

‘They are totally everyday stuff’:  
Teachers’ perspectives on using video games in the  
language classroom

Bachelor’s thesis  
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Tiivistelmä – Abstract <p>Videopelien pelaamisen kasvu on ollut viime vuosina räjähdysmäistä ja sen suosio kasvaa edelleen. Pelaaminen onkin sukupuoleen tai ikään katsomatta yksi suosituimmista ajanviettotavoista, ja se on noussut vahvasti perinteisen viihteen, kuten elokuvien, rinnalle. Pelit tarjoavat mahdollisuuden oppia vierasta kieltä oppilaille tutulla ja luonnollisella tavalla. Pelitutkimus on alana suhteellisen tuore, joten uusien tutkimusten tekeminen on tärkeää, jotta ymmärretään pelien hyöty mm. kielen oppimisessa.</p> <p>Tämän tutkielman tarkoituksena on selvittää opettajien asenteita ja kokemuksia videopelien käytöstä osana kielten opetusta. Samalla pyritään kartoittamaan peliopetuksen nykytilaa Suomessa ja havaitsemaan sen hyötyjä sekä haittoja. Tutkimus toteutettiin haastatteluin, joihin osallistuneet kaksi opettajaa työskentelevät Keski-Suomessa sekä yläkoulussa, että lukiossa. Tulokset analysoitiin kvalitatiivisin menetelmin.</p> <p>Tutkimuksesta käy ilmi, että opettajat käyttävät pelejä säännöllisesti osana opetusta, sillä niiden on havaittu motivoivan sekä auttavan oppilaita keskittymään. Varsinkin pojat hyötyvät peliopetuksesta, sillä sen on havaittu parantavan heidän oppimistuloksiaan. Opetuksessa käytetyt oppimispelit ovat kuitenkin yksinkertaisia verrattuna oppilaiden vapaa-ajalla pelaamiin peleihin, mikä vähentää oppilaiden kiinnostusta oppimispelejä kohtaan. Tutkimuksesta käy myös ilmi, että uudella opetussuunnitelmalla ei ollut vaikutusta pelien käyttöön opetuksessa, vaan uusia metodeja, kuten pelejä, on otettu käyttöön opetuksessa jo aikaisemmin. Jatkossa tutkimusta voisi laajentaa koskemaan koko Suomea, ja haastatella useita eri opettajia yleistettävämpien tutkimustulosten saamiseksi. Jatkotutkimus voitaisiin toteuttaa myös kvantitatiivisin menetelmin, jolloin saataisiin kattava tilastollinen kuva peleistä kielenoppimisen välineenä.</p>	
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## 1 INTRODUCTION

In recent years, the video game industry has become one of the most popular forms of entertainment. According to Rahikainen (2016: 12), on average, teenagers spend two hours a day playing video games. However, video games are no longer only the fun of children and teenagers. Rahikainen (2016: 11) states that the average age of a video game player is 35 in the United States, which means that playing games has become a common hobby for all age groups. Eskelinen (2012: 7) indicates that one of the reasons for this explosive growth is the interactive nature of games, which engages players in the action. The rise of smartphones has also increased the popularity of games. Mobile games are played by 82% of Finnish teenagers, which makes it the most popular gaming platform in Finland (Rahikainen, 2016: 13).

Games are on the brink of surpassing even the most popular mainstream movies as the most popular form of entertainment. According to an article published on the website Muropaketti (2018), an immensely popular game Red Dead Redemption 2 achieved the biggest opening weekend of any entertainment product. It generated 725 million dollars in its opening weekend compared to a highly popular superhero movie Avengers: Infinity War, which generated 640,5 million dollars in the same time.

Games might be entertainment for millions of people worldwide, but it is still merely one aspect of games. Video games have also been proven to benefit learning outcomes in several skills, such as collaboration, decision making, mathematics and languages (Rahikainen, 2016: 14). Reinders (2012: 2) suggests that games could be an important asset in education, but the main problem is that there are extensive differences between traditional pedagogical procedures and new, game-enhanced approaches. Prensky (2001: 3) has discovered a worrying phenomenon, where traditional methods are considered as boring by students, therefore being an obstacle to learning.

The potential of games for language learning is still quite unknown. New research on the subject is needed especially in Finland because of the new curriculum, which has been implemented in Finland gradually since 2016 (Opetushallitus, 2018). The new curriculum includes learning outside the classroom and with technology, possible tools being games and other digital environments. Because of these changes, it is important to study teachers' attitudes and opinions on game-enhanced learning.

The present study will investigate the adoption of video games in education from the perspective of upper comprehensive and secondary school teachers by interviewing them on whether they use games in their teaching. The study will examine both commercial games and educational games and the possibilities they can offer for classroom learning. The study will also investigate whether the new curriculum in Finland has so far had an effect on the utilization of video games in education. Although board games can be used for educational purposes, I am studying only the potential of video games in education.

The thesis is structured followingly: in section 2, the most important key terms are introduced, followed by discussion of the potential of games for language learning. Next some of the games that are used in education are introduced, and the final chapter of background theory discusses relevant theory about teachers' opinions on video games in classroom. Chapter 3 introduces the research questions, means of data collection and methods of data analysis. Finally, chapter 4 consists of analysis of the interviews, including the actual findings of the thesis. Chapter 5 will conclude the whole thesis, summarizing the main points.

## 2 BACKGROUND THEORY

In this section, I will define the important key terms regarding the research and then discuss how games are used in education and whether their potential is reached or not. Finally, I will end the background theory by introducing previous research conducted on teachers' perspectives on video games.

### 2.1 Definition of key terms

Reinders (2012: 2) defines that a video game is an interactive unity that usually consists of tasks and offers challenges for the player. A game includes a player, game mechanics, rules and goals. A game is played on a console, computer, or mobile phone.

The term gamification is closely related to games used in education. Sánchez-Mena and Martí-Parreño (2017: 434) explain that gamification is “the use of game design elements in non-game contexts”. Rahikainen (2016: 71-73) introduces a practical example of this: an educational mathematics game intended for a school environment, where students collect points by answering correctly in calculations. With a certain number of points, students are able to move to the next level. In this context, game design elements include points and levels, which creates a goal and constant progression.

Furthermore, educational games are its own field and I will distinguish it from video games in this study. Educational games are aimed solely for educational purposes, which means they have a higher potential for positive learning outcomes. However, Rahikainen (2016: 22) states that the potential is rarely reached, because educational games often have a smaller budget than commercial games and are therefore graphically less appealing. This leads to players being less engaged and motivated, resulting in poor learning outcomes compared to playing commercial games.

### 2.2 Games in education

Reinders (2012) states that games have multiple advantages for educational purposes. Games encourage players to explore and take risks, because they are safe environments. Players are free to try new styles of play to achieve their goals. Players also learn by doing and by giving meaning for new words through context and situation. Many players use fan-sites to deepen their knowledge of their favorite games and might connect with other players in the process. Reinders (2012: xii) explains that to maintain interest, players face new challenges as they progress in the game. This has been called “the cycle of expertise”.

The most beneficial advantage of game-enhanced learning is the immersive nature of games. They offer situated learning opportunities for players, which motivates them to learn and encourages lifelong learning. New technologies work as bridges between learning within and outside the classroom (Reinders, 2012: 21).

Although games have many advantages in education, their potential is still far from fulfilled. There are extensive differences between traditional pedagogical procedures and new, game-enhanced approaches (Reinders, 2012: 2). According to Eskelinen's study (2012: 10), only 28% of teachers played video games, whereas over 80% of children played regularly. This leads to teachers and children having a massive generational gap towards game-enhanced learning. Teachers have more restricted views of game learning than players. Young students are used to fast-paced learning environments outside school, whereas teachers prefer more traditional practices, like pen and paper assignments. According to Prensky (2001: 3), learners find traditional teaching methods so boring that they do not want to learn.

Reinders (2012: 3) describes that during game-enhanced situations students were more active participators than during regular formal classrooms. They were more active in using the target language in various situations. Participants even enjoyed the learner-centered nature of interaction. This is not surprising, because teenagers and young students are used to "multitasking" (Reinders, 2012: 12). They move swiftly between audio, text, images and video. For example, some individuals are comfortable in texting or playing casual games while watching television. Hence, using various tools in the classroom does not seem to be a problem for students. Although games have a positive effect on learning, there are still hindrances to using them. Reinders (2012: 20) states that the most significant problem in game-enhanced learning is applying it in the traditional, formal learning context. He emphasizes the role of teachers in implementing video games into classrooms (Reinders, 2012: 98). He found that teachers who play themselves can see the pedagogical potential of games better than non-playing teachers.

### 2.3 Which games are used in education and why?

Games offer many opportunities for learners. It is possible to learn and develop different skills, such as language skills, collaboration, analytical thinking and mathematics. This chapter introduces two different games that are used in education, TinyTap and Kahoot.

Their potential benefits for language learning will be discussed, as well as barriers to using them.

Rahikainen (2016: 36) introduced a game-pedagogic project (PEPE) in his master's thesis. The project began in 2013 and its purpose was to expand knowledge of game elements usage and its benefits in comprehensive school. 18 schools from Helsinki participated in the research, assisted by the University of Jyväskylä. The purpose of the study was to focus on introducing games, gamification and game elements as a part of education and different subjects.

The game used in the study was TinyTap. It is a mobile application, which works on android, iOS and browser. It is a learning platform, which can be used for building an interactive lesson. The application was widely used by the teachers in the study. The application consists of game-like elements, interactive quizzes, and built-in games. TinyTap also offers possibility to monitor students' performances and results, which makes it easier for teachers to evaluate students. In TinyTap, games are divided into different categories, which include ready to use games in several languages. The games fit very well in teaching English grammar and words. For example, memory games are excellent tools for learning almost anything, from words to flags. Memory games are easy to create by hand, but a digital version offers different difficulty levels and games can also remember when a certain word is learned, providing student with harder words. The most significant obstacle in using the application seemed to be finding the right games for different lessons. However, when the right games are found, they can be saved and used easily from then on.

Game-enhanced learning and bringing games to school is based heavily on commercial games played at home. According to the PEPE research, several teachers from different schools recognized the significance of games for class spirit. The co-operation needed in games required students to work together towards a common goal.

Zarzycka-Piskorz (2016: 18) studied Kahoot and its benefits for language learning in a classroom environment. The study was conducted during general English courses at the Pedagogical University in Kraków with students from various departments. Kahoot is a free online application accessible for teachers of all subjects and can be used at all levels. It is easy to use and requires only basic knowledge of technology. Kahoot is a versatile platform where teachers can create their own questions and adapt them to the skills of

their students. It contains the basic game elements: a reward, instant feedback, points and a leader board.

The game created in the study focused on grammatical content, such as passive voice and verb forms. After finishing playing the game, the students faced the evaluation phase, and the results were rather impressive. Overall grade for the fun element was 3.9 stars out of 5 and 90% of the students stated that they had learned the intended grammar structure when playing the game. Moreover, 80% of the students would recommend this type of learning. Only 6% felt negatively afterwards, the vast majority feeling positive or neutral. Motivation was also evaluated in the study. 70% of the students felt motivated to learn grammar after playing Kahoot. The most popular reason for motivation was the desire to win, as the game is about winning and losing. Other important motivators included mastering knowledge and being able to play with others.

The study thus demonstrates that students who played Kahoot learned grammar, were highly motivated, and felt positive. The results of the study are rather convincing, and teachers have now a scientific study supporting the use of games as one part of the class.

#### 2.4 Teachers' perspectives on video games in education

Sánchez-Mena and Martí-Parreño (2017: 436) researched teachers' views on using game-enhanced learning in classrooms. The study was conducted by an e-mail survey for teachers. Those who have used games earlier in their lessons answered the interview. Constant comparative analysis was used by researchers along with identified keywords via text mining software to cluster the main themes.

Sánchez-Mena and Martí-Parreño (2017: 440) discovered that teachers have mixed beliefs regarding game-enhanced learning. The most important benefits teachers thought they could achieve were the ability to draw students' attention to the task at hand, to motivate students, to encourage interactive learning and to ease students' learning with games. The respondents explained that the entertainment provided by games increases students' motivation.

Sánchez-Mena and Martí-Parreño (2017:434-435) explain that the interactive nature of games was also considered as a motivating and attention-drawing element, resulting in positive learning outcomes. The teachers consider that because of the motivation and

attention provided by games, students learn better with games than with traditional methods. However, there were also some hindrances to using games, such as the lack of resources and time and boredom of students. Some teachers do not believe that games are suitable for their lessons, whereas some are afraid that students might get distracted by games, resulting in noise and excitement. The teachers stated that preparing classes with game-elements was more time consuming than preparing traditional classes. The teachers also discussed that their effort in trying to use games in classes is not worthwhile because they felt their efforts are not valued accordingly by students. Some teachers also felt that game-elements may be fit for some subjects but not for all, whereas some consider games as an extra activity that is not necessary for learning.

EUN, European Schoolnet, (Wastiau, Kearney, and Van den Berghe 2009: 36-40) conducted an online survey, which aimed to discover if teachers use games in the classroom. The survey, which consisted of closed and few open questions, was conducted in several European countries. The aim of the survey was to discover why and why not games are used in teaching, and therefore it was intended to find teachers who use different methods. The findings show that games are used in the classroom extensively by both male and female teachers of all ages. However, very few of those who have been teaching for over 30 years used games. Most commonly selected subjects for game-enhanced learning are mother tongue and foreign languages. Only 30% of the teachers did not use games at all in their classroom and 80% were eager to know more about the possibility of using games as part of education.

Both studies thus reveal that attitudes seem to be highly positive towards game-enhanced learning. Teachers expect games to be easy to learn and use, while being challenging. They should also be versatile and sufficient for other subjects in addition to language. Sánchez-Mena and Martí-Parreño (2017: 441) suggest that teachers need organizational support if they are to use game-enhanced teaching professionally. At the moment, the importance of freedom is necessary. Teachers who are proficient in using technology are free to use game elements in teaching if the learning outcomes are positive. This seems to be in line with the Finnish national board of education (Opetushallitus), which mentions games as a possible tool for teachers but does not force them to use games.

### 3 PRESENT STUDY

The present chapter will introduce the aim of the study, and the research questions, followed by the description of participants and methods of data collection. Finally, methods used in data analysis will be presented.

#### 3.1 Research questions

The present study aims to find English language teachers' opinions on and attitudes to using video games in education and their reasons for using or not using them. The differences among teachers in technological qualifications and interests towards video games play an essential part in whether games are used in the classroom. Teachers who play themselves are more inclined to implement game-enhanced elements in education and the study will look whether that is the case in this context.

The research questions are as follows:

- 1) *How do Finnish English language teachers perceive game-enhanced learning in the classroom?*
  
- 2) *What are the reasons teachers use or do not use games in the classroom?*

#### 3.2 Research participants and data collection

To answer the research questions, qualitative methods of data collection were used. I interviewed teachers who teach languages in both upper comprehensive and secondary school and mapped out their views on video games through a thematic interview (see Appendix). Different themes were used with appropriate questions associated with them. I chose qualitative over quantitative methods because of their flexibility that allows me to gather more in-depth answers that also include reasoning (Obrist & Arsène-Henry, 2010). Therefore, also my style of interviewing was closer to a guided conversation with a few questions rather than a structured, formal interview. My aim was to answer the research questions as well as possible, and unstructured, conversational interviews fit best my purposes. The interviews were audio recorded in order to analyse the material subsequently.

I acquired the interviewees by sending e-mails to the language teachers of a school in Central Finland. Two teachers, Matti and Laura, volunteered to be participants in the

study and gave their consent. They are both experienced language teachers in their 50s. I am using pseudonyms to protect their identity. Both interviews took place in the school premises where they work, and I was able to gather approximately 25 minutes of audio per interviewee.

### 3.3 Methods of data analysis

In the present study, I will use content analysis as the method of analysis. Content analysis means that data is analysed by looking for similarities and differences in the data and in similar studies. Its aim is to provide a summarised description which connects the phenomena to a larger context and to other studies. Data is divided into smaller themes and is then reformed as new entity (Saaranen-Kauppinen and Puusniekka, 2006).

Firstly, I transcribed the collected audio. My aim was to discover recurring themes from the answers that were related to the research questions. I attempted to compare the differences between the interviewees' reactions and connect them in the relevant background theory introduced earlier above.

#### 4 TEACHERS' PERSPECTIVES ON VIDEO GAMES IN LANGUAGE TEACHING

In this section, I will analyse the material gathered from the interviews. Firstly, I will introduce the interviewees' background in technology and video games. Then I will map out the participants' opinions on using games in teaching, and after that I will discuss the advantages and disadvantages of games in teaching. Finally, I will present all the other influences I have discovered, such as differences between boys and girls regarding game-enhanced learning.

##### 4.1 Participants' experience and background in technology and video games

I interviewed two teachers for this study, one male (Matti) and one female (Laura). Both of them are experienced teachers, having over 20 years of experience. Currently they teach in both upper comprehensive and secondary school. Their students are, therefore, 13- to 19 years- old. Matti teaches currently only Swedish but has taught English in the past. Laura is an English teacher. Both participants state being rather average users of technology. Neither are enthusiastic video game players in their free time, although both have some experiences, mainly from mobile games. Neither of the participants use social media.

When asked about what kind of role technology plays in language teaching, both interviewees agreed that it is a vital part. Various tools are used regularly in classes, such as YouTube, Quizlet and Kahoot, as shown in examples 1 and 2.

###### *Example 1:*

M: esimerkiksi musiikkia tai sellasia videopätkiä jotka on ollu osuvia ja sopinu johonki tiettyyn teemaan. [...] ja sitten sanaston opiskelussa me käytetään aika paljon Quizlettiä jossa sitten siellä on muutamia sellasia pelijuttuja [...] jos mieltii nyt vaikka tunneilla sitte niin Kahootia jonki verran pelataan [...]

*M: for example, music or such video clips that have been appropriate and fit for a certain theme. [...] and then in vocabulary learning we use quite much Quizlet which then has a few of such game things [...] if you think like classes then Kahoot is played to some extent.*

###### *Example 2:*

L: joo ne on ihan peruskauraa. Kyllä musta tuntuu et kaikki tälläset teknologiarikasteet, tälläset Quizziesit ja Kahootit ja Quizletit ja sitten myös materiaalit niinkuin YouTubet ja muut niin ne on ihan, ihan siis jokapäivästä tavaraa.

*L: yes those are basic things. I think that all these technological enrichments, like Quizizz, Kahoot and Quizlet and also materials like YouTube and such, they are totally everyday stuff.*

## 4.2 Participants' opinions on using games as part of teaching

Both interviewees agreed that games have a significant potential to motivate students, but they also recognize that current educational games are not engaging enough. This is a common problem with educational games, which was discussed by Rahikainen (2016: 22). He states that educational games reach rarely their intended learning purposes, because they are too simple and graphically less appealing than commercial games, which are highly popular among students. Parallel issues were also found in Sánchez-Mena and Martí-Parreño's study (2017), in which some teachers stated that students do not value game-enhanced teaching properly. Another viewpoint that surfaced in the interviews is that it is difficult to find relevant games for school environment due to lack of time and resources. This problem was also discovered by Sánchez-Mena and Martí-Parreño (2017: 440). They stated that lack of time and resources are common barriers to not use games in teaching. Matti and Laura explain their opinions in examples 3 and 4.

### *Example 3:*

M: [...] toi pelillisuus siinä mielessä, kyllä se ajatus siinä mielessä kyllä sitä pitäis saada kehitettyä, siinä on just tämä puoli et millä se saadaan niin et siinä saadaan sitä opiskelua, sen vetävän tarinan tai jonkun pelitavan mukaan niin se on, tuntuu olevan hankala järjestää. Kustantajilla ei oikein tunnu olevan sen tyyppisiä resursseja, se koneisto mikä heillä on käytössä on hyvin rajallinen, hyvin sellanen perinteinen ja mekanistinen tehtävien suhteen. Joskus tuntuu et otetaan askel taaksepäin kun pelataan niitä digipelejä sen sijaan mitä paperilla tai kynällä luokassa muuten tehdään, että siinä mielessä vähän hankala yhdistelmä ja ei tosiaan niitä nuoria jaksa oikein enää innostaa kun se on niin hidasta ja se eteneminen ja joka kohdassa pitää hyväksyä ja klikata että hyvä oikea vastaus, klikkaa mene eteenpäin ja niinpois päin. Et se ei oo semmosta luontevaa [...]

*[...] that gamification in that sense, it should be improved, it has just this side that how it can be implemented that you get that learning, that engaging story or some way of playing along, it seems to be difficult to implement. Publishers don't seem to have that type of resources, the machinery they have is very limited, in a sense very traditional and mechanistic when it comes to (digital) tasks. Sometimes it feels that we take one step backwards when we play digital games instead of what we do with a pen and paper, so in that sense it's a bit difficult combination and it's not very exciting anymore for students because it's so slow and the moving and in every corner you have to accept and click like great, correct answer, click and move forwards and et cetera. So it's not like natural.*

### *Example 4:*

L: [...] mulla ei riitä aika sitten siihen niinku rupeen hirveesti ettimään erilaisia pelejä et voisiko tällä pelillä tehdä sitä tätä ja tota. Ja sit niitä sellasia pelejä mitä esimerkiksi jossain alakoulumatskuissa on [...], ne on musta vähä kepposia, ei niitä jaksa kauaa pelata että käyt keräämässä nämä viisi sanaa ja se on sit siinä. Et niis pitäis olla sit joku,

enemmän sitä et ne oikeesti motivoi pelaamaan et koukuttaa jollain lailla samallailla kun joku Geometry Dash jota olen pelannut siis siskon pojan kanssa.

*L: [...] I don't have enough time for that like for searching different games like "could this game be used for this and that." And then those games that come included in some primary school material [...] they aren't that good, you don't want to play them for a very long time, you collect these five words and that's it. They should have more that they really motivate to play, they should hook the same way as like Geometry Dash does, which I have played with my nephew.*

#### 4.3 Benefits of using games in teaching

Matti and Laura agreed that games have a potential of motivating students and helping them to learn, also in their free time. However, Laura added that she believes boys benefit from games more than girls. She assumes that boys find the traditional ways of learning more tedious than game-enhanced learning. This is indeed scientifically proven true. Pedro et al. (2015) discovered that game-enhanced learning had a positive motivational effect with the male students but not with the females. Laura has encountered a problem during traditional classes, where students find it difficult to focus on assignments. She hopes that games would help students to focus better.

According to Matti's experiences, even the weaker students can get the feeling of accomplishment when his/her team wins a game-enhanced competition in class. Matti's findings are in line with Rahikainen (2016: 58), who has also discovered that using game-enhanced elements in teaching was especially beneficial for weaker students. He has also detected that with the increased motivation students are able to produce positive attitudes towards learning the subject. When game-elements were implemented as part of teaching, weaker students were able to improve their test results the most, compared to other students. Matti explains his views in example 5, and Laura in examples 6 and 7.

##### *Example 5:*

M: no kyllä mä näkisin että niinku se tietynlainen motivaattori se [pelit] varmasti on, vois olla parhaimmillaan ja kyllä mä oon nyt ton Quizletin osalta huomannu että tietynlainen sanaston opiskelu, että jotkut on hyvin sieltä saaneet sen motivaation ku sen pystyy omalla puhelimella tekeen ja voi tehdä vaikka bussissa kotimatalla ja harjotella niitä sanoja, kuunnella ja tehdä ja sitä kautta ku se motivaatio saadaan kohdalleen niin sitä kautta taas se asenne ylipäättään sen aineen opiskeluun helposti paranee. Just se ku sitä tekee sellasena sivutuotteena sit ku vaan tekee asioita niin sit huomaa et hetkinen täähän onki hyödyllistä. [...] Ja siellä ne heikoimmatki saattaa päästä semmoseen

ryhmään jossa se tuki on niin hyvä se heikoinkin saattaa joskus voittaa sen ryhmän kanssa joka tuo sellasta minä pystyvyyttä siihen, mäki osasin ja pärjäsin.

*M: well, I'd say that it's [games] surely some kind of a motivator at its best. And when it comes to Quizlet I have noticed that vocabulary learning, some have got their motivation from there when you can do with your own phone and you can in a bus on way home and practise those words, listen and do that way when you get motivation it is possible that the attitude towards the subject improves. Just that when it is done as a byproduct, when you just do things you notice that "hey this is useful." [...] and there the weakest can get into a group where the support is so good that the weakest may sometimes win with the group and it creates this I can do attitude there, I can and I made it.*

*Example 6:*

L: no siis ensinnäki kyllähän ne [pelit] niinkun osaa oppilaista varmaan motivois oikeesti et varsinki musta tuntuu et pojat tykkäis semmosesta pelillisemmästä [...] niin se varmaan tuntuis niistä paljon motivoivammalta kuin se että tehään jotain tehtäviä tai ope selittää tai et niinku pitää itte ottaa selville jostain kirjasta.

*L: well, firstly, surely they [games] would motivate some students really, especially I feel that boys would like more gamified [...] so that would feel much more motivating for them than doing some assignments or teacher explains or like having to search from some book.*

*Example 7:*

L: nii ja sitte tottakai siinä on se jos jokainen pelaa sitä omaa peliään niin silloin jokainen joutuu keskittymään siihen omaan pelaamiseen, siihen omaan miettimiseen ja silloin se menee niinku oikeesti niitten aivojen kautta. Ku silloin ku sitä tehään vaikka kokoryhmän, tarkistetaan vaikka jotain tehtävää niin kyllähän sen nyt näkee vaikka silmät kiinni et sielä puolet on jossai ihan niinku fyysisesti läsnä mutta henkisesti poissa että ne miettii jotain ihan muuta mut silloin ku niillä on se oma peli siinä edessä niin pakottaahan se ne keskittymään siihen asiaan.

*L: yes and of course there is that if everyone plays their own game it forces them to focus on own playing, that own thinking and then it goes like really through their brains. When we do it like with full group, we check, for example, some assignment, it can be seen even with eyes closed that half of the group are somewhere like physically present but mentally absent, they think about something completely different but when they have that own game in front it forces them to focus on the thing.*

Laura states that a very essential feature in all games that are used in teaching is that they should be easily modified for different purposes. Kahoot has been successful in this, and Laura has used it for grammar, vocabulary, and even for teaching about different countries, such as Canada. Laura also reflects that if she was to use some other educational game in class, one of the priorities would be easy customization for different purposes. This is in line with Sánchez-Mena and Martí-Parreño's study (2017: 440), in which it was discovered that one of the criteria for an educational game was its suitability for other

subjects, such as mathematics or history. With easy customization teachers are able to modify games according to their needs.

Sánchez-Mena and Martí-Parreño (2017: 440) also discovered that one of the reasons not to use games in class was their longer preparation time than normally. In contrast to their findings, Laura expressed a diverging view saying that she has not noticed any significant differences in time when preparing regular or game-enhanced classes. However, she uses games only for 10-15 minutes per class and therefore games are only a limited part of her classes. Moreover, she uses mainly Kahoot, which may be easier to use than the games in Sánchez-Mena and Martí-Parreño's study. Laura has also used Kahoot for years, and it is not known how competent teachers were in using games in Sánchez-Mena and Martí-Parreño's study. Perhaps the differences between teachers could be explained with differences in games and in how experienced teachers are.

#### 4.4 Disadvantages of games in teaching

Both teachers consider that the use of smartphones is sometimes a problem, the extent varying between classes. For example, according to Matti, 8th graders have such great problems with phones that they are collected away at the beginning of classes. As a solution to the problem, he suggests the use of the school's iPads during game-enhanced classes. On the other hand, he also thinks that the use of students' own smartphones is convenient because they are familiar devices. Another type of concern is mentioned by Laura, who is worried about the possibility that students could wander to other websites or do something that is not part of the class.

Matti recognizes that games are a very popular phenomena among students and understands that students use different kinds of devices abundantly in their free time. He is afraid that students' concentration skills are decreasing because games are so fast-paced by nature and full of quick rewards. He suggests that the school could be the environment where games are not played as extensively, as is illustrated in example 8.

##### *Example 8:*

M: kun niillä laitteilla ollaan niin paljon muutenkin niin sitten se jos ne tuodaan vielä luokkahuoneeseen koko tunniks ja tehdään jotakin niitten kanssa niin ois myös sitä muuta että koulu näyttää esimerkkiä et muutenkin voi viihtyä ja olla mukavaa. Ja ehkä muutenkin se keskittymiskyky, se aikaväli kuinka kauan jaksetaan tehdä yhtä asiaa, niin

se tuntuu että se lyhenee kokoajan ku on tottunu siihen että ne palkkiot on nopeita ja nopeesti tapahtuu jotakin [...]

*M: when time is spent so much with the devices otherwise, and if they are brought to classroom for the whole hour and we do something with them so there should be also something else, that school shows example that you can have fun without devices. And maybe the concentration, the time span how long you manage to do one thing, that seems to decrease all the time when you are so used to the rewards to be quick and something happens quickly [...]*

#### 4.5 Other influences

Laura has observed that boys are more engaged by game-enhanced elements in class, such as Kahoot, than girls. She has even encountered a situation where girls feel anxiety about playing games in class. Laura is sceptical about the suitability of game-enhanced learning for everyone. Laura's observations (see example 9) are in line with a previous study on how game-elements work with boys and girls by Pedro et al. (2015). According to their study, boys had a significant increase in interest and enjoyment when using game-elements compared to non-game elements, whereas girls did not have any statistical difference. Game-elements were also seen to improve the learning outcomes of boys, whereas reducing that of girls. Based on these results, it is evident that game-enhanced learning is not the best option for everyone but the same can also be said from pen and paper learning.

##### *Example 9:*

L: [...] musta tuntuu et tämmöset Kahootit ja muutkin, niin ehkä nekin vähä enemmän nappaa poikia, siis et kiinnostaa poikia vähä enemmän kun tyttöjä. En tiä. Mut siis tytöissä on ainaki niitä, tai siis mun oppilaissa joita mä opetan, niinku mulle yhet ysi luokkalaiset tytöt sanoo et välillä ahistaa se että kun se on tavallaan tämmösenä, et sun pitää valita ne monivalintatehtävät tai ne monivalinnat tästä pädin ruudulta tai puhelimen ruudulta, et tulee jotenki semmonen et "apua emmä tiä vaikka mä tietäsin jos tää ois kirjan tehtävänä niin mä tietäsin ihan tasan tarkkaan mikä näistä on se oikee vastaus". Et siis niissäki on niinku, et ei se oo niinku kaikille se ideaaliväline [...]

*L: [...] I feel that Kahoot and others, maybe they engage boys a bit more, I mean that they interest boys a bit more than girls. I don't know. But there are girls, I mean the students I teach, like some 9th grade girls say that sometimes it causes anxiety when it's like this you have to pick those multiple choice answers from this iPad's or phone's screen, you get like "help I don't know even I would know if this was as a question in book I would exactly know the correct answer." So there's like, they are not the ideal tool for everyone [...]*

Matti stated that the competitive aspect of group games like Kahoot and Quizlet motivates students to focus on task and try their best. Interestingly, Laura had just the contrary view on the competitive aspect, stating that it can affect some in a negative manner. The willingness to win may cause some students to guess answers, which results in poor learning outcomes. She also supposes that if competition is too exciting, games could cause frustration or aggression in some students, although Laura assumes such situations to be occasional.

Matti perceives that students still enjoy playing Kahoot and Quizlet although they have been played for a long time. According to Laura, students react to those games moderately. She feels that the games have lost their novelty value because they are played quite often. Laura's experiences are consistent with prior research on novelty value in game-elements, which have been studied by Koivisto and Hamari (2014). They indicate that novelty value in game-elements diminish with time, being high in the beginning but continuing to fade the longer the game is used. The results also show that younger students are more prone to boredom than more mature users. This should be considered when planning education, a solution perhaps being to switch games more frequently with younger students to improve their attention and interest, which potentially could lead to better learning.

Matti explains his views in example 10 and Laura in 11.

*Example 10:*

M: Kahootia jonki verran pelataan ja Quizletissä on tää live toiminto jossa mennään ryhmiin tekemään niin tulee sitä kilpailua tietyllä tavalla. Se tuntuu aina edelleenki motivoivalta vaikka sitä nyt on jo tehty pitkän aikaa, silti tuntuu että aina on kiva pelata, tämä porukka jossa tällä kertaa olet niin me yritetään nyt voittaa nuo muut.

*M: we play Kahoot to some extent and there is this live function in Quizlet in which we go to groups to do, so there is that competition in a sense. It still feels always motivating although we have played it for a long time, still it feels that it's always nice to play, this team in which you are this time, we try to win those others.*

*Example 11:*

[...] Kaikki mikä rupee kuitenkin oleen niinku sellanen tuttu juttu, niin menettäähän se sellasen novelty valuen [...] ja sit se saattaa olla myös et jos se kilpailuvietti pääsee hirveen vahvasti päälle, niin sit sieltä saattaa ruveta tulemaan sellasia turhautumisia tai sellaisia aggressioita tai sit sellasia et ei osata lopettaa tai et jää niinku vähä liikaa adrenaliinia kehiin. Mutta mä uskosin et ne on aika harvinaisia.

*[...Everything that becomes like a familiar thing, it loses its novelty value [...] and it may also be if the competitive spirit gets too overwhelming, there may be frustration or*

*aggression that one can't stop or there's too much adrenaline. But I think this kind of situations are quite rare.*

As can be seen in examples 10 and 11, teachers have quite contrary views on competitive aspect. These different views are most likely explained by differences in students as both teachers use Kahoot and Quizlet approximately as often.

## 5 CONCLUSION

Game-enhanced language learning is still in its infancy and its potential seems to be difficult to utilize. At least for now, there seems to be a generational gap between students and teachers, students being much more natural with digital game-environments, but both seem to be open to the possibility of game-enhanced learning in school. Moreover, there seem to be no clear instructions for teachers on how to implement games in their teaching methods, making it unfair to force teachers to use games if they are not comfortable with the technology. Resources and instructions are therefore needed if games are ever to be used professionally in education.

Based on the interviews, teachers are willing to use games as part of education if their pedagogical benefits can be explicitly reasoned. Simple learning games are already used extensively as part of education in the studied school, because teachers perceive apparent pedagogical benefits from using them. Both participants agreed that educational games motivate students and can help them to focus better on assignments. Games seem to be especially beneficial for weaker students, and thus could be used as a potential tool to improve their results. Boys seemed to be more engaged during game-enhanced classes than girls and thus games could benefit them more (see also Pedro et al. 2015).

The teachers were aware that learning games, such as Kahoot and Quizlet, are rather simple and cannot compete with commercial games when it comes to engagement. A common issue was also to find relevant games for school environment due to lack of time and resources. Both teachers consider the use of smartphones a problem, which is mandatory during game-enhanced classes. It is very difficult to monitor if students are actually focusing on their assignments.

One of the purposes of this study was to explore whether the new curriculum in Finland influenced the teachers' use of games in class. Based on the interviews, it was evident that it did not have any effect. Digitalization has been implemented gradually over the years and therefore the new curriculum did not have any radical changes. The teachers seem to have rather free permission to implement teaching strategies that fit their own style.

These results could be important for all teachers. They might encourage some teachers to try games in class for the first time, but also raise awareness of their weaknesses. Differences between genders are necessary to consider when planning classes, although

the data in this research does not allow to make far-reaching conclusions. Education coordinators could also benefit from these results, as they must consider similar issues I have discussed, such as gender differences and how games could be implemented in class.

As game-enhanced learning is still such a new field in the study of language, more research should be done. Possible topics could be differences between genders in game-enhanced learning, regional differences in teachers' use of games and a quantitative study on how extensively games are used in the language class. There are substantially more variations that could be studied, as the age and number of participants and different aspects can be varied.

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## APPENDIX

*Appendix 1: Interview plan***Haastattelukysymyksiä/Interview questions**

## Opettajien tausta/Teachers' background

1. Oletko toiminut kauan opettajana?

-How long have you worked as a teacher?

2. Mitä aineita opetat?

-Which subjects do you teach?

3. Mitä luokkia opetat?

-Which classes do you teach?

4. Mitä kursseja opetat?

-Which courses do you teach?

## Pelit osana opetusta/Games as part of teaching

5. Mikä on suhteesi teknologiaan? Onko se osa arkeasi?

-What is your relationship with technology? Is it a part of your ordinary life?

6. Millaisia työskentelytapoja käytät tunneilla? YouTube, elokuvia, leikkejä?

-What kind of teaching methods do you use? YouTube, movies, plays?

7. Koetko olevasi hyvä teknologisissa asioissa, kuten tietokoneen käytössä?

-Do you believe to be good at technological things, such as using computer?

8. Miten suhtaudut teknologian käyttämiseen osana oppitunteja?

-How do you react to using technology as a part of lessons?

9. Oletko koskaan pelannut digitaalisia pelejä?

-Have you ever played digital games?

10. Millaisia ajatuksia pelit opetuskäytössä sinussa herättävät?

-What kind of thoughts games spring up in you?

11. Mitä hyötyjä?

-What benefits?

12. Mitä haittaa?

-What disadvantages?

Syitä käyttää tai olla käyttämättä pelejä opetuksessa/Reasons to use or not to use games in teaching

13. Käytätkö pelejä opetuksessa?

-Do you use games in teaching?

14. Tunnetko opettajia jotka käyttävät pelejä? Miksi käyttävät? Miksi eivät?

-Do you know teachers who use games? Why do they use? Why not?

15. Tiedätkö miten oppilaat suhtautuvat peleihin yleisesti? Pelaavatko paljon vapaa-ajalla?

-Do you know how the students react to games in overall? Do they play a lot in their free time?

16. Arvioi oppilaiden suhtautumista peleihin oppimistilanteessa.

-Evaluate how the students react to games in a learning situation

17. Uusi opetussuunnitelma mainitsee, että pelejä on mahdollista käyttää opetuksessa.

Onko uusi opetussuunnitelma muuttanut työskentelytapojasi?

-The new curriculum mentions that games are possible to use in teaching. Has the new curriculum changed your methods?