picture of awareness of the most common tools for gamification and more specialized and unique platforms might be presented to teachers during training in the future.

Research limitations

The research aims to present the attitudes and behaviors of teachers of English, however it is limited in its sample size. No objective conclusions can be reached due to small scope of respondents. The study was conducted among teachers of one particular region. While the choice of scope assured that there is similar cultural background which may influence attitudes and effectiveness of gamification, the focus on particular region may influence the attitudes of teachers as they often share similar educational backgrounds and graduated the same faculties of education. The questions also explored only the surface level of attitudes and the nature of generalized statements may influence the recieved answers. Additional interviews with respondents may give proper context to the gathered data and portray the attitudes and beliefs about gamification better. As research of gamification in itself is limited, there is no objective way to assess direct influence of gamified elements on learning outcomes, engagement and motivation. The presented changes reported by

teachers can be connected to the use of gamification, however there is no clear colleration to the specific gamified content. The changes may simply represent the effects of the novelty of used emthods and activities and the gamified part may play no role in the observed changes.

Proposal for further research

The further research should attempt to include larger sample size of teachers. Furthermore, the future conducted research may follow more variables that can influence observed effects of gamification. Those included topics of gamified content, the size of classrooms, the level of English of learners, the time of the lesson and other factors which can influence students´ behaviours, motivation and engagement. Gathering of data from teachers who do not engage in gamification may present interesting overview of complaints and uncertanities related to the use of gamification which may be adressed in the teaching training in the future.

VI. Conclusions

The research related chapters present and analyse gathered data and attempt to generalize attitudes and trends regarding gamification of English learning. The Czech English teachers in general seem to be unaware of the concept of gamification and its theories despite the use of gamified content in their language teaching.

Teachers attitudes appear to be consistent between different schools. The overview of the gender ratio of responses suggests that male teachers are more likely to engage in gamified content. Additionally, teachers who can be categorized as relatively inexperienced appear to be more likely to use gamified content than experienced teachers. They employ variety of different tools and platforms with pre-existing gamified content or mechanics to gamify language items and tend to update gamified lessons or activities to ensure continuous engagement and motivation.

References

Abrams, S. S., & Walsh, S. M. (2014). Gamified Vocabulary. *Journal of Adolescent & Adult Literacy*, *58*(1), 49–58. https://doi.org/10.1002/jaal.315

Angst, C. (2023). *Unlocking Gamification - Exploring the Impact and Importance in Education*. Quick Reads for Busy Educators.

Borges, S. S., Durelli, V. H. S., Reis, H., & Isotani, S. (2014). A systematic mapping on gamification applied to education. *Proceedins of the 29th Annual ACM Symposium on Applied Computing*, USA, 216-222. https://doi.org/10.1145/2554850.2554956

Boudadi, N. A., & Plana, M. G. (2020). Effect of Gamification on students' motivation and learning achievement in Second Language Acquisition within higher education: a literature review 2011-2019. *The EUROCALL Review*, *28*(1), 40. https://doi.org/10.4995/eurocall.2020.12974

Chen, Y., Zhang, L., & Lu, G. (2022). A Longitudinal Study on Students' Foreign Language Anxiety and Cognitive Load in Gamified Classes of Higher Education. *Sustainability*, *14*(17), 10905. https://doi.org/10.3390/su141710905

Connolly, T., Boyle, E., MacArthur, E., Hainey, T., & Byole, J. (2012). A systematic literature review of empirical evidence on computer games and serious games. *Computers & Education*, *59*(2), 661–686. https://doi.org/10.1016/j.compedu.2012.03.004

Dehghanzadeh, H., & Dehghanzadeh, H. (2020). Investigating effects of digital gamification-based language learning: a systematic review. *Journal of English Language*, *12*(25). https://journals.tabrizu.ac.ir/article_10676.html

Dehghanzadeh, H., Fardanesh, H., Hatami, J., Talaee, E., & Noroozi, O. (2021). Using gamification to support learning English as a second language: a systematic review. *Computer Assisted Language Learning*, *34*(7), 934–957. https://doi.org/10.1080/09588221.2019.1648298

Deterding, S., Dixon, D. A., Khaled, R., & Nacke, L. E. (2011). *From game design elements to gamefulness*. https://doi.org/10.1145/2181037.2181040

Dichev, C., & Dicheva, D. (2017). Gamifying education: what is known, what is believed and what remains uncertain: a critical review. *International Journal of Educational Technology in Higher Education*, *14*(1). https://doi.org/10.1186/s41239-017-0042-5

Fischer, S., & Barabasch, A. (2021). Gamification: A novel didactical approach for 21st century learning. In *Vocational education and training in the age of digitization*. Verlag Barbara Budrich. https://www.jstor.org/stable/j.ctv18dvv1c.8

Goethe, O. (2019). Gamification Mindset. In *Human-computer interaction series*. Springer Nature. https://doi.org/10.1007/978-3-030-11078-9

Kim, B. (2015, March 25). *Chapter 5. Designing Gamification in the Right Way*. Kim | Library Technology Reports. https://journals.ala.org/index.php/ltr/article/view/5632/6952

Kim, S., Song, K., Lockee, B. B., & Burton, J. (2018). Gamification in Learning and Education. In *Springer eBooks*. https://doi.org/10.1007/978-3-319-47283-6

Kingsley, T. L., & Grabner-Hagen, M. M. (2015). Gamification: Questing to integrate content knowledge, literacy, and 21st century learning. *Journal of Adolescent & Adult Literacy*, *59*(1), 51–61. https://doi.org/10.1002/jaal.426

Kiryakova, G., Angelova, N., & Yordanova, L. (2018). Gamification in Education. *ResearchGate*. 9th International Balkan Education and Science Conference, Edirne , Turkey. https://doi.org/10.4018/978-1-5225-5198-0

Landers, R. (2014). Developing a Theory of Gamified Learning. *Simulation & Gaming*, *45*(6), 752–768. https://doi.org/10.1177/1046878114563660

Lynch, T. L., & Gerber, H. R. (2017). Soft(a)ware in the English Classroom: How Gamification Misses the Mark: Playing through Failure .*The English Journal.* 106(6), 88-90. https://www.jstor.org/stable/26359558

Rafiq, K. R. M., Hashim, H., Yunus, M. M., & Pazilah, F. N. (2019). Gamified-Learning to Teach ESL Grammar: Students' Perspective. *Religación*, *4*, 181–186. https://www.neliti.com/publications/331813/gamified-learning-to-teach-esl-grammar-students-perspective

Retherford, A. (2020). *The Effects of Gamification on English Language Learners' Motivation and Vocabulary Growth* [MA Thesis]. Southeast Missouri State University.

Rivera, E. S., & Garden, C. L. (2021). Gamification for student engagement: a framework. *Journal of Further and Higher Education*, *45*(7), 999–1012. https://doi.org/10.1080/0309877x.2021.1875201

Stieglitz, S., Lattemann, C., Robra-Bissantz, S., Zarnekow, R., & Brockmann, T. (2016). *Gamification: Using Game Elements in Serious Contexts*. Springer, 2017. ISSN 2196-8713

Toda, A. M., Klock, A. C. T., Oliveira, W., Palomino, P. T., Rodrigues, L. O. C., Shi, L., Bittencourt, I. I., Gasparini, I., Isotani, S., & Cristea, A. I. (2019). Analysing gamification elements in educational environments using an existing Gamification taxonomy. *Smart Learning Environments*, *6*(1). https://doi.org/10.1186/s40561-019-0106-1

Wilson, K. L., Bedwell, W. L., Lazzara, E. H., Salas, E., Burke, C. S., Estock, J. L., Orvis, K. L., & Conkey, C. (2009). Relationships Between Game Attributes and Learning Outcomes. *Simulation & Gaming*, *40*(2), 217–266. https://doi.org/10.1177/1046878108321866

Summary in Czech

Tato diplomová práce se zabývá tématikou gamifikace v rámci výuky anglického jazyka na českých školách základních a středních škol. V teoretické části je pozornost věnována definování pojmů gamifikace, hra a herní elementy, které jsou klíčové k pochopení problematiky gamifikace. Dále jsou prezentovány teorie pro využití gamifikace ve výuce a následně přehled výhod a možných metod gamifikace výuky jazyků. Shromážděny jsou i existující zařízení či aplikace, které umožňují gamifikaci učebního procesu, a které jsou učiteli v praxi běžně využívány. Výzkumná část práce zkoumá postoje, názory a postupy gamifikace učitelů anglického jazyka škol západočeského kraje. Prezentovaná data byla shromážděna online dotazníkovým šetřením v průběhu června 2023. Průzkum poukázal na oblíbenost gamifikace mezi učiteli anglického jazyka navzdory nevelkým teoretickým znalostem mezi většinou z nich. Potvrdil trendy pozorovatelné v zahraničních průzkumech, především pozorovaný vliv gamifikace na motivaci a aktivizaci žáků v učebním procesu. Většina učitelů ukázala pozitivní přistup ke gamifikace a jejím efektům na jejich výuku. Zároveň šetření ukázalo popularitu softwarových platforem ke gamifikaci a jejich využití k aktualizování gamifikovaného obsahu mezi učiteli.