

How do MMORPGs facilitate language learning for Finnish EFL students?

Master's thesis

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<p>Tiivistelmä – Abstract</p> <p>Englannin kielen globaalista vahvasta asemasta johtuen koulun ulkopuolinen kielenoppiminen on entistäkin tärkeämpi tapa hankkia ja pitää yllä kielitaitoa. Oppijan tulee altistua autenttiselle kielelle, mikä ei välttämättä aina toteudu formaalissa opetuksessa riittävällä tasolla. Videopelit ovat tällaiselle kielenoppimiselle erittäin monipuolinen ja otollinen alusta, ja niiden suosio on ollut valtavassa nousussa jo pitkään. MMORPG:t (Massively Multiplayer Online Role-Playing Game) ovat suosittuja verkkopelejä, joissa tuhannet pelaajat voivat vuorovaikuttaa keskenään eri tavoilla ja täten potentiaalisesti oppia englantia hyvinkin tehokkaasti.</p> <p>Tämä tutkimus pyrki selvittämään, millaisiin kielenkäyttötilanteisiin suomalaiset opiskelijat ajautuvat MMORPG:itä pelatessaan. Lisäksi tutkimuksen tarkoituksena oli selvittää, kuinka nämä kielenkäyttötilanteet johtavat kielenoppimiseen ja millaisena alustana suomalaiset opiskelijat itse näkevät MMORPG:t englannin oppimiselle.</p> <p>Aineisto kerättiin päiväkirjan muodossa, koska päiväkirja aineistonkeruumenetelmänä mahdollisti tähän tarkoitukseen riittävän laajan ja yksityiskohtaisen datan koonnin. Tutkimuksen viisi osallistujaa suorittivat seitsemän vähintään tunnin mittaista pelikertaa, sekä vastasivat muutamiin avoimiin kysymyksiin MMORPG:ien ja kielenoppimisen välisestä suhteesta omien kokemustensa pohjalta.</p> <p>Tutkimustulokset analysoitiin kvalitatiivisia metodeja hyödyntäen. Tutkimushenkilöt kokivat, että MMORPG:t edesauttavat kielenoppimista etenkin motivaation ja toiston kautta. He olivat yhtä mieltä siitä, että MMORPG:t ovat muutamasta vähäisestä heikkoudestaan huolimatta englannin oppimiseen soveltuvia alustoja. Kaiken kaikkiaan tuloksista kävi ilmi, että MMORPG:t ovat potentiaalisesti hyvinkin rikas kielenoppimisen resurssi, joiden koko potentiaalia ei ole vielä täysin kyetty valjastamaan.</p>	
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Table of contents

1 INTRODUCTION	3
2 THEORETICAL FRAMEWORK	5
2.1 Language learning	5
2.1.1 Interaction	7
2.1.2 Informal learning	8
2.1.3 Authenticity	12
2.2 Playing video games	13
2.2.1 Play	15
2.2.2 MMORPG	17
2.3 Learning language from video games	19
2.4 Previous studies on the links between video games and language learning	26
3 PRESENT STUDY	38
3.1 Aims of the study	38
3.2 Data collection and analysis	39
3.2.1 Participants	39
3.2.2 Participant's language skills and gaming motivation	41
3.2.3 The diary	44
3.2.4 Data analysis	45
4 FINDINGS	47
4.1 Language usage in the gaming sessions	47
4.1.1 Spoken communication with other players through microphone	48
4.1.2 Chatting with other players	51
4.1.3 Reading or listening to other players' chats	54
4.1.4 Reading or listening to longer in-game texts	57
4.1.5 Coincidental reading of single words or phrases	59
4.1.6 Reading or listening to autonomous NPC communication	62
4.1.7 Interacting with in-game NPCs	64
4.1.8 Interacting with other players through actions or nonverbal language	70
4.1.9 Role-playing	73
4.1.10 Utilizing MMORPG-related third party texts	76
4.2 MMORPGs as a platform for learning English	79
4.2.1 Aspects of MMORPGs that are the most useful for learning English	80
4.2.2 Aspects of MMORPGs that are less useful or harmful for learning English	87
5 DISCUSSION AND CONCLUSION	91
5.1 General trends	91
5.2 Reflection on the present study	94
5.3 Conclusion and future implications	96
Bibliography	98
Appendices	101

1 INTRODUCTION

Gaming is an increasingly common way to spend one's free time, and an exceedingly fast-developing industry. This is especially the case in Finland, where nearly everyone has access to at least some platform, be it a mobile phone, computer or console, to utilize for gaming purposes. According to ISFE's consumer study (2012), 60% of Finns engage in such activities, 48% of which being online gaming. In the globalized world, the importance of learning English in one's free time is becoming increasingly apparent, and this urgent need is being answered by multiple different media, including online gaming. Gaming is progressively becoming more interactive through virtual reality, advanced storytelling, world building and chat options among others, resulting in more socialization and correspondingly, more authentic language input. Additionally, being connected to the internet is no longer considered a luxury but more of a necessity in the current society as everyday transactions are often handled online. Consequently, spending one's free time on the internet playing video games has become a fairly popular pastime.

MMORPGs (Massively Multiplayer Online Role-Playing Games) are some of pioneers of social and interactive gaming, giving unparalleled access to a multitude of interactions, such as chatting with other players, defeating enemies together, trading items or even fighting each other. Although many of these games can just be an outlet for creativity, relieving stress or just enjoyment, they are far from a passive experience. They provide players with a huge amount of resources in both language input and output, vocabulary and interaction, for example. MMORPGs as a tool for learning is a topic that has been researched somewhat extensively before by several scholars, such as Hsu, Wen and Wu (2009), Suh, Kim S. and Kim N. (2010) and Bessièrè, Seay and Kiesler (2010), but we are aiming to add yet another angle to it: the present study strives to explore the potential of MMORPGs as tools for learning English, especially from the perspective of the players themselves.

Our main motivation for this study was first and foremost our own interest in video games, the MMORPG genre and English language itself. In our own experience our time spent playing video games has had a positive impact on our language skills. One such example is how our vocabulary expanded rapidly, especially when we were younger, when the desire to progress further in games that were still difficult for us to understand made us inadvertently learn English at the same time. After much trial and error and adapting to the MMORPG environments we were able to progress in our respective games. As this cycle happened several more times it led us to have increasingly positive experiences of both video games and the English language. Furthermore, in our experience informal learning through video games has been, in some cases, even more important to our language learning than formal learning, especially in expanding our vocabularies.

In the present qualitative study, we aim to explore the ways MMORPGs facilitate English language learning in a Finnish context through a diary conducted by the participants over a period of time. Our five participants played some MMORPGs of their choice and recorded their seven playing sessions into a diary. We analyzed the interactions and language learning situations the participants encountered and categorized them to provide an overall picture of what the MMORPG genre has to offer. Furthermore, we asked the participants to describe how useful the situations were for language learning and proceeded to analyze their answers and the potential implications that they might have.

In the second chapter, we present our theoretical framework for the study, first defining some key terms and then proceeding with some previous studies surrounding the topic. In chapter three, we further explain the intricacies of our study, including the methodology and the construction of the diary. The fourth chapter summarizes our major findings and their categorization, whereas the fifth chapter considers their implications and general trends, also providing a conclusion for our study, along with some ways to further pursue the topic.

2 THEORETICAL FRAMEWORK

In this chapter, we will proceed to introduce some key theories and terms surrounding our topic, as well as some previous studies regarding it. The key terms we first define are related to language learning in general, and later we continue to explain some of the game-related terms. We will also elaborate on the gap in research that our study aims to fill.

2.1 Language learning

In order to be able to define 'language learning', we must first define 'learning'. According to Schlosser and Simonson (2006: 97), learning means "the observable change of behavior or attitude in a student that is a result of a learning experience". This serves as an ample base definition for the purposes of our study, although our own definition differs from it slightly: we don't necessarily agree with the change of behavior or attitude being observable. For example, in language learning specifically, it is very plausible that one learns a single word, but never uses it oneself. This would hardly count as observable, but at least in our study, we still consider it learning, as it adds to the vocabulary of the student, making it much easier for him or her to understand texts containing that word. Schlosser and Simonson also mention that learning is the result of good teaching, which is naturally true. However, teaching is not the only way one can learn, as learning can occur both by oneself and with a teacher or a fellow learner, and with or without the intention to learn.

Schlosser and Simonson (2006: 97) also define the term 'learning activity' as a way of students to be involved in their own learning. This can happen alone or in groups, and we would like to specify that it can also happen consciously or unconsciously. For example, when playing a game, the objective is rarely to learn something, but rather to entertain oneself. However, despite there being no intention to learn, learning can certainly occur by encountering new concepts and seeing what they mean for the first time, for instance. In this case, playing an MMORPG (Massively

Multiplayer Online Role-Playing Game) could certainly be considered as a learning activity, although the point of the activity is not necessarily to learn.

Drawing from the definitions above, language learning means acquiring a language through different kinds of learning activities, either consciously or unconsciously and with or without an educator. It entails learning words, grammatical structures, accents, utterances, phonemes or phrasal expressions, for example. For the purposes of our study, by language learning we mean gaining any type of new understanding about the language in question, whether it is being able to understand or produce the language in speech, writing or even nonverbal forms.

As discussed above, language learning can happen in many different kinds of learning activities. During those activities, a learning situation may occur. By learning situation we mean a single point in time and a specific setting, where the learning occurs. For example, when playing a game, one might find a foreign word that one has never seen before, such as 'fletching'. Then, after continuing to play the game and examining what is meant by the word in the game, one might notice a character making arrows out of wood in the same context, and then realize what the word means. This example can exemplify both unconscious and conscious language learning, as one can either stumble upon the character making arrows by chance and thus learn the new word, or find it after many minutes of searching for it.

To specify, a language learning situation is an instance where the learner has a chance to learn something new about the language. In other words, it means that there is 'affordance' to learn in a specific situation and the learner engages in that situation, not just the specific moment when the learner actually learns something. Bærentsen and Trettvik (2002: 51) define affordance as something the environment offers to the person in question, be it beneficial or not. In this case, what the environment offers are learning opportunities. However, it is important to note that when we mention the term 'language learning environment', we do not merely mean an environment where there are many affordances to learn, but instead an environment where the learner engages with these affordances and has an actual

learning experience, whether it is conscious or not. There is a key difference between these two; if any environment with affordances was considered a language learning environment, nearly every possible environment and context could be called such. This definition would have almost no informational value, and would not serve a purpose in our study. When a learner engages with the affordances provided by the environment, learning is likely to occur, validating the term 'language learning environment'.

2.1.1 Interaction

Often when engaging in some of the language learning situations discussed above, there is at least one other person involved. In addition to the traditional interaction between two humans, such as talking or shaking hands, video games and especially MMORPGs offer a multitude of different ways of interaction. Naturally, as MMORPGs are games where players can interact with each other, it is still possible to interact with other players by talking, trading, forming communities or even attacking them. This is done by contacting the other player via the avatars that they have created when starting the game. There can be thousands of players online interacting with each other at any given moment (Suh et al. 2010: 370).

However, the interaction between two or more players is a mere fraction of what MMORPGs include. Esposito (2005: 3) mentions the term 'human-computer interaction', which means the interaction between a human and an electronic computing system, such as a computer or a gaming console. This is also a type of interaction that takes place when playing MMORPGs, but when we mention the term 'interaction' in our research questions, we mean the type of interactions that provide linguistic input or demand output from the player. These interactions can be either between two or more players, or a player and one or more non-player characters (NPC). For example, when completing 'quests' in-game, it is very common to come into contact with an NPC who gives the player instructions or even talks to the player casually, reacting to the choices the player makes. Another possibility of interactions that provide input but do not necessarily require output from the player are reading

conversations between other players, instructions or other in-game sources of information like guides or announcements. Naturally, it is also plausible that the player utilizes some third-party programs or websites for guides, which makes them sources of input as well. According to Bogenn (2004: 3), this is quite a common phenomenon as games grow increasingly complex in nature, still providing little help to the player in difficult situations. If a learner is motivated enough, it is possible for him or her to even search for information about the words he or she encounters. For example, if the player encounters a foreign word like the previously mentioned 'fletching', he or she can search the internet for definitions of the word, leading to self-directed, conscious learning.

2.1.2 Informal learning

Video games tend to lend themselves particularly well for the type of interactive language learning mentioned above. As playing video games is in most cases considered a potential context for informal learning, it is essential to define what informal learning itself means. Livingstone (1999: 51) defines informal learning as "any activity involving the pursuit of understanding, knowledge or skill which occurs outside the curricula of educational institutions, or the courses or workshops offered by educational or social agencies." This is the brief definition that we will be referring to when we mention the term 'informal learning'. To put it simply, informal learning is learning that occurs out of a person's free will, in a context that does not include any teachers or other educators. It differs from 'formal learning', which means learning that usually happens with the help of a teacher and possibly an educational institution. However, while that is the definition we will be utilizing through our study, the entire concept of informal learning is not as a whole that simple. Below, we will thoroughly elaborate on what informal learning entails through numerous examples and theories from Benson and Reinders (2011) and Schugurensky (2000).

An example of formal education would be a student sitting at his or her school desk, while a teacher instructs him or her about derivation. However, an example of informal learning would be an American person with English as their L1 watching a

French television series with subtitles, and slowly but surely understanding more and more of the characters' speech by following said subtitles and listening to the reoccurring words, thus finding connections between the two. Especially this kind of informal language learning is a growing resource in our world of endless entertainment provided by the vast expansion of technology; games, movies, the internet, books and many other forms of entertainment are extremely popular all over the world. Naturally, informal learning is not limited only to technology: a simple conversation with a foreign friend already offers an excellent form of informal learning. This is by no means a rare phenomenon either, as in the globalized world people are much more connected through school, work and the internet.

Benson and Reinders (2011: 8) make the distinction between language learning beyond the classroom and the common terms that are often held synonymous with it, such as extramural or out-of-school learning. For the purposes of this study, we use the term 'informal learning' over Benson and Reinder's preferred term, 'language learning beyond the classroom', though the two share essentially the same meaning in our case. Benson and Reinders (2011: 9) divide language learning beyond the classroom into four dimensions, which help define the difference between 'extracurricular', 'non-formal' and 'after-school' language learning, for example. The first dimension that they introduce is location. Where the learning happens matters a great deal when choosing the correct terminology: for example, 'after-school' and 'extramural' often refer to activities that the school provides, while terms like 'out-of-class' or 'out-of-school' refer to activities that are organized by the students themselves.

The second and perhaps in terms of our study, the most relevant dimension Benson and Reinders (2011: 10) mention is formality. This is where the term 'informal learning' surfaces, as Benson and Reinders make the distinction between formal, non-formal and informal learning. Formal learning is learning instructed by a teacher or an educational institution and informal learning is by Livingstone's (2006: 211) definition "anything people do to gain knowledge, skill, or understanding from learning about their health or hobbies, unpaid or paid work, or anything that interests

them outside of organized courses", which Benson and Reinders agree with. Livingstone's definition is fairly aligned with their definition of 'language learning beyond the classroom', making the two nearly interchangeable. Non-formal language learning, however, means that the learning occurs in programs provided by the school.

The third dimension of Benson and Reinders (2011: 11) address is pedagogy. In this dimension, what matters is the instructor. In self-instructed learning, the instructor is non-human, such as a television or a computer. There is also the possibility of naturalistic learning, where neither intention to learn nor instruction is present. However, Benson and Reinders mention that this method could be reduced to self-instructed learning where the focus is on entertainment instead of learning itself. This is quite relevant to our study, as video games could be seen as a form of naturalistic learning: when playing, the player rarely has any intention to learn or an actual instructor in this sense. Quite closely connected to this idea, the final dimension Benson and Reinders (2011: 11) mention is locus of control. This refers to the amount of control the student has over his or her learning. He or she can choose a particularly instructive way of learning or keep the control of his or her learning by choosing a way of learning that is abundant with decisions. For example, choosing to learn by watching an instructional DVD is far more instructive than playing an MMORPG, where there are rarely any instructions towards learning, and the focus is almost solely on the gameplay itself.

In addition to the nature of informal learning, we also have to take into account the multiple different forms it can manifest in. According to Schugurensky (2000: 3-4), there are three forms of informal learning: self-directed learning, incidental learning and socialization. In self-directed learning, either an individual or a group of individuals engages in a 'learning project', where no educator is present. However, Schugurensky does mention that a 'resource person' may be involved, meaning a person who does not consider himself or herself an educator. In self-directed learning, the person learning is fully conscious about learning something, and also holds the intention to learn it. An example without a resource person could be a

middle schooler learning to whistle by trying long enough by himself, whereas with a resource person, he or she could ask his or her father to teach him or her how to whistle.

Another form of informal learning that Schugurensky addresses is incidental learning. In this form of informal learning, the learner is conscious about his or her learning, but lacks the intention to do so. For example, a person could learn something by accident, such as a pedestrian stumbling upon a sign that informs him or her about the risks of smoking. However, the final form of informal learning that Schugurensky introduces is socialization, which lacks both of the above qualities: the learner is neither conscious nor has any intention of learning anything. For example, absorbing one's parents' values and ideals could very well be considered as socialization. The young child might not have any idea of what the ideals mean, but directly copies them from his or her parents unconsciously, acknowledging them as his or her own. This form of learning can be noticed later by 'retrospective recognition', however: for example, if the ideals that one has obtained from his or her parents clash with the values that one obtains from school later, he or she can realize where they originated.

While not all of these terms are necessarily relevant for MMORPG-based learning, this categorization is quite useful for understanding the phenomenon. MMORPGs, or video games in general, could in this classification be considered as incidental learning: they are played mainly for entertainment purposes, but as one plays them, one can clearly notice the learning progress.

2.1.3 Authenticity

As we have already established that MMORPGs provide immense amounts of language input, there is another very relevant term that we must discuss. Due to the popularity of English media and English's status as a lingua franca, the term that often surfaces especially in the field of language learning is 'authenticity'. According to Morrow (1977: 13), authenticity in texts means that they are produced by a real

language user to relay a message for a real audience, whether it is written or oral. However, the definition has evolved and gotten much more complex in the last decades.

Another factor by which authenticity can be measured is the meaning of the text in question. According to Swaffar (1985: 17), a text can be authentic, no matter whom it is written for, as long as it is intended to communicate meaning, including texts that are intended for language learners. However, Kramersch (1993: 177) argues that a text can be regarded as authentic if it is written for a real-life purpose and not for teaching purposes.

MMORPGs often require a great deal of linguistic output from the players, especially if they wish to converse with one another. This type of conversation certainly qualifies as authentic input, whether one participates in the conversation or not. The conversations are typically either casual chatting or messages that seek to fulfill an objective, such as finding a team member or selling an item. Both of these examples are authentic in the sense that they are communicating meaning to another person and they are not sent for the purpose of learning or teaching.

It is arguable whether or not texts provided by NPCs (non-player characters) in MMORPGs can be regarded as authentic, as they have been originally written by real people, but are fabricated in nature. The same pieces of conversation are given to each player who chooses to talk with them, but they do usually relay information that is useful to the player for completing a quest, for example. Widdowson (1983: 30) argues that the term authenticity could even be used to refer to the procedures of interpretation or making sense of language by a language user, even if the original text itself is not necessarily authentic. In this sense, even NPC discussions in MMORPGs could be regarded as authentic input.

2.2 Playing video games

During the last several decades the term “video game” has had quite a few definitions. This is partly due to their ever changing nature. Therefore, many of these definitions are no longer as relevant nor accurate due to the various changes in the game development, hardware and games themselves during the last few decades as Erkkilä (2017: 15-18) mentions. Granic et al. (2014: 67) point out that as video games are so diverse, it can lead to it being hard to unambiguously define video games as a term. The largest reason for this is the almost innumerable amount of different video game genres, ranging all the way from first person shooters to different fitness software and simulations. Another reason is the fact of how many different platforms there are today for playing.

The term “video game” is defined by Oxford dictionaries as thus: “a game in which you press buttons to control and move images on a screen,” focusing on the interactivity of video games. Similarly, Mäyrä (2008: 52) states that the most important thing in defining video games is to take into account their interactive nature. This view is also reinforced by Granic et al. (2014: 67) who also heavily emphasize the interactive nature of video games. The player is an active figure who constantly affects how the events in the game play out. Interactivity is video games’ most important attribute. It distinguishes them from other similar forms of media, such as television and literature. Granic et al. (2014: 67) also add that the structures and the systems of the video games are planned around the interactivity between the player and the game. In our study, interactivity not only between the human and the computer, but also between two human players is the most crucial element of video games and especially MMORPGs, as it is what makes them such excellent tools for learning.

According to Mäyrä (2008: 52), each subsequent generation in video games has been visually different compared to the previous ones. This is due to the video games being audiovisual representations that are closely tied to the advancement of

the hardware. As Teittinen (2017: 9) mentions, in the middle of the 20th century video games were so simple that the base gameplay involved only moving a single dot around. Even during the next few decades video game graphics were quite basic. Text based adventures were the standard for some time during the 1970s since the hardware of those times just was not capable of too high of a performance.

Even though early computers were really large in physical size, with some taking the space of a whole room, they were not fast at all. Even later, as third person graphics were introduced, it was really taxing for computers to be able to produce the image. The situation today, however, is quite different. The computer hardware has taken great leaps in performance with processors consisting of several physical and logical cores, for instance. Video game graphics and the overall audiovisual representation is changing drastically with the introduction of virtual reality (VR) which is feasibly available to consumers. It differs from all preceding technology by having the feeling of actually being inside the computer generated reality (Psootka 1995: 405). VR is currently being experimented on but in the near future it will introduce a whole new perspective in video games with the player feeling like they are inside of the events of the game. This will inevitably have an effect on how video games are perceived and on how they are defined.

Increasingly ambitious undertakings are possible in video game development today also due to increasingly large development budgets. For example, Zackariasson and Wilson (2010: 140) describe how a large video game company Rockstar Games developed and published a video game called GTA IV in 2008. The game made a profit of 500 million dollars during the first week after its release. This game easily surpassed the box office profits of the concurrent blockbuster movie Spider-Man 3, which in turn made 337 million. GTA IV had a larger than usual development team consisting of 150 people and the development cost the company 100 million. Even though the development cost of the game was high the end result was extraordinarily large and skillfully made open world action game, in which also minor details received care and attention. This kind of video game development is more usual

nowadays and as the game development is given more resources it often affects the end result in a positive way.

On the other hand, independent (indie) game development is also rising. Indie games often incorporate interesting and unusual video game mechanics. Such undertakings would be risky with large budgets and therefore, indie games are often developed in small teams. The funding comes either from small budgets and/or various Kickstarter campaigns, in which individual people may opt to assist the game development team by basically donating money or buying the game before it is ready. This kind of video game development is drastically different to the way larger video game companies work but they do often seem to find their market. As Simon (2013: 2) states, even though the game development team can be small it does not necessarily mean the game is any inferior. He also continues to mention that since finding a formal definition for video games is hard, it is also hard to use indie games as a help in defining video games themselves.

2.2.1 Play

As play is something that applies both to our everyday world and video games, we deem it as an important term to define and discuss. Play can also be a foundation to many forms of learning, which makes it even more relevant for our purposes. Similarly to video games, *play* has been defined in various ways. Caillois (1961: 9-10), for instance, states that playing can be defined using six different terms. These six terms cover the nature of playing and strive to give as accurate description of it as possible.

The first term Caillois (1961: 9-10) introduces is *freedom*. According to Caillois, this means that the players are not obligated to play and if they were, playing would lose its enticing qualities as a diversion. Anyone can choose to play as they are not forced to. Therefore it is often done during one's free time and hence exciting. If, on the other hand, the players were forced to play the game they would not feel that playing is all too fun. Further amplifying the sense of freedom is Caillois' term of

separation from the outside world. What this means is that the playing happens in a set area and timeframe. These two are also determined before the actual playing begins. The time and place used for playing is separate from one's other daily activities.

According to Caillois, games are also *uncertain* in nature. Basically the way how playing goes and the result of playing are not known beforehand. When the playing begins anyone who is participating is capable of winning and the only true way to find the winner is to play the game and finish it. Caillois deems gaming as, in addition to being uncertain, also *unproductive*, meaning that the playing is not productive in the sense of creating something new. New, in this instance, means actual goods, for example. The outcome of playing is not to create something to leave behind. The point of playing is often the playing itself.

Caillois, similarly to Juul, mentions that games are governed *by rules*. The playing has its own rules and those rules are the ones that matter. The rules that are relevant in our everyday lives are rarely applied into playing more than minimally. The point of playing is to adapt to the rules and then still being able to thrive and possibly even win. Seemingly contrary to the previous term of rules, the final term Caillois describes is *make-believe*. While playing the players are aware that the playing has little or nothing to do with real life. Aspects that are present in the game during playing may be completely impossible to apply to real life. The playing is closed off from real life and the events that happen during the playing stay inside the game. This definition of *playing* by Caillois (1961: 9-10) provides a good baseline for defining the term. Additionally, Caillois Whitton (2010: 23-27) and Juul (2011: 36-43) include the games' make-believe nature in their definitions of the term *playing*. This seems to be largely agreed upon and as Erkkilä (2017: 18) states, it has been that way for half a century. Erkkilä (2017: 18) then adds that the same is true for video games: they are also games where the players acknowledge that what they are doing is just playing and not associated with their regular life.

Juul (2011), however, points out that the relationship between rules and fiction can sometimes be very complicated. A game with a complex fictional world can become an atrocious game without a proper set of rules. He adds that even though fiction and rules do not always work together seamlessly, the outcome can still be positive. Since video games are immaterial and the rules are invisible to the player, they are allowed to be more complex and intricate. As the player mostly focuses on the visual side of the game, the rules applied can make the experience much more entertaining without the player even noticing their existence.

2.2.2 MMORPG

The aforementioned type of fictional world building is especially prevalent in Massively Multiplayer Role-Playing Games (MMORPGs). The beginning of the MMORPG genre can be traced back to the year 1974 in which the first graphic virtual world, Mazewar, was introduced. In this simple first-person perspective game the players moved around in a maze while shooting each other. However, as the gaming hardware and the video games themselves have developed quickly and significantly, the MMORPGs of today are quite impressive gameplay-wise. Also, as Suh et al. (2010: 370) state these games have become places where all players no matter the age can experience different social interactions. The largest game of these MMORPGs can be said to be World of Warcraft (WoW) with the peak amount of concurrent subscribers having been 12 million in 2010. This sheer number of players effectively exemplifies the interactive potential in MMORPGs, as the network that players are able to form is, indeed, massive.

MMORPGs are games that incorporate large and vast 2D or 3D environments in which large amounts of players interact with each other and the gameworld over internet connection (Hsu et al. 2009: 990, Suh et al. 2010: 370). Suh et al. (2010: 370) also add that this interaction happens mainly through characters created by the players. These player avatars then interact with the other player avatars and possibly other non player elements. Peterson (2012: 362) describes this as an opportunity for the players to create virtual objects and add something to the gameworld that the

game developers have created and assume new unique online identities, which are better known as characters. Bessièrè et al. (2010: 531) state that these characters players create are some sort of an amalgamation of their actual and ideal selves, which means the character that is the player's physical representation online is an idealized actual self. Bessièrè et al. (2010: 531) continue that those who are more dissatisfied with their real life selves are more likely to enhance their virtual MMORPG avatar. This means that those players with the poorest self-confidence and those players who dislike themselves the most can use MMORPGs as a sort of an escape by discarding the traits they dislike about themselves and enacting a virtual self they feel better about. MMORPGs can also potentially help their confidence develop through giving them a sense of achievement through completing quests, for instance. This escape from reality is possibly one of the reasons MMORPGs can be highly addictive.

As players create these new avatars for themselves they assume certain online identities. Players then play these characters and they become some kind of embodiment of themselves. As the playtime on that particular character increases so does its experience and gold, for instance, thus increasing the character's overall value both to the player and the possible market for accounts, should the player choose to part with it later. When the player continues playing on that character they start becoming more psychologically connected to their character, and therefore, keep playing on them for long periods of time (Bessièrè et al. 2010: 530). This is very interesting from the perspective of interaction, as players can effectively play a role in MMORPGs through their avatar, and therefore engage in situations they could not engage in in their non-virtual lives.

In MMORPGs players often form and work in different kinds of communities. The nature of MMORPGs is often very competitive. This competitiveness is often manifested in virtual violence due to the typical MMORPG setting being one including swords and sorceries. For example, many MMORPGs implement a PVP (Player Versus Player) system, where the players can virtually fight with each other and see whose character performs the best. The same type of competition can also

happen peacefully through scoreboards, where players can compare their statistics and try to beat each other without necessarily interacting with one another. As players are seldom able to survive alone they form groups and communities that help their members through various ways, including but not limited to sharing information, resources or helping one another during dangerous and hard quests. All this requires interaction, which often expands to instant messaging within the game, but also through internet forums or VOIP (voice over IP) networks, for instance (Bessièrè et al. 2010: 530).

One of the most defining traits of MMORPGs is the large number of concurrent players that either play together or through different instances, in which they are in the same place in the game but cannot see each other. Large, expansive gameworlds together with vast amounts of players from all over the world give the player a feeling of being a part of something great and large. The other defining trait is that the players' virtual avatars often play bigger roles than in other video game genres. This often comes down to the role-playing aspect of MMORPGs and through this the virtual avatar representing the player's online identity.

2.3 Learning language from video games

English is generally recognized as the international language by many (Anderson, Reynolds and Yeh 2008: 188). It is taught as English as a Foreign Language (EFL) all over the world. Students, however, often lack opportunities for enough exposure to English, which is essential to language acquisition. As Anderson et al. (2008: 188) continue, regardless of the teaching techniques the EFL teachers employ they have been exploiting media in their teaching. This way the students have been able to get exposure to various different sources of English input. Throughout teaching years these language educators have encouraged their students to seek different kinds of alternatives to textbooks and vocabulary lists.

The media that can be considered authentic material is the material to which native speakers are being exposed to in English speaking countries. Kilickaya (2004: 1) mentions that numerous EFL teachers and researchers, such as Phillips and Shettlesworth (1978), Clarke (1989) and Peacock (1997) advocate using authentic materials to reach a language competence level that is as close to native speakers as possible. This authentic material can also beneficially affect learning by increasing learner on-task behavior and increasing student motivation to learn new aspects of the language. This can be considered to be one of the reasons why movies in foreign language and culture classes that utilize authentic media are becoming the standard in foreign language departments around the world (Anderson et al. 2008: 188).

Video games, currently receiving a lot of attention from these EFL educators, can be considered a form of interactive and engaging authentic teaching materials. One of the major EFL learning areas they potentially improve is listening. According to Kabata and Yang (2002: 564), different kinds of listening comprehension tasks can be improved by adding visual input and feedback. This has been shown by several studies, such as Herron, Henley and Cole (1995), Hoven (1999) and Little, Devitt and Singleton (1989). These both can be provided by video games. According to research, games that are integrated into classrooms are able to support learning and thinking skills of higher-level. Research also shows that with effective teacher guidance video games can through simulation provide opportunities for players to “delve into language and knowledge of professionals from other semiotic domains” (Anderson et al. 2008: 188).

According to Peterson (2013: 34), game studies theorists have long argued that numerous types of video games are valuable and viable as tools for learning. Peterson continues that various studies show links between developments in cognitive science and video games that could be used to explain the learning phenomenon. Peterson (2013: 34) then adds that this has been recently accompanied by continually increasing claims that computer games can potentially support a form of learning that is both powerful and effective.

Peterson (2013: 34-35) introduces previous studies regarding video games and learning by Crawford (1984), Juul (2005) and Prensky (2001, 2002, 2006). They state that “some types of computer games incorporate elements that support learning”, “playing a video game is a learning experience” and “play has a deep biological, evolutionarily important, function, which has to do specifically with learning”. This means that when one is enjoying playing it does not only elicit a high degree of involvement but can also result in learning. The key is the connection between play and fun as they are both important factors in human learning. When playing a video game is fun, enjoyment, which is the product of playing, is able to create beneficial effects that can in the end result in one’s learning (Peterson 2013: 35). This is further explained by Prensky, who states that having fun or experiencing enjoyment helps us relax, and doing so makes our minds more receptive to learning. Play, while also fun, makes us more involved, which also helps with learning (Prensky 2001: 117). Additionally, according to Chik (2014: 97), freedom of playing and autonomy are important in order to have fun while playing video games. As explained by Caillois (1961) in chapter 2.2.1, freedom is by definition part of playing. Chik (2014: 97) then emphasizes that autonomy is a key component in facilitating L2 (second language) learning through playing video games.

Peterson (2013: 36) elaborates on Prensky’s computer games’ structural elements that are involved in learning and their hypothesized roles in learning are explained. First is *rules*, which are supposed to set limits and create a framework to guide the behavior of the player. Second is *goals and objectives*, the function of which is to provide motivation to the player. Third is *outcomes and feedback*, which are supposed to elicit emotional investments. The fourth one is *conflict, competition, challenge and opposition*, all of which function around problems and collectively stimulate interest and involvement for the player. Fifth is *interaction*, which is linked to creation of social groups that are game-based. The sixth and final one is *representation or story*, that is supposed to enhance the engagement of the player. These six parts collectively affect the player’s learning. For example, *outcomes* help the player by providing a measure of progress toward the game’s goals and tell

whether the player has won or lost. This way they also influence emotions related to winning and losing and add to the appeal of video games.

How different learning principles are present while playing video games is another matter. Peterson (2013: 39) introduces Gee's interpretation (2005, 2007) of general principles, divided into three main categories, that are inherent in effective learning and also realized in well made video games. The first category of these general principles is *empowered learners*. Under this category are the principles of *co-design, customize, identity and manipulation and distributed knowledge*. Co-design principle means that the learner is in an active role instead of a passive one. As computer games' nature is learner-centered and interactive the player's critical learning is supported. This is due to the player feeling that they are both creating and experiencing the game world at the same time. The customize principle entails that the learning is at its highest effectiveness when the player is able to try new ways of learning and after this they are able to choose how their learning will continue. This is visible in many video games where the game is supportive of trying new ways of learning. Identity principle, on the other hand, references the deep learning that occurs when the learner is able to adopt a new identity that they also value. This is common especially in various online games where the player is given the opportunity to create new player characters. The manipulation and distributed knowledge principle means that when the player uses tools provided by the game, such as the player character or other virtual objects, to fulfill different goals, they feel a sense of empowerment. These sort of smart tools act as knowledge repositories and all this facilitates learning by making the player more immersed in the game world. If making progress in a computer game makes players integrate and share knowledge it is a sign of good game design.

Peterson (2013: 39) continues with Gee's second category of learning principles, *problem solving*, which includes the principles of *well-ordered problems, pleasantly frustrating, cycles of expertise, information on demand and just in time, fish tanks, sandboxes, and skills as strategies*. The first one, well-ordered problems, means that the player encounters problems structured in such a way that they are encouraged to

create hypotheses which will help them with more challenging problems in the future. When this happens, learning is at its highest effectiveness. This kind of structure, where the findings made in solving early problems helps in later ones, is present in many video games. The second principle, pleasantly frustrating, means that presenting the player with problems that are both hard but achievable facilitates learning. This is also common in many video games and the player is often additionally given support in various phases of the game, which encourages continued participation. The third principle, cycles of expertise, is linked to the player continuing to play the game. The player first learns a skill, practices it, masters it and then encounters a new challenge that requires them to incorporate new skills. As the player's skill becomes nearly automatic and then fails in solving a new problem, they are challenged to combine and integrate both old and new skills again, therefore repeating the process. In video games the player often first extensively practices a certain skill, which is then often followed by a test of mastery in the form of a boss fight, for instance. After the boss fight the player often proceeds to a higher level and then encounters problems that require even more practice.

The fourth principle in Gee's second category (Peterson 2013: 40), information on demand and just in time, means that for the sake of learning it is best when verbal and written information are provided in a context where it can be immediately put into use. Often in computer games the player at first learns about the game by mostly relying on the material the game itself provides. The fifth principle, the fish tanks, means that if a system that is operating in the real world is too complex to understand, for the comprehension's sake it is best to approach it at first by looking into simplified systems in which the focus lies on the different central variables and relationships. An example of this kind of fish tank in a video game is the tutorial that is often included in video games. This provides the player the opportunity to look into and try different key elements of the video game in a focused, controlled space instead of being overwhelmed by just jumping into the game and not understanding what is happening around them. The sixth principle, the sandboxes, are areas in video games often safe from disturbance. This also links to the seventh principle, skills as strategies, as the player is motivated to learn and practice skills since this

brings them closer to their goal. This is often realized in video games and practice is often required in order to progress further.

The third category, *understanding*, contains the principles of *system thinking* and *meaning as action images*. The first principle, system thinking, means that the player understands that their actions are a part of a larger complex system. These systems encourage certain behaviors but restrict others. This is often included in good games that require the player to undertake certain activities for practice that at the same time develops and enhances the player's understanding of the game as a complex, whole entity. The latter principle, meaning as action image, means that learning happens when the learner experiences or does something meaningful. These are then stored in the learner's mind and viewed as simulations. In video games the meaning of certain words and concepts is made clear through action consisting of various experiences and activities. These all add together and allow the player to continuously build and store more of these simulations in their mind for later use (Peterson 2013:40).

Gee (2005: 34) further elaborates on the above. How one learns from playing video games is subtle but positive. Gee suggests that video games would be sold much less if at all if people were able to learn and master them too easily. As stated above the key is to keep the player somehow motivated and therefore challenge him or her to learn. Gee even suggests that even if it does not always seem so in schools in particular people do actually enjoy the learning process. Hence people, without even realizing it, are really looking forward to learning new things. This is also how the process of learning language through playing video games is so subtle.

Gee (2005: 35) provides further explanations to the principles of learning and video games above: people are encouraged to take risks and explore completely new possibilities in video games. This is because even if the player somehow fails to proceed they can return to an earlier point in the game, their own save, and try a new approach. However, this requires the player to commit to their video game in order to finish it. Gee (2005: 36) states that the best way to keep the player

committed is when the challenge provided by the video game is correctly adjusted. According to Gee, the perfect amount of challenge is when the game is hard for the player yet he or she is able to advance further. Gee even compares this to a classroom situation by saying that some students feel the school is too easy while for others it may be even too hard at times.

According to Peterson (2013: 46), studies that were conducted recently generally agree that video games are both motivating and capable of supporting the development of skills needed in learning. These skills are later specified to include reading, logical thinking, observation, basic knowledge, problem solving, decision-making and strategic planning. Simulation games were shown to improve one's intellectual development, for instance. Video games of different categories may improve certain skills, including psychomotor coordination, spatial orientation and stress reduction. Therefore, it can be concluded that the beneficial effects of playing video games may go even beyond enhanced cognitive skills.

As the brain is stimulated to function better the learning process is further enhanced. Gee (2006: 2) introduces an example of a video game with *Thief*. In this video game the player assumes the role of a virtual character in a large, very complex virtual world in which proceeding is near impossible if the player is not able to fulfill certain demanding tasks. If a phenomenon, the weather, for example, is being studied by scientists, they are not inside the phenomenon themselves. This is different in video games, however, as the player is clearly inside the simulation when they assume the control of the player character. Therefore, the creation of empathy of complex systems, that go beyond the base entertainment value the video games provide, is possible and they allow the player to learn.

As a summary, video games incorporate several effective learning methods, such as providing the player with a safe space to try new things. If the player was to fail they would just be able to try again due to various saving and check point mechanics prevalent in most games. Another way to keep the player engaged and continually learning is to increase the challenge by first making the player learn the required

game mechanics, and then continually having the player evolve and integrate new skills with previous ones in order to keep progressing. All this is often by design in order to make the player more likely to return to and continue playing the game. At the same time, this can potentially provide the player with an excellent learning platform.

2.4 Previous studies on the links between video games and language learning

There have been a multitude of studies regarding the topic of video games and language learning and the ones most relevant to the present study will be covered in this section. While the perspective of the students is our main focus, we will also showcase some studies that exemplify the usefulness of MMORPGs and other games at a more general level. We also aim to elaborate on what our study has to offer in terms of new information and why our specific angle is important.

Calvo-Ferrer (2015) conducted a study in Spain about how effective video games can be as stand-alone learning tools, and how students getting motivated by them affects their learning gains. It is interesting to compare how results can vary from one country to another, as Finland is quite different from Spain as a learning environment.

Calvo-Ferrer's (2015) 59 participants, ranging from 19 to 20 years of age, played a game called *The Conference Interpreter*, which quite literally consisted of the players attending a conference and having to interpret it at the same time. The participants were divided into groups A and B, and group B was provided with a booklet that depicted the contents of the game. While group A played the game itself, group B had to only read the booklet instead.

Both of the groups had to take several tests and answer questionnaires before and after participation. These included a test on mobile operating systems vocabulary

(which was used as a pre-test, post-test and a delayed test), a questionnaire about motivation and finally, a test about their learning gains.

The data was analyzed with one-way between-subject analyses, and provided the following results. L2 vocabulary was learned more efficiently through the game than the booklet, but after six weeks post-study there was no major difference in the participants' vocabulary levels. Interestingly, Calvo-Ferrer (2015: 9) points out that motivation caused by the will to learn, for example, produced positive learning outcomes, but motivation derived from enjoying the game itself did not. This is intriguing from our perspective, because in section 2.3 we attempt to establish that enjoyment is exactly what makes video games so lucrative for learning purposes. It is very beneficial to contrast the results of Calvo-Ferrer's study to our study, and see whether or not students agree with this notion.

One of the more recent studies done locally in Finland was conducted by Erkkilä (2017). Erkkilä studied both the conscious and unconscious English learning that happens while playing video games. The main research question was do Finnish upper secondary students feel that digital games enhance their English skills. Other secondary research questions aimed to find out what kind of language use English games require from the player, what parts of the language are acquired while playing video games, do the density and duration of playing affect the language learning and are there differences between genders in gaming habits or in experienced language learning (Erkkilä 2017: 39) Great emphasis is placed on the participants' experiences in the study as often the aim is to find out how the players themselves, the Finnish upper secondary students, perceive their own gaming and English learning.

Erkkilä's study (2017) was conducted through an online questionnaire, which was distributed to 15 Finnish upper secondary schools. There were 779 answers in total. Some of the questions provided a few set options in the answers from which to choose while other questions were more open-ended in nature, providing a space in which the participant was able to describe their personal experiences. Therefore, the study contained both quantitative and qualitative data (Erkkilä 2017: 40-46).

Some of the key findings included that Finnish students collectively feel that playing video games helps and has helped them to learn English. Additionally increased playtime showed to affect English learning positively. Gender differences concluded that girls felt their gaming had less of an impact on their English learning than boys did. This observation was explained with the help of the above, meaning that since girls played less frequently and their playtime per gaming session was smaller than the boys' they felt that their gaming had not been as helpful in learning. However, as mentioned above, the participants in general felt that playing video games positively affected English learning. This was concluded to be due to those who play more frequently and for longer at a time receiving significantly higher English input while playing (Erkkilä 2017: 81-86).

Suh, Kim S. W. and Kim N. J. (2010) were studying MMORPG-based instruction in Korean elementary education, which concerns the benefits of MMORPGs in formal education, as opposed to informal learning. The participants of the study were 302 fifth and sixth graders, although 82 of the students' answers were omitted due to unfinished responses or extensive language experience from being an exchange student. 118 of the students were taught English using an MMORPG and 102 of them, being the control group, were taught in a face-to-face fashion. Curriculum specialists determined that there was not enough difference between the two curricula to cause any interference to the study.

The study itself was conducted in two months, during which both of the groups had 40 minute classes twice per week, replacing their usual English lessons. In the MMORPG group, instructions were given in Korean, but the contents of the game itself were in English. The students were divided according to their skill levels via some basic skill tests, and were then placed into the game area together in those groups. The game itself consisted of defeating 'monsters' and obtaining 'treasures' through answering certain problems, for example. During the gaming period, the students did not receive any instruction from their teacher.

The control group learned the same contents as the MMORPG group, but through their textbook, visual aids and instruction by a researcher. The reason behind choosing a researcher over a teacher was to prevent any unwanted variables that having a regular teacher might cause. After the gaming period, both the treatment and control groups faced five tests and a survey to compare their learning gains (Suh et al. 2010: 374).

The results of the study (Suh et al. 2010: 376) show that MMORPGs can be beneficial in second language learning, as the students that played the game exhibited better performance in listening, writing and reading than the students studying through traditional face-to-face instruction. The three most influential variables in the study were motivation, prior knowledge and surprisingly, network speed. Suh et al. (2010: 377) speculate that network speed and motivation may have had a correlation: when the network speed decreased, so did motivation. This would perhaps explain how networking speed was even more influential as a factor than motivation alone. Another interesting aspect Suh et al. found was that computer skills or the capacity of the computer itself had no significant impact on the results. The consensus that MMORPGs could be beneficial to second language learning is aligned with our own hypothesis, and supports our overall claim.

Sylvén and Sundqvist (2012) conducted research quite relevant to our topic. The goal in their study was to present legitimate empirical evidence that L2 proficiency does correlate with the different types of games played and frequency of these gaming sessions. The participants were Swedish L2 English students aged between 11 and 12, similar age group to the study conducted by Suh et al. (2010). The total number of students was 86, 39 of which were boys and 47 were girls.

The study was carried through a questionnaire, a language diary and three proficiency tests. The questionnaire included gathering information about the participants' backgrounds but also scrutinized their contact with English outside of school. More specifically, the questionnaire gathered data about the participants' self-confidence regarding English, mother tongue and traveling abroad, for instance.

The diary on the other hand examined how much time the participants spent on seven predetermined extramural English activities over the course of one week. These activities included reading books, reading newspapers and/or magazines, watching tv, watching movies, browsing the internet, playing video games and listening to music. After these there was a part in which the students were free to write about other activities in which they had engaged in during the week that were somehow related to English. The diary was to be filled daily, and the names of the video games or movies the participants played or watched were to be written down. The language proficiency tests then measured how the participants had developed in L2 English. The three different areas in the test were reading and listening comprehension and vocabulary. Previous studies before this one had shown positive connections between L2 proficiency and playing video games, particularly in vocabulary. These previous studies had also noted differences between genders with boys out-performing girls in certain areas of the language, such as expanding vocabulary. Additionally it was emphasized that these benefits regarding language learning and playing video games were most notable when acquired at a young age (Sylvén and Sundqvist 2012: 308-309).

The results in the study showed that the participants engaged in extramural English activities in variable amounts. Individual variation (SD) was 7.9 with values of EE varying all the way from 0 to 41.8 hours per week. There were also differences between genders with boys spending 10.6 hours per week as opposed to 8.4 hours by girls. Playing digital games was the most common of these EE activities. Other common activities were watching TV, listening to music, watching films and using the internet.

When the study tried to find links between SLA and video gaming it divided the participants into three different groups based on the amount they played. The three groups were called non-gamers, moderate gamers and frequent gamers. Boys were found somewhat evenly in all three groups while girls were mainly included in non-gamers and moderate gamers as only a few girls played enough to be included

in frequent gamers. The participants of the third group, frequent gamers, were much more likely to have learned some of their English skills outside of school.

In the English proficiency tests included in the study the results became increasingly better depending on how much the participant played video games. The frequent gamers clearly fared the best with moderate gamers and non-gamers behind them respectively. One of the more interesting findings in the study was the question whether the participant sometimes spoke English in their spare time, with their family or friends, for example. To this question more than half of the participants (53%) responded positively. Moderate gamers did also speak a considerable amount of English (42%) but the non-gamers much less so (21%).

All in all in the study it was clearly evident that playing video games had beneficially affected the participants' English learning as the division to the three different groups and their test scores showed. It was emphasized, however, that the findings in the study should not be overgeneralized as the study did not take into account different learning styles or the participants' previous L2 proficiency levels. Also some of the differences between genders could be explained by the types of video games they played.

Another study emphasizing the experiences of the participants was conducted by Teittinen (2017). Her study was, similarly to ours, about finding connections between video games and language learning, English in particular. Teittinen's (2017: 25-26) study aimed to find out what kind of vocabulary the participants learned while playing video games and how useful they perceived it to be. It was also studied whether the participant's gender affected the views of language acquisition via playing video games.

The participants in the study were young adults, namely university students. This was because they were viewed as being somewhat competent in English. Also they had finished studying English in previous school levels, including elementary school, secondary school and then either upper secondary or vocational school. It was

reasoned that since most of the language acquisition done via playing video games was during a more active phase of language learning, such as during secondary school, the participants would have acquired most of the vocabulary during that time period (Teittinen 2017: 26-27).

The study was conducted through a questionnaire, which included both open-ended and closed with Likert scale questions. All in all, the questionnaire included 17 questions. There were a total of 120 answers to the questionnaire, 119 of which were used. The age of the participants ranged from 14 to 41, although most of them were in the mid-20s, which was the study's target group. Due to the large amount of answers the data was mainly analyzed quantitatively (Teittinen 2017: 27-31).

There were differences in results between genders regarding the playing times. Male participants played more often and for longer periods of time compared to their female counterparts. However, the vast majority of the participants did actually play for notable periods of time. Only 8% of the female participants never played video games and only 1% of the male participants played video games less often than once a year. Also the age at which male participants started playing video games was lower compared to their female counterparts, which means that boys tend to experiment with video games earlier than girls. However, both often start playing video games at a young age. Regarding different video game genres male and female participants favoured mostly the same ones with action/adventure games being at the top with 93% and 72% of male and female participants playing them respectively. Major differences were found in mobile games of which 28% of males and 56% of females played. Another divisive video game genre was sports games, of which 33% of males played while only 12% of females played those.

In the study a total of 58 of 120 participants shared their views on learning English by playing video games, of which 56 answers were used. Of these 28 male and 19 female participants felt that playing in foreign language had a greatly positive effect on one's language learning. Even those participants that did not feel playing video games had a benefit on their language acquisition stated that they do believe gaming

facilitates language learning. Only two male and three female participants felt that playing video games is not that important for one's language acquisition. In their case they felt that other extramural activities, such as watching television, were more beneficial in their language learning. In total the vast majority felt that there was a strong connection between playing video games and language acquisition and also had personal experiences on the matter.

The participants felt that the most beneficial video game genre for language acquisition was role playing games with 78% of males and 48% females choosing them. This was considered to be due to the very nature of role playing games as they require a high degree of involvement from the players ranging all the way from character creation and then interacting with the game world and potentially other players. This then leads to the player being at least on some level attached to their character, as was discussed in section 2.2.2 of the present study. It was also noted that since the players spend a great deal of time with the role playing game they receive a lot of authentic English input and repetition with regularity, which both benefit one's language acquisition (Teittinen 2017: 62).

The study concluded that video games do have remarkable potential in language learning and teaching. Their utilization in teaching would be useful. This, however, can potentially pose several challenges, such as finding games that work well with certain ages and that are also suitable for use in schools.

Eskelinen (2019) conducted a study that focused more on the language learning aspects single-player games tend to provide. Focus was on the players' experiences while gaming. The study also intended to find out how single-player games motivate the players, what kind of games are the best for language learning, what different varieties the players acquire when gaming and how the players actually use the different language learning opportunities in games.

The study was conducted via interviews that were structured by utilizing five themes from which the questions were drawn: backgrounds, gaming, language learning,

grammar and learning from games. The interviews were semi-structured, meaning that when answering the questions it was possible for the participants to elaborate further. Nearly all the same questions were asked of each participant. The length of the interviews ranged from 30 to 70 minutes (Eskelinen 2019: 43-44).

There were seven participants in total. The participants were all young adults (university students) ranging from 20 to 28 years old. Only one of the participants was female while the other six were male. The study's target group was the age range of 18-28, as people of those ages have learned English since primary school and would still be able to have a certain amount of experience relative to the experience of learning English at school. All of the participants had broader than average language experience as they had studied other languages in addition to Finnish, English or Swedish, the most common one being German (Eskelinen 2019: 44-47).

Five of the participants began playing video games between the ages 3-6, while the other two began playing between 7-10. Six of the participants started playing video games in English nearly immediately while one played in Finnish until secondary school. The participants' playtime ranged from 6 to 25 hours per week depending on how busy they were due to school work, for instance. The main reasons for playing were relaxation and entertainment. However, other reasons for gaming also included other aspects of video games, such as stories and competition (Eskelinen 2019: 47).

Some of the key findings in the study were that some players utilize video games for honing their language skills. This was especially evident when the participants that had studied German in some capacity all played video games at least sometimes this way. Participants also emphasized that utilizing English was necessary in order to progress in video games. This was due to the need to understand what was required of the player in various tasks and quests while playing. It was also noted that even though video games do utilize various non-verbal means of guidance, most do instruct the player in text form. Regarding the different language varieties the participants described the game language to be really versatile. British and American

English was found in various different situations, such as American variety if the game's events happened in the United States and British variety if the game had a historical context. On the other hand, it was mentioned that if the game character was either Russian or Chinese, for instance, they used a very stereotypical variety of English (Eskelinen 2019: 50-52).

According to the participants, there were certain differences between single-player and multiplayer games (Eskelinen 2019: 61-63). Four of the participants felt that they had little opportunity to use their productive English skills while playing video games. This was due to them playing single-player games that often do not provide such opportunities. On the other hand, the participants felt that single-player games instead help in learning English passively. This was something of an opposite situation in multiplayer games, however, as the participants felt that actively engaging in language use opportunities that video games provide in multiplayer game modes promote active English learning. This was due to the presence of various means of communication, like chat windows, through which the players could engage verbally with each other. In the present study, MMORPGs should provide opportunities for both passive and active English learning, as they do have both single and multiplayer components to them.

Regarding motivation all of the participants felt that video games are a motivating factor to language learning. For example, if they were not able to advance in the game they had to continually learn more English in order to have the necessary language tools to get through the game's challenges. The participants additionally compared their learning experiences to learning from school books. According to them, learning from the books was seen as obligatory and tedious while playing video games was voluntary and hooking as an activity. Participants also felt that in order to fully enjoy the video game's story and narrative one must be able to have as good English skills as possible. This was seen as the second important factor to motivation. As discussed above, MMORPGs include various sources of motivation to players that can all potentially enhance one's language learning (Eskelinen 2019: 64-65).

Some of the notable points of relevance between these previous studies and present study are found in studies conducted by Erkkilä (2017), Suh et al. (2010) and Sylvén and Sundqvist (2012). First, even though Erkkilä's study covers a multitude of game genres and is not focused on any particular one, it is still relevant to our study, since it examines learning English through video games. Second, Erkkilä's study was also conducted in Finland, so two different sets of local data can then possibly be compared. Third, a major focus is on the participants' own personal experiences and how they themselves perceive them. Our study, due to the diary format, which we adapted from Sylvén and Sundqvist (2012), can possibly provide additional insight to where these players' experiences come from in particular. Fourth, the participants are free to provide their own feelings regarding video games, with MMORPGs as the main focus, and language learning and whether they feel the effect of playing is beneficial to one in this instance and if it is then how. Suh et al. (2010) had an approach that is quite closely related to our study as well. However, as they studied MMORPG-based instruction in elementary education, their focus was in formal education, whereas the present study focuses on informal learning instead. They conducted their study in Korea, which is also an interesting comparison to the Finnish context. Finally, Sylvén and Sundqvist (2012) utilized a diary as a data collection method, which we later adapted to the present study. We found this method to be unique in its way of providing introspective, learner-centric data.

All of the previous studies discussed above have approached the topic of learning language from video games from various different research angles and background variables. One such variable is utilizing participants of different age groups, which might have a substantial effect on the results of the study. For example, the learners' age and better cognitive skills could help them trace the effect of certain factors on their language learning, such as video games (Teittinen 2017: 26). In some studies, such as those conducted by Erkkilä (2017) and Eskelinen (2019), the participants were in high school or university, whereas Sylvén and Sundqvist (2012) and Suh et al. (2010) had elementary school students as participants. An example of the difference in research angles would be the evaluation of learning in the study: Sylvén

and Sundqvist, as well as Suh et al. examined the participants' proficiency with a formal exam, while Eskelinen approached the students with an interview instead. As such some of the studies focused mainly on the participants' own experiences while others tested language learning from video games more concretely.

Previous studies generally agree that playing video games has a positive impact on one's language learning and video games provide a great deal of excellent input to the player. Studies, such as Erkkilä (2017) also found out that generally playing for longer periods of time has an increasingly beneficial effect on language learning. Additionally, as mentioned above, Teittinen (2017) found that RPGs as a game genre seems to be the most beneficial one for language learning. However, as none of the above studies concentrate on the topic of interactions in detail, it would be beneficial to further study what kind of interactions the players actually engage in while playing and how exactly do these interactions facilitate language learning. The present study aims to target this gap while focusing on the MMORPG genre in particular. Furthermore, we wish to scrutinize the students' own experiences on language learning rather than utilize formal testing to examine their proficiency.

3 PRESENT STUDY

In this chapter, we will specify the aims of our study and our research questions, as well as both our data collection and analysis methods.

3.1 Aims of the study

As exemplified by the previous chapter, there is not a great deal of research about MMORPGs as a learning tool from the learner's point of view, especially utilizing an approach like ours. In the present study, we focused on the different learning situations and interactions that occur while playing MMORPGs, and on whether or not they truly facilitate language learning. Lastly, we aimed to investigate the participants' views about learning languages through playing MMORPGs and examined their implications.

Our study focuses explicitly on the points of view of the learners, as their perspectives can dramatically differ from those of an English teacher, which could also be part of the reason why MMORPGs are not necessarily very widely recognized or implemented as plausible learning aids in the curriculum. While educational games have recently been somewhat recognized as learning resources even inside the classroom (Calvo-Ferrer 2017: 264), MMORPGs are mostly left untouched in that context.

Despite their lack of influence in formal learning, MMORPGs are extremely popular among students due to their highly interactive and diverse gameplay, along with the internal motivation they awaken (Hou 2012: 1225). We aim to find out what it is that makes MMORPGs special as a form of informal learning, and what their strengths and possible weaknesses might be from the learners' perspectives, as teachers can often be quite detached from such activities. It is possible that the perspective of the learners could also help with the designing of authentic learning materials in the

future, especially if teachers can innovate a way of utilizing MMORPGs in their teaching directly.

Our research questions are as follows:

1. What kinds of interactions and other possible language learning situations do the students encounter while playing MMORPGs?
2. How do these interactions facilitate language learning?
3. What are the students' perspectives on language learning via MMORPGs in general?

In order to answer these questions, first, we studied some background factors of the participants, such as age, gender and the games they played for the duration of the study. Afterwards, we proceeded to analyze the diaries they had written (more information on the diaries in section 3.2.3) regarding their actions and interactions in-game, and lastly, examined their answers to some open-ended questions regarding language learning via MMORPGs.

3.2 Data collection and analysis

In this section, we will explain the methods we used to collect and analyze our data, as well as introduce the participants of the study.

3.2.1 Participants

Finding participants for a study like ours proved challenging but a sufficient number was eventually recruited via various student email lists, for instance. Thus, the participants of the study are of different ages, and have very different backgrounds. However, we specifically chose participants that were at least young adults, as it is more likely that they are at a level of metacognition where they are able to process their own learning, and think about the reasons and factors behind it, as opposed to younger learners, who are yet to mature in that respect. Moreover, at this age it is

likely that the participants are able to interact more actively in the games due to their higher proficiency, rather than assume a very passive role, which might yield rather few language learning situations. It is also presumable that at a younger age participants would be less motivated to provide adequate data for a study such as the present one. Many of the participants who initially signed up unfortunately quit without turning in their diaries. Naturally, we are aware of the fact that because some of the participants know us on a personal level and because we are active gamers ourselves, it may affect their diary entries and thus hinder the reliability of this study.

Initially a total of six participants were recruited, but as one of them failed to turn in the agreed materials, the final number of participants was five. Also, one of the participants regrettably turned in his diary unfinished, with only three of the seven sessions complete. However, as our study is of qualitative nature, we do not believe that the number of participants would have a significant impact on the results of the study, as long as we have at least five in total.

The background factors of the participants are as shown in Table 1 below. Our sample size of five participants consists of two female and three male participants. This allows us to analyze the gender differences with a little more reliability, even though it is not our focus in this study.

Participant	Age	Gender	Played games
1	21	Female	Black Desert Online
2	25	Male	RuneScape
3	28	Male	RuneScape
4	26	Male	Guild Wars 2, Black Desert Online, Grand Theft Auto V (FiveM-mod)
5	20	Female	Star Wars The Old Republic

Table 1: Background information about the participants.

3.2.2 Participant's language skills and gaming motivation

To further explore what kinds of backgrounds and interests our participants had, they were asked about their English proficiency and gaming motivation. These were seen as possible aids in analyzing, or at least theorizing, whether or not the following two factors, proficiency and interests, have any connection to learning English while playing.

Even though all of the participants were between 20 to 30 years old there were major differences in their English skill levels. These differences ranged from being capable of communicating verbally only “somehow” to feeling close to native speaker levels of English proficiency.

Participant 1 felt like her English skill level was good. She mentioned that she uses the language daily in various different forms, including, but not limited to, playing video games, watching videos on the internet and participating in communication on different internet forums. Additionally, Participant 1 mentioned having English speaking friends with whom she communicates in English.

Participant 2 felt confident in his English skills due to using them on a daily basis at work, while studying and in his free time. In his free time, he tends to watch videos, play games and follow other types of English content as well.

Participant 3 was the only one who was hesitant about calling himself very proficient in English: he stated that he could somehow express himself orally, but mostly excels at writing and reading comprehension.

Participant 4 viewed his English skill level to be good. He stated that he understood both written and spoken English easily. He gave a couple of examples of these, namely news articles and videos on YouTube. On the other hand, he mentioned

having minor problems with scientific articles sometimes due to them having certain words in them that are not included in his vocabulary and therefore, having to often use a dictionary to translate them.

Participant 5 was also very confident in her English skills, as she reports having utilized English daily for years and got the highest possible grade from the matriculation exam.

All in all, four out of five of the participants thought of themselves as proficient or even very proficient in English. This aspect might potentially affect their learning positively, as they are likely to have better metacognitive skills and are perhaps more aware of their own learning. On the other hand, being very confident could also cause them to think that they have already learned everything that there is to learn, resulting in a possible drop in learning gains. MMORPGs, however, should provide multiple ways for one to hone their language skills through various forms of interactions and complex lore texts, even if the initial proficiency of the player is already very high.

There were various different features in MMORPGs that the participants liked. Some of them were similar but there were some notable differences. The participants' preferences ranged from gaining achievements to socializing and exploring the vast worlds that the games offer. Many of the participants mentioned some of the same aspects, but most had some nuances that separated their opinions from the rest. One of the participants even stated that he had no interest in MMORPG-games as of late, but listed some of their best properties nonetheless.

Participant 1 favored the vast range of possibilities in activities the player can do and participate in while playing MMORPGs. The other big aspect of the game genre she found especially appealing was the social side. She really enjoyed cooperating with other players in various different ways MMORPGs can potentially provide.

To Participant 2 the vast amount of different options while playing was the most appealing. He really enjoyed the freedom when it comes to developing one's own character and found it interesting. Participant 2 also liked that one could choose whether to focus on either PvP or PvE content, PvP in this instance meaning battling other players while PvE means farming either experience, money or items alone or doing various quests.

Participant 3 was mostly interested in socializing, communicating with other people and even finding friends that way. This was rather interesting as not only was Participant 3 the one to most emphasize socializing, but he was also the only one not very confident in his English. Additionally, he stated that collecting achievements is also an alluring part of the game mechanics.

Participant 4 found the exploring of vast game worlds and developing one's player character experience and gear wise to be the most appealing aspects of MMORPGs. He added that these types of games are also enjoyable to play together with a friend. Participant 4 also added, however, that he does not feel any special pull towards MMORPGs and he had not played this game genre for some time. For the present study he returned to them, especially the game Guild Wars 2, and continued from where he left off.

Participant 5's answer to this question was the most concise out of all the participants. She found the extensively large world and interesting story that MMORPG games often implement to be the most alluring aspects.

The answers to this question were relevant in the sense that one's interests can possibly reflect one's learning methods as well. For example, Participant 3, who reported to enjoy socializing, is likely to encounter such situations, while someone who enjoys the single player aspects of MMORPGs might not. It was also interesting to see what motivates our participants to play the games, as those same aspects could perhaps be utilized in motivating learners in a formal context as well.

3.2.3 The diary

The sort of data we were trying to gather was mainly about what kind of interactions the players of MMORPGs engage in while gaming. We were additionally interested in how these players view MMORPGs as a platform for learning English based on their own experiences with the genre. As we were looking through different options on how to conduct such a study we came across a diary as a data gathering method. The diary would allow the participants to describe their gaming sessions in great detail and provide adequate amount of data on the various interactions that happen while playing. Therefore we chose to conduct our study through a diary-based questionnaire, inspired by Sylven and Sundqvist (2012), as the approach was rather unique and seemed like a very fruitful way of getting the desired data, meaning exact information about their playstyles, interactions and language use.

The diary (see Appendix 1) we had the participants fill consisted of three parts. The first part covered the background information discussed above, including gender, age and the game played. Additionally, there were two open-ended questions regarding how proficient the participant thought he or she was in English and what he or she liked about MMORPGs, also discussed above.

The second part consisted of seven play sessions, each at least one hour in length, which each have the same questions under them. These questions encapsulated what the participant did while playing in each session, and what kinds of interactions he or she had during them and what kinds of language learning situations he or she encountered. Finally, the participant was asked to describe which of the actions and interactions within the sessions were the most beneficial, and which were the least beneficial for his or her English learning.

The final part of the diary consisted of four open-ended questions regarding MMORPGs as language learning tools in general. The participant was asked how useful they found MMORPGs in learning languages, and was also asked to specify

what aspects of them are helpful in language learning. He or she was also asked whether or not there are some aspects that could potentially be detrimental to language learning, what those were and why they were negative in nature. Finally, the participants had the option to give some free-form feedback on the diary and the study itself.

The diary form was delivered to the participants via email in fall 2019, and they were free to fill it in whenever they pleased. The diary was only delivered to those participants who signed up to fill it, as we did not want any unnecessary uncertainty in who would turn their diary in and who would not. They were given several months (until the end of the year) to fill the form, as we thought it would be reasonable for such a cumbersome and time-consuming task. In order to motivate the participants, three movie tickets were randomly given to three of the five participants who completed the diary.

3.2.4 Data analysis

The reason we settled on qualitative content analysis in general was that we wanted to get precise answers from the participants, something that a quantitative study would not have been able to provide. As Sarajärvi and Tuomi (2017) state, content analysis is especially well-suited for studying human interactions and experiences, which is exactly what our study is striving to accomplish.

After the data in the present study was initially analyzed, it was organized into themes that were continuously reoccurring in the diaries and answers using thematic analysis. Therefore, the data was first grouped and categorized until larger themes became more apparent. Afterwards, the categories were further divided into sub-categories in order to be able to provide more specific analysis. During this phase, the research questions were slightly revised in order to focus only on the relevant data.

The categories we created were chosen to cover all relevant themes and language interactions that appeared in the data. This proved to be rather difficult due to some actions plausibly fitting into multiple different categories, forcing us to revise categories multiple times for them to be more precise. Even after the categorization process was finished, some of the actions still had some elements belonging to many different categories, but we found enough justification to place them in certain categories over the others. The focus in the categories is mainly on the in-game language usage and various language opportunities provided by the game. However, certain third party platforms for interactions also came up in the data and being relevant to the present study they were also included. The ordering of the categories was also quite complicated, as we had to take into account a great deal of factors, such as the interactivity and learning style exemplified in them and the agents that were involved in the activities.

4 FINDINGS

In this chapter, we have categorized and will present the main findings of the study. This includes the diary sessions as well as the participants' answers to the open-ended questions.

4.1 Language usage in the gaming sessions

In this section, we will discuss the results of the study regarding the seven gaming sessions the students had to complete. We decided to divide the participants' experiences into categories, in order to be able to focus on the situations themselves more effectively. The categorization process was done by examining all of the language learning situations and interactions in the participants' answers and determining which defining traits certain experiences shared with each other, as mentioned above in section 3.2.4. The categories are derived from the four skills: listening, speaking, reading and writing, and further determined by which type of input or output they entail and whom they are executed with, if anyone. For example, the second category we will introduce is 'chatting with other players', which is a written, interactive experience that often happens within the in-game chat options, but can also happen through third party chat programs such as Discord or Skype. We will first start examining the categories from verbal player-player interaction, then proceed to scrutinize reading and listening to various texts, NPC interactions, nonverbal interactions, role-playing and finally utilizing third party texts. Our specific categories are listed below. Some examples of the interactions in these categories were briefly discussed in section 2.1.1.

1. Spoken communication through microphone
2. Chatting with other players in writing
3. Reading or listening to other players' chats
4. Reading or listening to longer in-game texts
5. Coincidental reading single words or phrases
6. Reading or listening to autonomous NPC communication
7. Interacting with in-game NPCs
8. Interacting with other players through actions or nonverbal language
9. Role-playing
10. Utilizing MMORPG-related third party texts

Note: Some of our participants utilize vocabulary that is specific to video games and we have provided a list for such words and their meanings in Appendix 2.

4.1.1 Spoken communication with other players through microphone

In addition to the traditional messaging, it is also possible to communicate through spoken means when playing MMORPGs. Usually, this happens through a third-party-program, such as Discord, Skype or some other chatting programs, but sometimes can be available as an option in the main game as well. In the present study, we divided the participants' spoken chatting engagements into four different categories that emerged from our data, depending on the purpose of the chat. These categories are **concrete instructions, theoretical strategizing, fulfilling a gameplay purpose** and **idle chat**. Spoken communication is not necessarily as learner-friendly as written chatting due to the material not being easily reviewable, but is certainly crucial to learning pronunciation as well as pacing in speech. Additionally, it is possible for players to ask each other to repeat a sentence, should there be any misinterpretation or mishearing. Regrettably, due to the specifications of the examples the participants provided about their spoken chats being somewhat vague and often lacking in detail, as well as the fact that not all of our participants utilized a microphone at all, some of our categories are covered by the same single

example. We also briefly mention role-playing, as some examples were difficult to place into any other category, though it will be covered in its own section later.

Participant 3 was the only one to have an example for the first three categories: concrete instructions, theoretical strategizing and fulfilling a gameplay purpose. In addition, all of these were covered largely by the same example; Participant 3 was trying to defeat a boss with his friends and chose to communicate through a microphone in Discord rather than typing in-game, as the boss they were trying to defeat was fast enough where typing became fairly impractical and difficult. There were two different occasions where Participant 3 was defeating a boss with his friends, the first of which covers the categories of concrete instructions and fulfilling a gameplay purpose. The category of concrete instructions includes both giving and receiving instructions that are meant to be directly obeyed to gain a desired effect. During the first boss defeating session, he only had one friend with him, and was in a call with him on Discord. The participant's friend was the one 'tanking' the hits while Participant 3 was supporting him with healing. In this case, the friend was giving the participant concrete instructions on how to act to defeat the boss, such as telling him to provide healing at a certain moment. This also counts as fulfilling a gameplay purpose, as just by saying what he wants, he was able to get the support he needed in order to defeat the boss. By fulfilling a purpose, we mean that the act of chatting by itself is accomplishing something in-game, such as using the chat to sell items by advertising.

Theoretical strategizing entails two or more players discussing in-game strategies or gameplay mechanics in general. The example about theoretical strategizing is from the second time Participant 3 was defeating a boss while speaking on Discord with two of his friends. In this case, while also idle chatting, they were discussing some strategies for defeating the boss, such as which weapons to use in which order. Participant 3 stated that he was first utilizing the in-game chat to accomplish this, but later switched to Discord.

Participant 2 engaged in some idle chat during his gaming sessions. By idle chat we mean chatting that does not fulfill any particular in-game purpose, but rather acts as a form of entertainment or relates to a discussion about non-game topics. This idle chat happened when the participant's friend, utilizing his own avatar, travelled to see the participant's avatar in the game RuneScape. The two felt easier to communicate by speaking as opposed to typing by utilizing Discord. The participant specified that he used some in-game terms while talking. It was not specified if the participant communicated only in English or whether Finnish was involved. However, it is somewhat likely that English was used at least to some degree in this interaction since in-game terms, that are generally always in English, were involved and mentioned.

The case of Participant 4 was different from the others as he was playing on a role-playing server in GTA V by utilizing the FiveM game modification that allows for more role-playing elements. Therefore, the interactions can carry completely different meanings and weight. As the participant had loaded into the game he had a spoken interaction when someone ran past him. This stranger insulted the participant by saying something unspecified as he passed the participant by. However, this was seemingly done in good humour as the participant mentioned to just having replied "nice". The participant had another spoken interaction while on this server when he came across another player whose character was laying on the ground. This second stranger was, according to the participant, a kid who was screaming for help into his or her microphone. The participant stated that he did not want to listen to the noise so he said to the screaming player that he will not help, laughed and continued on his way. Depending on the interpretation, both of these examples could fit in the category of idle chat, but arguably could also fit into the category of fulfilling a gameplay purpose, if role-playing can be counted as such. However, due to the rather vague specifications of the circumstances, we chose to handle these as separate examples. All in all, the spoken discussions were mostly performed through a third-party program such as Discord, as not all MMORPGs allow in-game voice chat, with the exception of the role-playing server mentioned above. Spoken communication was thought to be more convenient for chatting over

typing whilst doing something intensive in-game. This could potentially lead to even more effective learning, as the participants talk about what they see on the screen and have to make the others understand as well, in order for strategizing to work, for example.

4.1.2 Chatting with other players

Typing in the in-game chat has generally been the main way of communicating in video games with multiple players. This is still true in MMORPGs where communication between players can be even more emphasized as chatting is often encouraged or even required in order to advance through the game's content, as discussed above. Chatting with other players can also happen on other platforms, such as the game's forums, the stream chat of the game or other chat programs like Discord, for instance. It is a very convenient tool for learning, as the messages stay on the screen and they can be reviewed at any time, providing the player sufficient time to process them. Much like spoken chatting, this can also be utilized to fulfill the same purposes and had similar examples in our data. As such, we utilized the same four categories introduced in the previous section: **concrete instructions**, **theoretical strategizing**, **fulfilling a gameplay purpose** and **idle chat**. It is also worth noting that we consider emoticons to be a part of chatting and not nonverbal language, as they have to be typed into the chat box like regular messages. None of our participants specifically reported utilizing emoticons, however.

The first of the four categories is concrete instructions. One of these cases emerged during Participant 4's gaming sessions when he was trying to solve a jumping puzzle. Jumping puzzles are one element of gameplay in the MMORPG Guild Wars 2 that require the player to utilize their platforming skills, which means the ability to navigate the game's various platforms, such as different ledges, in order to navigate correctly to the end. Solving a jumping puzzle often rewards the player with either an achievement, a chest containing loot or even both. These are often considered quite difficult to get through. Participant 4 was trying to help another completely random player through a jumping puzzle in order to get to the top of a tower. The participant

provided a screenshot of the situation, in which the participant's player character was in the middle of the shot, standing on a platform with a speech bubble above him telling the other player to jump there. He even led the way for the other player by example. According to the participant, however, the other player did not follow his instructions and after watching the other player fail several times consecutively he continued forward. Participant 3 received concrete instructions in the MMORPG RuneScape when he asked which relic he should choose. The relics are powerful in-game buffs that players can unlock with League Points. The participant said that he had to acquire a certain amount of these points in a tournament in order to be able to obtain one of these relics.

Participant 3 was also involved in the second of the chatting categories, theoretical strategizing, in the MMORPG RuneScape. Participant 3 started playing a game mode called Twisted Leagues, which is a game mode in the main game that differs in several ways from the base game, with restrictions to trade between players and visiting different areas. The participant felt like he needed some help in order to play the game mode properly so he engaged in discussion with other players playing the same game mode on various different platforms: in-game chat possibilities, the game's forums and stream chat while watching someone else play the game mode. Participant 3 also engaged in theoretical strategizing when he discussed boss fight strategies with his friends, which included discussing which weapons should be used, how they should be used and the order of their usage. Some of the strategizing he did with his friends could arguably also belong into the third category, fulfilling a gameplay purpose, as it was done while trying to defeat the boss in question.

The third of the chatting categories, fulfilling a gameplay purpose, was evident in Participant 3's gaming session in which he partook in a minigame in RuneScape. In the minigame that Participant 3 played, the player cuts down tree roots and throws them into fire in order to reduce the enemy boss' hit points. The participant explained that due to the cooperative nature of the minigame he talked a lot to other players in order to get through the challenge. He discussed, for example, boss fight strategies

and what works best with them utilizing written in-game chatting options. Additionally the participant's chatting was fulfilling a gameplay purpose when he was fighting one RuneScape's bosses, Saradomin boss Commander Zilyana, along with his two Egyptian friends. According to the participant, they discussed how to engage the boss successfully. He also mentioned that it was much easier to, for example, ask for healing when he was talking to his friend through a microphone rather than by typing.

Participants 2 and 3 engaged in the most casual of the chatting categories, idle chat. In Participant 2's first gaming session, he was talking with his friend through Discord while training his woodcutting skill. Woodcutting in itself is not very interactive, as it mostly consists of merely clicking on a tree and proceeding to the next one when the first falls. Hence, Participant 2 was able to concentrate on talking with his friend, who also added him to his or her clan chat, an in-game chatting channel that is usable through the chatbox, which Participant 2 continued to utilize throughout the sessions. Regrettably, Participant 2 did not elaborate on the contents of the discussions, so they will be left unanalyzed. Participant 3, on the other hand, was involved in idle chat several times during his gaming sessions. These included discussing politics and a friend's military service abroad, for instance. This idle chat oftentimes happened during other activities that were not too challenging making chatting and actually playing at the same time possible. In conclusion, typed chatting was very common, but somewhat taxing in certain situations, which require a great deal of attention. However, the same functions, as the categories imply, could be executed via both typed and spoken chatting. Therefore, the same benefits for learning also can be perceived to some effect, although typed chatting might not be as effective in situations where there are a great deal of other events the players have to take into account on the screen, such as combat.

4.1.3 Reading or listening to other players' chats

While MMORPGs do often require some linguistic output from the player, they are arguably even more efficient in providing input. The sheer number of chat channels

is rather immense and there are many options to choose from. Usually these options include at least the global chat, general chat, guild or clan chat, private chat and party chat. Global chat can be used to deliver messages all over the entire map, possibly even cross-servers, while general chat only reaches players that are sufficiently close to the chatting player. The more private options are used for communicating with a single person, like private chat, or to certain groups of people like one's guild or party. Reading or listening to other players' chats could also be a very effective learning tool alongside chatting itself, as when one is not participating in the chat itself, it is easier for one to analyze the texts and potentially acquire some new information about the language. In our study, we also make distinctions about the topics of the chat. The three categories we will be utilizing here are **game-related chatting**, **advertisements** and **off-topic chatting**, with off-topic meaning not related to the game. It should also be noted that reading or listening to these messages can be either active or passive: one might be actively following a discussion or looking for an item to buy, or one might just unconsciously read some random messages that overload the screen while doing something else. Additionally, it is possible to read or listen to player discussions via other third-party sites like stream chats, but we will discuss them in further detail in section 4.1.10.

Game-related chatting is a common way of sharing experiences or strategies with other players, and this often occurs in more private chats due to the dialogical nature of such conversations. Hence, it is not necessarily as common to find these types of discussions in the general or global chat, unless someone is asking for advice publicly. However, it is also possible to have such chats in the general or global chat, if one wishes to have an open discussion with more than one non-party player, or if one simply does not care about privacy. As an example, Participant 4, while playing BDO (Black Desert Online), encountered some game-related general chat messages and mentioned actively reading them for entertainment. There were multiple players chatting at once, some with each other and some just openly sharing comments or experiences. One example would be two players chatting about an in-game dungeon called the Imp Cave. Participant 2 also spent time reading some clan chat

messages, though their contents were not specified in his diary, and could have also included some messages that fall in the category of advertisements.

Naturally, when engaged in discussions oneself, one usually pays attention to what others in the same discussion say. Participant 3 had an active part in many discussions on several platforms, including third-party platforms like Discord and Twitch. Since many of these discussions were with multiple other players, it is safe to assume that he also read and listened to other players' discussions. Two good examples of this would be the times he talked about minigame strategies, and on another occasion, boss killing strategies, with other players.

With chat windows being as prevalent as they are in MMORPGs, they provide a good platform for various different advertisements and players do utilize them quite frequently. These advertisements are usually related to the game they are posted in, but advertisements related to external factors are not uncommon. The most typical in-game advertisements in chat are related to either clan or guild invitations or selling in-game items. Some MMORPGs provide chat channels reserved for these kinds of announcements while others allow these in general or global chat. There are negatives and positives to both these options: for example, posting a sale advertisement in general chat may reach more people but these people may not be, however, interested in the announcement and will not pay attention. One of the reasons for this is that most players are not actively reading the general chat, unless they are actually looking for something and even then, depending on the MMORPG, may be looking at more specific chat channels.

Participants 1, 2, and 4 were all at least at some point during their gaming sessions reading chat logs or windows and as such were most likely exposed to various advertisements. Participant 1, while doing quests and farming in BDO, was paying attention to the chat box on the side of the screen. She mentioned that it was continuously scrolling due to people chatting very actively. Participant 2, on the other hand, was reading his friend's clan chat in RuneScape, which was used for various types of messages. Additionally the participant was involved in the Grand Exchange, which is an in-game market filled with item sales messages. Participant 4 mentioned

reading the chat in both GW2 (Guild Wars 2) and BDO. The screenshot of GW2's general chat contained a guild recruitment message in a foreign language while BDO's chat log included various different messages consisting of casual chat between players.

In addition to various advertisements the general or global chats in MMORPGs are filled with other kinds of messages, which often include non-game-related messages as well. While MMORPGs can be played solo they are often structured to be social in nature. They provide the players with many possibilities to meet and interact with new people with the chat box being one of them. As the chat is such an easy and accessible way of interacting with others, many take advantage of this opportunity and share their thoughts, opinions or experiences of topics like their daily lives. However, as the players form various communities, such as clans and guilds, they tend to utilize those community chat channels more often. Participant 4 provided multiple screenshots of chat boxes of GW2 and BDO. The messages in the chat boxes were mainly off-topic with the players having fun with each other. One example of these messages was in BDO general chat that simply stated "cats taste funny with curry sauce". He also encountered some use of emoticons, like a player typing 'xD' to express his or her amusement. Though Participant 1 also briefly mentioned looking at the general chat in BDO, her mention of it was quite general, the chat being filled with people discussing with one another. Clan and guild chats are different in the sense that the topic often revolves around the guild members' interests, as the participants in the discussion are limited to the guild members themselves. When Participant 2 was on his friend's RuneScape clan chat channel, the messages were also seemingly off-topic, not necessarily being related to the game itself. As the above analysis concludes, reading other players' chats is a key element in MMORPGs and a very prominent factor in gaining more linguistic input. As there are a huge number of players online at any given time, it is almost impossible to avoid reading at least some of the chats other players have. Naturally, this is even more inevitable if the player wants to interact with the other players.

4.1.4 Reading or listening to longer in-game texts

In MMORPGs it is common to encounter longer stretches of texts in many different contexts. They are implemented in the games to either create further immersion for the players, or in order to give sufficient instructions for advancing in the game. By long stretches of in-game text, we mean texts that are not produced by other players and are longer than two full sentences. These are highly valuable to a player's language learning, as longer, coherent texts have more depth than single phrases, as well as perhaps some cohesive words or phrases that might be absent in shorter texts. Some of the categories, such as NPC dialogues, can overlap with this category as well. We have divided this category into three parts: **instructions**, **immersive texts** and **mixtures of the two**.

Many video game genres, including MMORPGs, often consist of complicated mechanics. This means that in order to successfully navigate the game's various challenges the player must be able to input commands in certain order, which requires knowledge and experience. Therefore, the game often must point the player in the right direction. If the player must solely rely on longer lore-based texts without concrete directions the player might become confused and may even give up on the quest they are trying to complete. Hence, it is greatly beneficial for both the player and the game if the game is able to provide the player with comprehensible instructions. These instructions do not need to be so simple that the player does not have to think at all, as this could lead to breaking the immersion completely. However, the instructions need to be understandable enough for the player not to feel hopeless or lost at any point in the game.

When Participant 4 joined a role-playing server in GTA Vs FiveM-mod he was first met with various instructions on what to do and how to behave while he was visiting and playing. The participant provided a screenshot of them and they seemed to be very precise and direct with telling the player concretely where to go first and how they should begin their journey on the server successfully. Participant 1 on the other

hand came across in-game instructions in BDO when she noticed the possibility to open up a tips section from one side of the screen. This is one way to provide the player with an opportunity to figure out where to go themselves without feeling that the game is being too invasive with all the precise instructions. The player can try to complete various objectives with the current information available to them and if they still feel lost, they can click the tips section open and proceed with the game. Participant 2 also read in-game instructions while playing RuneScape and solving a clue scroll. The participant provided a screenshot of the clue scroll and even though this particular scroll contained only one sentence, the scrolls can and often do contain longer instructions. Therefore, it is very probable that the participant came across longer in-game instructions during his gaming sessions as he was completing these scrolls.

Immersive texts are a necessity in most MMORPGs, as they are the basis of the entire game world. They can appear in the form of NPC dialogue, stories or descriptions available through in-game books, scrolls or even loading screens, for example. The game's lore is often elaborated upon via quests, but at least the background of the main story is usually accessible to all players when starting the game. It is possible for the player to alter the events in the story through interacting with NPCs and making decisions in certain dialogues. Participant 5 exemplified this in SW:TOR (Star Wars: The Old Republic) while progressing through the story quests by both reading and listening to NPC dialogue and choosing the appropriate answers in the 'interaction wheel', which provides the player with multiple choices of what to do. Completing quests is one of the more common ways to encounter immersive texts.

It is not uncommon for the two categories, immersive texts and instructions, to collide. For example, a quest dialogue often at least indirectly tells the player what to do next, while also providing narrative and lore progression. This is the case with many of RuneScape's quests that Participant 2 completed in his sessions, as well as the clue scrolls. The quests in RuneScape often include some lore in the midst of instructions, or might even deliver crucial instructions in a long stretch of lore. As

opposed to the traditional instructions like 'kill 10 enemies', an example of this type of instruction would be this: 'The mountain is bristling with enemies, each of which guards it with extreme care. You need to be careful while looking for the key, as it holds great value for them too.' Some of the clues in the scrolls might only contain a tip that entirely relies on the game's lore, requiring the player some previous knowledge. Quests might be the most common way of mixing the two categories, as they are usually the main way of progressing in a game's story, but also very heavily instructive in nature. All in all, longer in-game texts provide immersion to MMORPGs and further boost the amount of input that players are provided with. They give more detailed instructions that are necessary for quest completion and understanding what is happening on the screen. As comprehension is required for progression, the players are forced to utilize language and perhaps even learn some new aspects of it for future situations.

4.1.5 Coincidental reading of single words or phrases

Not all reading in MMORPGs is interactive, and some of it might even be completely unnoticed by the players. The game is designed to keep players up to date with what is happening around them and what they themselves are doing at any given time. Therefore, it is common for each item, NPC, action and place to have their own specific texts that show when they are interacted with. Reading these texts can often be an unconscious process for a seasoned player, as they have seen the same messages thousands of times before. Especially when starting the game, there is also a huge number of options to select and adjust to one's liking from different customization menus. While this type of reading is not necessarily the most effective for communication, it is a very efficient method of enhancing one's vocabulary without even noticing it, as it is one of the most common types of reading one encounters in a MMORPG. We divided these types of reading into four sub-categories: **object and action descriptions**, **repetitive messages**, **announcements** and **menus**.

Object and action descriptions are everywhere in MMORPGs: hovering the cursor on an item will display its name, and sometimes a short description of what it is and what it can be used for. The same applies for almost any object in the game, be it NPCs, places or even other players. This is a type of reading that a player cannot avoid, as even holding the cursor on empty land might display a 'walk here' message. It is almost certain that all of the participants encountered this type of reading, even though many of them did not specifically mention it, as it can be highly unconscious. However, some of the participants, such as Participant 1, actually made conscious use of the descriptions while learning what properties certain items had in BDO. This shows how the descriptions can be very useful for newer players. It is also especially useful for in-game shopping, as shops also have a description for every item they sell. Participant 5 also made use of this feature while buying the new eighth anniversary wares that a SW:TOR vendor had for sale.

In addition to descriptions, there are a number of other repetitive messages that appear in certain circumstances while playing MMORPGs. As the player needs to know what happens in the game around him or her at all times, many games have adopted a system which automatically displays a text on the screen when a certain action is performed or when a certain event happens. Naturally, this can get rather repetitive as MMORPGs often require the player to keep performing the same action dozens, if not hundreds or even thousands of times. A very good example of this is given by Participants 2 and 3, who both trained their Woodcutting skill in RuneScape. Training this skill involves the player chopping down trees and acquiring their logs until their inventory is full or until there are no more trees to chop down. Everytime a player gets a pile of logs in their inventory, the chat box displays a message: 'You get some oak logs.' As getting a Woodcutting level could require hundreds of these logs, the player would in turn get to see the message just as many times.

Similarly to other games MMORPGs contain certain types of pop-up messages that come up while playing. These announcements serve as a notification to the player and they appear for various different reasons. For example, the player character's

Health Points (HP) might be running low and the game tries to warn the player about the character possibly dying if not appropriate action is taken to remedy the situation. These kinds of announcements make it easier for the player to play the game and pay attention to the gameplay.

Participant 1 came across these kinds of announcements and notifications while playing BDO. The game warned her about nearby hostile NPCs that may pose a threat if the player was to continue forward. This happened when her player character was about to leave one of the games safe hubs into the wilds outside. Participants 2, 3 and 5 also encountered notifications, this time during level ups. Participants 2 and 3 were leveling up their Woodcutting skill in RS while Participant 5 was leveling her player characters themselves in SW:TOR.

Game option menus in video games are often simplistic in nature. These include various settings for video and graphic options, for instance, and they provide the player with a chance to adjust the game to look, sound and play the way that is most comfortable for them. These menus are simplistic because they are meant to be an easy and fast way to adjust the game. Menu options are usually short, ranging from a single word to a few words in length. Video games often come with default settings that are based on the player's computer but many still adjust certain settings, such as sound volume.

Participant 4 mentioned adjusting game settings while playing BDO. He changed graphics options at the start of the game session, likely in order to make his computer run the game optimally. Having the game perform as well as possible is often quite important as this can directly affect how well one performs in the game. If the game has significant time delays on one's hardware, it can make the gameplay much more difficult. In brief, reading single words or phrases is inevitable in MMORPGs as they appear nearly everywhere on the screen where the player looks. They provide a great deal of input despite their minor role in game progression, though the player most likely will not notice their overall value to his or her learning.

4.1.6 Reading or listening to autonomous NPC communication

In addition to the traditional interactions between a NPC and a player, MMORPGs often employ NPCs to talk to one another in order to create further immersion in the game. This is also done to deliver some of the game's lore to the player in a natural way, and to avoid unnecessary amounts of texts that the player would most likely skip through. Messages can be either audible or written, and usually the audible messages are also provided in written form in case the player is playing without any sounds. The NPCs often also react to a player being close, and might greet the player with a simple 'hello' or 'welcome'. These messages by the NPCs cannot be answered by the player, but serve the purpose of making the NPCs feel less robotic. Sometimes, these types of NPC-NPC interactions can act as a trigger or a storyline to some quest or event, in which case the player can sometimes participate in the discussion or change its path. Quest cutscenes also often employ NPC discussions in advancing the story, usually either as an introduction or an indicator that the player has accomplished something in the quest. Similar to regular NPC interaction, this type of communication is also typically quite different from player communication. However, while NPC interactions are usually sought by the players for completing quests or other objectives, encountering these NPC-NPC communications can be involuntary and might not even always be consciously processed, potentially leading to a different kind of learning. We have divided the autonomous NPC communication into two categories: **single phrases** and **full discussions**.

Single phrases in this case are usually either repetitive comments that NPCs say to create more immersion, or comments that occur as a reaction to a player doing or accomplishing something nearby. The comments can be aimed at the player, at another NPC, or the NPC can just be talking to themselves. Whether or not all players can hear or read the comments depends entirely on the situation. Some comments might only be available during quests and may contain spoilers for the plotline, which makes them only detectable by the player completing the quest. In

some games, this is not taken into account, however. Participant 5 had two examples of encountering these simple phrases. The first one happened when she was completing a quest and encountered some enemies, which shouted repetitive comments upon noticing the player and becoming hostile. After completing another quest, there was also a NPC that thanked her for completing the quest. Participant 2 did not mention encountering these types of messages, but RuneScape has multiple areas where these messages are displayed, and while traversing those areas, it is likely he did encounter some of them.

Longer NPC discussions can play various different roles in MMORPGs. When NPC villagers talk amongst themselves, ask each other how they are doing and wish them well, the player will feel more immersed in the game world. When these villagers' communication imitates that of the non-virtual world the game feels increasingly more alive. This way the game world will not necessarily feel empty even if there are no other players present. Another possible function of these NPC discussions is that they can move the game's story forward and point the player character in the right direction. When the same villagers discuss something that is making them feel uneasy or if something has recently happened in a certain part of their village the player has an easier time completing their quest without needing the game to directly tell the player where to go and what to do.

Participant 4 encountered NPCs discussing amongst themselves during his gaming sessions and he provided a screenshot of the situation. He was questing in the MMORPG GW2 when he came across a situation in which two NPCs were fighting and then a third NPC, seemingly an authority figure, breaks the fight. The player character was present in the situation and not just spectating from a distance. Participant 5, on the other hand, faced NPC discussions in the MMORPG SW:TOR when she was questing with one of her player characters. As the alien races in the game speak languages other than English sometimes the player has to read the subtitles instead of just listening in order to understand what is being communicated. This may even be necessary in some of the game's quests as various instructions may be given in alien language. In sum, reading or listening to autonomous NPC

communication can happen without the player realizing it. Although they are made mostly for immersive purposes, the discussions can also be a part of a storyline or other types of plot. Similarly to reading single words or phrases, this can lead to unconscious learning while the player is concentrating on the gameplay itself. Moreover, the language used by NPCs is usually different from the language used by other players, which also provides some variance in language input.

4.1.7 Interacting with in-game NPCs

In most MMORPGs, NPCs (non-player characters) often play an important role in story-telling and many of the services that are available in-game. They can be a source of information, items, quests or even experience points through combat. There are also NPCs that only serve the function of decoration, such as villagers that can be interacted with only to make the game feel more immersive of an experience. Discussions with them can either be in written form in the in-game chatbox, voiced by a voice actor, or even both. However, unlike player avatars, NPCs' interactions are usually fixed and pre-programmed according to what the player chooses to say or do during the discussion. While fundamentally different from any other form of interaction in MMORPGs, NPCs can be a great source of input and sometimes even require output from a player. They also tend to use different kinds of language than players do, which gives the players different kinds of input than they might normally receive. As an example, certain NPC discussions could be written in a very formal, grammatically correct way. In our study, we divided NPC interactions into six categories: **informational interaction**, **narrative interaction**, **service interaction**, **idle chat**, **combat** and finally **miscellaneous interaction**.

The first category we are going to focus on in this section is informational interaction. This category encapsulates all types of NPC interaction that is meant to give new information about the game to the player. For example, NPCs in quests or events often give players instructions on how to complete said quest or event, as well as more detailed, concrete instructions on what to do to reach certain objectives inside it. Other than quests or events, tutorial NPCs often give some tips to newer players

to get them acquainted with the game's mechanics and can even provide them with some information that can be useful later on. While informational interactions can often share the function of progressing in the narrative, it is not always the case. Especially tutorial NPCs are often separated from the story and serve the sole purpose of teaching the player some of the key mechanics.

Participants 2 and 4 both engaged in completing some quests and events, in which informational NPC interaction was present. Participant 4, while playing Guild Wars 2, encountered a new area in the map and decided to ask NPCs what had happened. After hearing what the NPCs told him to do, he proceeded to go examine the map by himself. He also did some quests in Black Desert Online, in which he reported to talk to some NPCs that gave him information on how to complete the quests in question. Participant 2, while completing some of the beginner quests in RuneScape, reported that it was useful to not only read the in-game quest guide while completing them, but also to read the dialogues as they provide essential instructions towards completion, as well as a deeper understanding of the plot.

RPGs generally always include a story and MMORPGs are no different. Like in RPGs, story in the MMORPGs is progressed through various different quests that players complete during their gaming. These quests often provide the players with an opportunity for narrative interaction and for deciding what their story will be like. For example, in some MMORPGs the players are provided with the possibility to choose either a good or an evil side, with some providing alternatives for anything in between. These choices are manifested in in-game discussions, for instance, where the player chooses what their character will say in that particular situation. This greatly enhances player involvement and immersion in the game. The story can be told in various ways. These include static discussions, text slides, fully animated cutscenes or various events that happen while being fully integrated in the gameplay with no additional transition, such as an NPC captain leading a charge.

Participants 1, 2, 4 and 5 engaged in questing and therefore, in narrative interaction. Unfortunately, the NPC interactions themselves were not described in much detail,

and as such we can only report what the participants stated in their diaries. Participant 1 followed the story closely in the MMORPG BDO during her gaming sessions. It was her main focus and she followed the in-game instructions closely. She also mentioned that during the story it was possible for her to cooperate with other players that were seemingly as far as her in story completion. Participant 2 attempted quests in RuneScape. He mentioned that his new character had not yet done the beginner quests the game provides so he began completing them. He also stated that in order to be as efficient as possible in this he started multiple of these quests at the same time. Later on during his last diary gaming sessions he reported finishing several of them. Participant 4 on the other hand did story quests in both GW2 and BDO. In GW2 he was interacting heavily with NPCs in order to find out what had happened to the game map while in BDO he was involved in more movie-like cutscenes that progress the story in addition to talking with NPCs. Participant 5 was involved in narrative interaction in SW:TOR while doing Mayhem quests and Heroic missions. Mayhem quest is a more combat-oriented arena quest while Heroic missions are self-contained experiences as quests in that they are not directly involved in the game's main story. Heroic missions include cutscenes during which the player character makes choices that affect the mission's outcome later, with consequences that are not always immediately apparent.

Service interactions in MMORGs are among the most important interactions, as often the game becomes rather unplayable without them. Some examples of these include storage, shops, event exchange NPCs and participation in certain events or mini-games. In some cases, even interacting with another player in a certain way can be locked behind a NPC interaction. For example, fighting another player may require a special combat-zone, which might only be accessible via talking to a certain NPC. Participant 2, while playing RuneScape, often reported utilizing some of the storage and exchange functions of the game, such as banking and the Grand Exchange, which is a tool used for buying and selling items between players. To be able to utilize these services, the player needs to interact with a certain NPC, in this case a banker or a Grand Exchange clerk. They can either be interacted with through talking with them via the chatbox, choosing the alternatives available, or by

skipping the conversation using the right-click options. These types of discussions with NPCs are usually static, and always provide the same outcome regardless of the number of times the service is utilized. They also have a very limited number of chat options for the player, which are usually static as well. A very simple example of this would be a player preparing to utilize the bank and talking to a bank clerk. Given the options 'yes' and 'no', whether or not he or she wants to utilize the bank, the player clicks 'yes' and is redirected to the banking service.

As an example of service interaction, Participant 5 reported utilizing many different event shops in SW:TOR. In this case, the NPC shops had a great deal of limited-time event goods for sale, which the participant was interested in buying. However, as the buying process of large quantities of items is apparently a rather tedious process, she reported using a macro (an automatic third-party program that can perform simple tasks for the player) to buy 999 pieces of every event item. In some games, utilizing macros is against the terms of use, and can be an offense that warrants banning one's account. Unfortunately, utilizing a macro to do anything in MMORPGs can strip the game of most of its linguistic value, as macros work without the player's input and can even function without the player being present at all. Participant 1 also reported having seen different shops that sold extra materials for in-game usage, but did not specify if she utilized them or not, which leaves us with little to analyze.

As MMORPGs are indeed role-playing games, immersion is one of the key factors in player experience. One of the ways to get immersed in the gameworld is to interact with one of the numerous NPCs that inhabit the game's areas. This sort of idle chat, however, does not necessarily require any specific goal other than to see how the characters are faring in their everyday activities. Many NPCs in MMORPGs have certain daily schedules and rhythms according to which they act during discussions. This is often done to make the game feel more realistic for the players. Sometimes the NPCs are capable of chatting with players and have something predetermined to say.

Participants 4 and 5 engaged in this sort of idle chatting with the NPCs during their gaming sessions. Participant 4 greeted and talked to various NPCs in the MMORPGs GW2 and BDO. This was almost always at the beginning of the gaming sessions, shortly after loading into the gameworld. This is quite typical as this is one of the few quick ways to increase immersion before starting different activities. However, Participant 5's experience in idle chatting was quite different. Due to the fact that the MMORPG SW:TOR includes many different alien races that talk in various different languages makes idle chatting with them especially interesting. Luckily for the players enabling subtitles is possible in the in-game options menu.

A key aspect in most MMORPGs is players leveling their characters. One of the most typical key components to getting the experience points needed to advance in character levels is through combat experience. This is most often done through fighting and defeating hostile NPCs. These NPCs are often marked red as opposed to green (friendly) or yellow (neutral) to warn the player that if they were to get too close these characters would attack the player. In addition to leveling the player character hostile NPCs are fought in order to progress in various quests or to acquire certain items. Some forms of combat are also typical in various in-game events or endgame content that often have enemies so powerful that multiple players are often required to take them down. Combat requires the player often to auto-attack, meaning right-clicking the hostile for the character to strike the enemy without needing additional input, to use skills and sometimes to use items. Due to the often hectic nature of the combat the player must be able to process large amounts of language input in quick succession in order to be victorious. In some cases, enemies might, for example, have some messages that appear before they launch their attack, such as: "The monster is preparing to breathe fire", giving the player time to react. This hectic nature is further exemplified by Participant 3's fight against the boss Commander Zilyana, where he stated it was difficult to type instructions to his peers due to having to dodge Zilyana's attacks simultaneously.

Participants 1,3 and 5 all specifically mention fighting hostile NPCs during their gaming sessions. According to Participant 1, this was often needed in order to

advance the game's story (BDO). The requirement to defeat a certain number of specific enemies, such as "Defeat Great Boars 0/10" with the numbers indicating how many enemies the player has defeated and how many they should defeat to continue forward. Participant 3, on the other hand, specified that he went to fight one of the boss NPCs in RuneScape. Boss NPCs are often some of the most difficult combat encounters in MMORPGs with some even requiring a great deal of preparation. This specific situation is discussed in greater detail in section 4.1.2. Participant 5's goal differed from 1 and 3 in that she was trying to get her player character to a high enough level to be able to access Imperial Fleet, one of the game's hubs, in the MMORPG SW:TOR. In order to do this Participant 5 defeated a number of enemies to earn enough skill points to advance in levels. Additionally the participant initiated and completed Heroic missions during her gaming sessions. Heroic missions differ from ordinary ones in that they are of higher difficulty and are often designed for two or more players. These missions involve combat that is also more challenging than on the standard worlds of the game.

Some MMORPGs can include other types of NPC interactions, which do not necessarily belong to any of the categories above. These kinds of miscellaneous interactions could theoretically be almost anything, such as giving an NPC a gift, abusing them without initiating combat, or performing some kind of action in front of them, causing them to react. For example, Participant 5 reported spending a great deal of time and effort to hug wookies, which are a species of furry aliens, in different areas of the game SW:TOR. When a sufficient number of wookies have been hugged, the player can unlock an achievement. Participant 5 also assigned certain NPCs to her strongholds, which makes them more easily accessible for her over the NPCs' usual locations. A third, more malicious example of miscellaneous interactions comes from Participant 3, who reported stealing cakes from a NPC to get some food in order to replenish his hitpoints. Stealing, or as RuneScape verbalizes it, thieving, is a skill that can be trained and is used to gain either items or money from NPCs. In conclusion, interacting with NPCs can be almost as complex, and sometimes even more complex than interacting with other players due to large dialogue trees, for instance. Different NPCs provide different interacting options and

are often necessary for progressing in the game, be it through shops, quests or combat.

4.1.8 Interacting with other players through actions or nonverbal language

Interacting in MMORPGs does not necessarily always require spoken or written language. There are various other ways of interacting with other players, and it is even possible to use nonverbal communication, such as gestures. Many of the following categories might also include some verbal additions, but can often be executed without them. We divided this category into four sub-categories, which are as follows: **emotes**, **exchanging items**, **cooperation with other players** and **tutoring**. Even though nonverbal language is not necessarily directly relevant to our point of view in this study, it can be and often is utilized alongside other means of communication, which we found too prominent in the data to simply ignore. Additionally, it may affect kinesthetic learners in the way that their actions are made into words by the game itself, as well as commented on by other players. For example, when performing a dance emote, the game chatbox might display a message such as: "Player X started dancing." In the case of tutoring, actions and nonverbal language not only make instructions clearer, but also give concrete meanings to words that the other player is using.

Several of the participants utilized various emotes while playing. These emotes are certain animations that can be triggered at will, and generally differ from game to game. They are a means to convey some message, like shaking one's avatar's head, for instance. Some games also include animations that are similar to but do not count as emotes as they are not meant for communication. One way to trigger these is to complete certain actions, like crafting items, for instance. In this context, emotes do not include emoticons like smiley faces or other written options, as they are discussed separately in section 4.1.2.

Participant 2 utilized emotes when communicating and interacting with his friend in RuneScape. The participant provided a screenshot of this in which the participant's

player character is next to his friend's while doing a "zombie walk" emote and his friends doing one of the game's dance emotes. The participant's friend then asked him where he had acquired this emote that was one of the rarer ones. Participant 2 then replied that the emote was possible to be acquired during one of the game's Halloween events. Seasonal emotes are typical in games as they encourage players to log on to have a chance to acquire one. In Participant 5's gaming sessions, she utilized emotes in the MMORPG SW:TOR during a seasonal winter event, in which it was possible to throw snowballs at other players. The participant mentioned using an emote when finally getting hit with a snowball after throwing them at other players. The avatar already performs an automatic emote of getting hit with a snowball, but the participant chose to emphasize this reaction by performing a manual emote of her own. Participant 1 mentioned a more practical use for emotes to interact in-game in BDO. She needed to communicate fast with other players and thought emotes to be a quick and easy way to convey a message to others. They do not require too much effort and are mostly recognized by all players, with some exceptions. For example, nodding is a fairly quick and universal way of signalling agreement.

Another form of interacting with other players through actions is exchanging items, or as most MMORPGs refer to it, trading. To understand this phenomenon, some degree of explanation is required. Trading is often quite a key component of many MMORPGs, as tradable items' prices mostly consist of both the rarity and the need of the items, creating the game's own economy that the players can actively change, either unknowingly or on purpose. Some players even make trading their main source of income, such as buying items at a low price and selling them at a higher price. Naturally, this sort of playstyle requires quite a great deal of interaction with other players, especially if there is no automated selling function in the game. It is also possible to exchange items to other items, or even give items or money for another player free of charge. Trading, as a game function, can either be executed through manually looking for a buyer through the in-game chat and clicking the trade option, or by using an automated sell function some games have to either auction or leave the items for sale for a certain price.

Participant 2, while playing RuneScape, had collected some oak logs from his woodcutting session, and sought to sell them for some extra income. To achieve this, instead of utilizing the regular trade function of the game, he chose to use the 'grand exchange', which is a function that lets players leave some items for sale for a certain price, and sells them to the person that offers the most money. Likewise, if one were to buy items using the function, it sells the buyer the cheapest possible option, regardless of the buying price that was set. This is a rather indirect way of interacting with other players, as players cannot see each other or communicate with each other while using this function. Furthermore, they cannot even see each other's names. Participant 1 also traded some items while playing Black Desert Online. However, instead of using an automatic function, she manually traded with other players. Unfortunately, she did not describe the process in too much detail, so the contents of the trades will be left unknown.

MMORPGs as games often include difficult and challenging content. In order for the player to advance through these challenges either a great deal of game knowledge or mastery of game mechanics is required. Some cases even require both but this is mostly true when talking about endgame content. For example, certain puzzles or fights require the player to press buttons and rotate their skills in correct order and this order is often very strict. Failing to do so inevitably leads to defeat. One way to pass this knowledge or teach some of the game mechanics is by showing and leading by example, or tutoring. This is often accompanied by chatting with the other player, either by spoken or written means. Participant 4 had an example situation of this during one of his gaming sessions when he engaged in tutoring in GW2. In this sequence the participant tried to help another player to pass one of the game's challenging jumping puzzles, though the other player still failed to accomplish this. This example is described in greater detail in section 4.1.2. Additionally Participant 3 engaged in a firemaking minigame called Wintertodt while playing RS, in which players must utilize skills rather than combat. The players are required to cooperate in order to successfully complete the challenge. While nonverbal communication and interaction with other players might not be as necessary as verbal interaction often

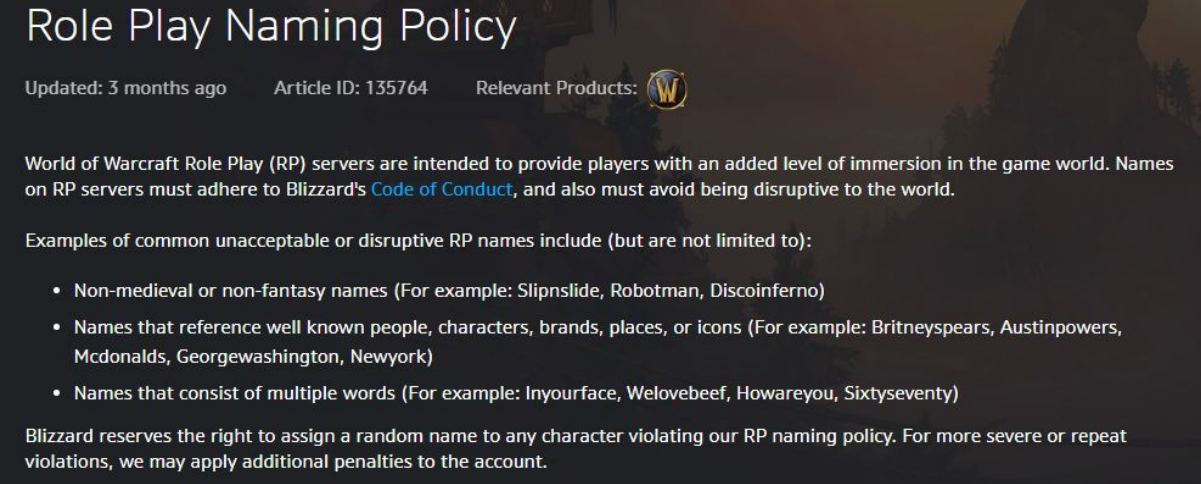
is, a large variety of actions can be executed through them alone. They are also very useful in conjunction with verbal communication and can make it more diverse.

4.1.9 Role-playing


In addition to traditional role-playing that is already included in the name MMORPG, the games often have specific role-playing servers available, which allow an even more immersive experience for the player. In this type of playstyle, the player chooses to make a persona for his or her character, and strives to act according to that persona. Making every decision in-game according to one's character's preferences instead of one's own preferences is what makes these types of servers differ from others. However, it is also common for players to project themselves through their characters, and sometimes even try to achieve their ideal self in-game, while unable to do so in the non-virtual world. This is discussed in greater detail in section 2.2.2. Some servers have strict rules as to what kind of behavior is allowed. While the degree of role-playing can vary from server to server, breaking character can be frowned upon, especially if done publicly. It is common for these servers to include an option to chat with other players through a microphone, but there are also servers that are purely based on typing. Role-playing is quite a different category from the others in our study in that it can utilize all the other forms of language use mentioned in other categories. However, role-playing is a very unique way of using language, and does not directly fit in any other category. It portrays the player as someone else than themselves, which results in peculiar choices of words and other linguistic preferences. Depending on the character he or she is portraying, the player might use or encounter language that is normally atypical for him or her, resulting in differences in learning as opposed to regular play. In this section, we decided to divide role-playing into two different types: in-game role-playing and role-playing through interaction with other players. Additionally, we will be covering an example of rules that are enforced in WoW (World of Warcraft) role-playing servers.

While there are multiple rules that are encouraged in role-playing servers, the one that is the most enforced in many MMORPGs is the player's name. In WoW, there

are explicit rulings as to what kinds of names are disallowed (as shown below by Blizzard Support naming policy), in order to avoid disruption of the immersion. Choosing an unfit name could result in automatic randomization of the name, or in some extreme cases even muting or banning the player. These types of rules are usually shown to the player when starting to play on a role-playing server. This was also the case with Participant 4, who needed to read the rules of the GTA (Grand Theft Auto) V FiveM role-playing server before he was allowed on the server. There were also some instructions and tips on how to start the game and how different decisions can affect the gameplay.



Role Play Naming Policy

Updated: 3 months ago Article ID: 135764 Relevant Products: 

World of Warcraft Role Play (RP) servers are intended to provide players with an added level of immersion in the game world. Names on RP servers must adhere to Blizzard's [Code of Conduct](#), and also must avoid being disruptive to the world.

Examples of common unacceptable or disruptive RP names include (but are not limited to):

- Non-medieval or non-fantasy names (For example: Slipnslide, Robotman, Discoinferno)
- Names that reference well known people, characters, brands, places, or icons (For example: Britneyspears, Austinpowers, Mcdonalds, Georgewashington, Newyork)
- Names that consist of multiple words (For example: Inyourface, Welovebeef, Howareyou, Sixtyseventy)

Blizzard reserves the right to assign a random name to any character violating our RP naming policy. For more severe or repeat violations, we may apply additional penalties to the account.

The actions the player character takes in-game are often pre-determined by the player during character creation phase. As the player comes up with an idea of a character, what the character and their motives are like, the way the character will behave in-game becomes increasingly apparent. These in-game actions may be similar to what the players themselves would take in the same situation but not necessarily, as the character the player makes can be completely different from their usual self. For example, the character may be such a righteous knight that simply must always intervene when they see something evil happening even though it would not always be beneficial for them to do so. How strict the players are with their characters regarding role-playing varies from player to player. However, at least on specific role-playing servers in MMORPGs, the vast majority of players tend to stay

as true to their character as possible. Participant 4 also made his decisions based on what their player character would do in GTA V FiveM-mod. As the character needed to get a job in order to proceed on the role-playing server, he chose to be a forester. For this to be possible the character first needed to get his driver's license. After successfully acquiring the license the character's work assignments included driving timber. However, Participant 4 grew weary of the game after his character ran out of fuel.

How the player character interacts with other player characters is also often pre-determined already during character creation. This is similar to the player character's actions, as these interactions are also based on the character itself and depend on how far the player wants to take the role-playing. This can potentially shape the interactions between players a great deal and take communication to completely different and interesting directions. This of course depends on how willing the players are to role-play. If players stay as true as possible to their characters in these interactions the role-play could lead to an immersive and rewarding gaming experience. Participant 4 engaged in role-playing interactions during his GTA V FiveM-mod gaming session when he came across other players. In his first interaction another player ran past him and insulted the participant's character. The participant on the other hand simply acknowledged this by saying "nice" as the insult was said in good humor. Another player interaction happened when the participant came across a player who was laying on the ground screaming for help. The participant stated that since the noise was overbearing due to the other player's poor microphone, he had said that he would not help and then left the area.

All in all, role-playing is a very unique way to play MMORPGs and offers immersion like no other. It can affect the interactions between players and lead to both the use and learning of very specialized registers and vocabulary. Additionally, adopting a role of a certain character can help the player save face if there happens to be a grammatical mistake, for instance. This means that the player does not need to be as careful with their language and can utilize it without hesitation, making it quite lucrative for generating output.

4.1.10 Utilizing MMORPG-related third party texts

In addition to the in-game guides, which are often lacking in detail, players tend to seek tips and guidance from other sources, such as forums or wiki pages. Most of the third party informational websites regarding MMORPGs are run by players of the game itself. It is also possible for the game developers to have provided the base for such use, as is the case with RuneScape's forums, for example. In essence, these websites are utilized when the in-game instructions simply are not enough to help the player progress. Especially common examples of third party text utilization are quest or boss killing guides, both of which are often used to deal with the more difficult content of the game. Other players' experiences and advice are often taken into account before tackling these types of content, as failing could result in considerable loss of progress or even losing previously acquired items upon death. As in-game guides are very rarely too specific with their instructions, a considerable level of time, effort and resources might be required to complete a quest or a boss fight without any third party help, and this is something many players cannot afford or simply seek an easy way out. While they are not a part of the actual game, they certainly contribute a great deal to the language input of an average MMORPG player and appeared in our data quite frequently, which is why they are worth discussing. It is also important to note that these texts are usually written by the players for other players, so the language encountered in them can vary depending on the formality of the source. We decided to divide these third party texts into three different sub-categories: **written texts**, **audiovisual texts** and finally **interactions with other members of the community**, which is the only sub-category that requires output as well.

Written third party texts provide an excellent source for various in-game information for players. They are often assembled into an easily accessible format, an example of which are various game wiki pages that are usually written by the players themselves. For example, if a player wants to find out how a certain in-game item is obtained they can easily do so by writing the item's name into the wiki's search bar

and then studying the page that opens up. This page has been written by other players who have themselves acquired the said item and then edited by the same players into an easily understandable and concise piece of text. Other examples of third party game texts include various guides that can, for example, help players navigate the game's quests more easily and efficiently. These are common especially if the quests are complicated or if there is a chance the player can miss an item, for instance, by playing without having the needed knowledge beforehand.

Two of the participants referred to a third party guide during their gaming sessions. Participant 4 studied a third party class guide, of which he provided a screenshot, when playing BDO. The guide informed the participant about their character class, Striker, by describing its playstyle, strengths, weaknesses and how it generally performs. This guide pointed the participant in the right direction and told him what to expect when playing this class. Participant 2, on the other hand, referred to a third party game wiki site when playing RS. He reported referring to the quest guides the site provided when attempting and later completing some quests. The participant mentioned needing to attempt a certain quest again due to him not reading the instructions carefully enough the first time.

Audiovisual texts can in certain situations provide an even better source of information. A video can provide an easy to follow example on how to perform certain actions or complete specific quests in-game. If the player needs to find a certain item that is hidden in a very specific, hard to find place, for instance, the player can quickly and easily refer to a video on where to find this item. Another way to receive this audiovisual third party input is through watching someone else play the game through a streaming platform. This provides the player an opportunity to view example gameplay in real time and additionally to interact with the streamer and his or her viewers by asking any potential questions.

Participant 4 watched guides in video format while playing BDO. The video guides were about his character class, Striker. The game's combat mechanics are quite complicated and due to not having played the game for some time the participant felt

he needed guidance on how to play his character effectively and execute certain actions in particular. He did this almost as soon as he started playing as he felt he was lost when it came to the game mechanics.

There are multiple ways of interacting with the other members of the gaming community outside of the game itself. These include, but are not limited to, stream chats, different chatting programs like Discord and the game's forums. Naturally, it is also possible to interact with other players in-game, but in order to reach the most players possible and to reliably receive answers to one's questions, this is not always the best possible option. Participant 3 was the only participant who interacted with other players outside of the game itself. He reported to have watched multiple RuneScape streams on Twitch.tv, a popular streaming site, while talking in the stream chat, as well as talking to his friends on Discord. None of our participants actually posted anything on the official forums of the games they played, but Participant 3 did report reading instructions there in order to understand a new game mode that had recently been published, which he had also watched some streams of. In conclusion, while third-party texts are not a part of the MMORPGs themselves, they are certainly a very prominent component of the player base. They are a way for the players to connect outside of the game and share information and experiences with each other, which is something the game itself is often unable to provide.

So far, in section 4.1 we have categorized and presented the different types of language learning situations that emerged from our data. These categories and the order of presentation were based on the four skills and the nature of these language learning situations. In section 4.2, we will continue to analyze the participants' answers to the open-ended questions of the diary, regarding their opinions on the most and least useful aspects of MMORPGs and ponder their potential implications for learning.

4.2 MMORPGs as a platform for learning English

All of the participants in our study agreed that MMORPGs were indeed useful for language learning in general, for three general reasons that emerged in the first open-ended question of the diary. These reasons include the diversity of the language encountered, the multitude of opportunities to utilize language especially interactively and finally the motivation to learn that MMORPGs provide. In this section, we will proceed to analyze the participants' answers to the open-ended questions of the study regarding which aspects of MMORPGs are the most useful and which are less useful or harmful for language learning. We will also further explore the three reasons mentioned above, which will be further divided into six more precise reasons in section 4.2.1. We will also consider the possible implications of their diary answers overall regarding learning English.

First, however, it is useful to consider the implied conceptions that the participants as gamers might have about learning English. Everyone has some underlying conceptions about language learning, whether they are proven by research or not. They can be acquired by reading about them or from one's own experience, and it is important to pay attention to them, as they can often affect one's actions and thoughts unconsciously. Gaming usually happens during one's pastime, making it an autonomous activity. For gamers it is important they do not feel obligated to play, which was also discussed in section 2.2.1. Additionally, as discussed in chapter 2.3, this autonomy is one of the key factors in facilitating language learning, specifically L2 learning (Chik 2014: 97). Another typical concept of gamers is that playing video games is useful for expanding one's vocabulary, which is supported by several studies, such as Sylvén and Sundqvist (2012), as well as Sundqvist and Wikström (2015). One possible explanation for this is that gamers receive such a large amount of input while gaming that they encounter vast amounts of different words, which they then gradually acquire over the course of playing. Finally, getting to practice one's language use is one aspect of games the players feel is generally useful in regards to language learning. This was evident in Erkkilä's (2017: 76) study, when in

one example response a participant mentioned being able to practice her English skills daily through gaming. She felt that she was both able to understand the language encountered and that she was generally understood when interacting with other players. MMORPGs generally provide excellent tools for interacting with other players and therefore, should be great platforms for practicing one's language skills. These are some of the conceptions that are likely to emerge in the answers.

4.2.1 Aspects of MMORPGs that are the most useful for learning English

Whereas there were three main reasons for why MMORPGs in general were found to be useful for learning, the aspects that participants found useful for themselves personally were more detailed. There were six aspects the participants described in total with some of the participants sharing the same opinions. These aspects include well-written instructions, grammatical correctness, repetition, in-game language content, interaction with other players and the motivation to progress. All of these were also somehow exemplified in their gaming sessions, which makes the analysis even more fruitful. It is interesting to take note of what each participant answered to this question, as it might reflect their preferred learning methods. For example, someone who thought interaction with other players to be the most fruitful is likely to learn a great deal through it as opposed to other means, such as reading. However, it is also important to note that this may not always be the case, as learning through playing MMORPGs can often be unconscious, leaving the players oblivious to what they learned the most from.

As video games are designed to challenge the player they are seldom too easy in order to keep the player engaged. This was discussed in greater detail in section 2.3. In order for the player to be able to progress in the game they need to understand the instructions. As these instructions are not always in the player's own mother tongue, but rather in English, they need to be able to translate the instructions in some capacity at least. Participants 3 and 4 emphasized the need to understand game rules and instructions and felt that it motivates one to learn English. If the players are enjoying themselves they will want to continue and progress further in

the game and therefore, will continually need to translate new instructions. To be understood, of course, requires the instructions to be well-written and understandable for the player. If the player is told what to do in too complicated a manner, even translating the instructions completely may not be enough. Participant 2 in particular praised the MMORPG RuneScape for this, as he stated the game's instructions to be clear enough to not require consulting an outside source. Participant 1 on the other hand noted how helpful visual clues can be in understanding the instructions. She gave an example of this in BDO, as in the game there were arrows pointing in the right direction to help the players that were lost. This is also a very good example of MMORPGs employing different kinds of learning techniques, as in addition to auditive and kinesthetic learning methods, the game also provides the player with some visual aids such as the arrows.

Grammar was another aspect that many of the participants considered both useful and harmful in certain situations. Whereas the in-game content, such as quests and instructions, probably offers quite flawless sentences without any grammatical errors, player-player interactions can often facilitate errors, as players are naturally not always native speakers. Mohamed, Goh, and Eliza (2004: 84) argue that correct grammar and its instruction is important in learning different aspects of language, such as writing. Therefore, MMORPGs alone could be considered lacking as a platform for learning language. However, Participant 1 argues that even though there are multiple instances of errors, the overall outcome of language learning in MMORPGs is still very positive. While the NPCs can provide the player with perfectly grammatical sentences, other players can certainly do so too, and even possibly correct any mistakes another player might make. An example Participant 5 mentions is the very common mistake of mixing the words 'your' and 'you're'. While some players might often use these words incorrectly, in most cases the game itself has proficient translators or writers who don't make the same mistake. When Participant 4 was playing in the role-playing server of GTA V, the instructions included the correct use of the word 'your', for instance. By being critical towards player-made texts and focusing largely on the game's own texts when learning grammar, it is

possible to keep grammatical errors minimal and by receiving feedback, even correct past mistakes.

Several participants mentioned the usefulness of repetition in language learning. This is generally accepted to be beneficial to one's language learning (Gass, S., Mackey, A., Alvarez-Torres, M. J., and Fernández-García, M. 1999, Duff 2000). As one receives the same input many times enough the information will gradually become continuously more ingrained in the learner's mind. Participant 4 emphasized that hearing the same voice lines several times in MMORPGs helps one remember certain phrases and aspects of language better. This is certainly very prominent in MMORPGs, as gaining experience often requires the player to repeat the same processes multiple times.

On the other hand, Participant 5 felt that 'grinding' in MMORPGs, meaning performing the same actions repetitively, was not necessarily beneficial to language learning. She felt that while grinding one does not use much if any English at all and therefore, it was not particularly helpful in language learning. This is in accordance with Duff (2000: 135), who states that in certain situations, such as the recipient being overloaded from all the previous work, the repetition may have certain side effects that conflict with the teacher's goals. However, we would argue that the language use in repetitive tasks is largely an unconscious process, which happens without the player even noticing. While one might not necessarily notice that they are continuously encountering language while performing a simple task, it is often the case in MMORPGs, as almost everything one does is reported in some way and the options to perform those tasks are also usually in written form. It is quite likely that if a player completes the same task thousands of times, he or she will remember the words that are being utilized in that task for a longer period of time. An example of this would be Participant 2's training of his Woodcutting skill in section 4.1.5, during which the message 'You got some oak logs' appeared on the screen every time he obtained the item. Assuming he did this hundreds or thousands of times during his training, the word 'oak logs' is probably very familiar to him.

The participants mentioned that the language in video games is generally grammatically correct and therefore, beneficial to one's language learning. As the various in-game texts, such as quest and mission descriptions, are carefully written and clearly expressed, they can offer some examples of correct English. This was also evident in the various screenshots of the games the participants provided as the in-game texts in them were seemingly grammatically impeccable. Participant 2 in particular emphasized how well written instructions, story and various descriptions are useful complete texts for players to learn language from. The precise instructions, for example, were especially important to him in section 4.1.4 when he was completing clue scrolls and quests in RuneScape. Similar types of text were also brought up by Participant 5 who also mentioned the benefit of clear voice acting. Listening to how English is actually spoken by native speakers and learning the intonation and pronunciation that way can greatly enhance one's communication capabilities and make it easier for others to understand them. Practically all of the participants' findings were in accordance with Krashen's (1992) Input hypothesis (CI). According to Krashen (1992: 409), language is acquired by understanding incoming messages. Additionally the recipient must be open to the input, which then in itself must contain a language item the recipient has not acquired yet. This is known as the theory of comprehensible input and it is well applicable here. As the player is really focused on the game they enjoy, they are susceptible to this comprehensible input, which can then potentially facilitate language learning. All in all the participants seemed to agree as a whole that in-game texts provide an effective means for learning English.

Due to the highly social nature of MMORPGs, the vast majority of players inevitably interact with other players during their gaming sessions providing them with plenty of authentic input, as discussed earlier in section 2.1.3. Most participants felt that interacting with other players is beneficial to one's language learning. Participant 4 in particular stated that these player to player interactions provide a great opportunity to really use and practice the language. The players are able to interact with others through various ways, including both spoken and written chat, both of which were utilized by the participants. Participant 3, for example, interacted through voice

communication with his foreign friends during his gaming sessions. The participant enjoyed the interaction even though he was not confident about his spoken English skills. Participant 4, on the other hand, utilized both the spoken and written chat when he interacted with strangers during his gaming sessions. GTA V even provided the participant with an opportunity to communicate through voice chat without needing third-party programs. These interactions were discussed in greater detail in sections 4.1.1 and 4.1.2. Participant 1 also mentioned the use of the game's forums for discussion. These can potentially provide an excellent platform for connecting with other players in a way different from the instant messaging used in-game. Forums utilize comment threads, which are answered by other players at their leisure and thus, getting answers to a question could take hours. These thoughts were in accordance with Rama et al. (2012: 335) who argue that MMORPGs can act as spaces for language use and interacting with native speakers allowing both time for reflection and a large margin of error.

Even though the English used online by players may not always be grammatically correct, it still has the potential to facilitate language learning. According to Krashen's (1992: 409-410) output hypotheses the interaction between two people can be beneficial in language learning even if grammatical mistakes are made. The Output plus correction hypothesis (OC) states that if one tries new language items in communication, makes a mistake and then receives negative feedback it adjusts one's understanding of the grammatical rule or the word's meaning or spelling, for instance. One possible form of this negative feedback can be in the form of explicit correction, which is typical in online gaming communities where one's spelling is quite often corrected. Additionally, according to the Comprehensible output hypothesis (CO) by Krashen (1992: 410), if one's communication partner has trouble in understanding, one adjusts their output by trying another version of the rule or language item. This behavior is also typical in online gaming communities, where if one player is misunderstood they often attempt to adjust what they are saying in order to successfully convey their message. In sum, as the language encountered online varies in quality, it can be said that while all interaction with other players is not necessarily strictly beneficial to one's language learning. However, as we have

established, the benefits still largely outweigh the disadvantages as the players cooperate to understand each other.

In addition to the game's instructions requiring English to progress, language skills are essential in many other areas of the game as well. Participant 4 mentions the interest he attains to a game's world and its lore, which are both extremely crucial to how immersive a game can be. Without sufficient skills in English, it is often nearly impossible to understand the story and lore of MMORPGs, as they are mostly in written form. If a player wishes to familiarize himself or herself with them, he or she needs to either learn enough English to be able to read them or find a translated version, which can often be quite scarce. While some games do provide subtitles in different languages, they are also beneficial for learning when hearing the story in English at the same time. As seen in section 4.1.6, when Participant 4 was playing Guild Wars 2, he was acquainted with NPCs that were discussing amongst each other. The dialogue provided some immersion to the player, and would have been difficult to understand without being proficient to at least some degree in English. Being able to understand the game's story and lore is motivating for both learning and playing, which makes it very rewarding for the player overall.

Understanding English is not only important for comprehending the story, but also the various terms, items and conversations with other players. Without knowing what a certain item's name is, it is very difficult to determine what it is used for, unless the game provides a summary. This is essential in trading, for example, where another player demands a sum of money for an item. If one does not recognize the item, it can be difficult to make a reasonable offer. Participant 1 reported to have honed her English skills while trading with other players, as she found it was important to know what the other players were giving her in exchange for her own goods. Communication skills are also very important in interacting with other players like this, as it often happens through messages that are also in English. For example, finding an appropriate sales message and haggling with another player is certainly something that requires at least a decent command of the language. Participant 4 also mentions that in situations where progress requires English skills that are

beyond one's capabilities, he or she can resort to using translators or dictionaries in order to find out what a certain piece of text means. This is also a very effective strategy for learning, although the motivation in this case is extrinsic and serves the purpose of progressing rather than acquiring new words.

The process above functions similarly to task-based language learning, in which it is important for the learner to have a goal, in other words a certain outcome to which to work towards. According to Ellis (2003: 9-10), some of the critical characteristics of tasks include a primary focus on meaning, language use in a real-world process, involvement of any of the four language skills, such as reading and a non-linguistic outcome. This applies to the above example, in which Participant 4 mentions the possibility of using a dictionary, for example. If the players come across quest instructions that they do not understand due to not comprehending the meanings of certain words, they can refer to a dictionary and then possibly learn and memorize the meaning. This situation is comparable to task-based language learning, as the player has problems with a certain meaning in a video game, making it a meaning-focused real world process. Their comprehension process also involves reading and the outcome is non-linguistic as the player is then able to progress in the game.

4.2.2 Aspects of MMORPGs that are less useful or harmful for learning English

While most of the interactions in MMORPGs were considered beneficial for language learning, each participant also mentioned something that at least had the potential to affect learning English negatively. Even Participant 1, who stated that every aspect of playing MMORPGs is beneficial for language learning, mentioned some potential risks in her answer. The negative aspects were quite few, so they could be summarized in three simple categories: errors, slang and MMORPG language mixing with the language taught in school. Many of the participants had similar opinions, which we will clarify below.

Most of the participants mentioned errors in their diaries in some form. Errors, especially grammatical errors, can be quite prominent when the majority of players in a MMORPG are usually not native speakers of English. While most of the incorrect language usage originates from the players, it is also possible for some games, especially games with smaller budgets, to have errors in translations as well. Participant 5 mentioned that it is possible to acquire incorrect forms when interacting with other players, if the other players utilize an incorrect form and the player mimics it. She used the examples *your/you're* and *must of/must have* and stated that these are often used incorrectly. Some grammatical errors were also present in one of the chat logs Participant 4 provided in section 4.1.3. If mistakes like these are made too many times, it can be difficult to learn to use the correct form later. It is also possible for this to happen after already learning the correct form, but resorting to the incorrect one upon encountering it frequently enough. The reverse is also possible: when a player, instead of the incorrect form, encounters the correct form frequently enough, the incorrect usage of a certain word or phrase can be diminished. Participant 2, however, while stating that the English in many MMORPG players' linguistic repertoire is not by any means excellent, mentions that it would be difficult to cause any considerable damage to one's proficiency, as most of one's English skills are acquired at school, and moreover at an early age. Whether or not this is the case for most MMORPG players, it is an interesting argument.

No language, however, is necessarily pure. According to Brunstad (2003: 52), all of the different languages have the signs of borrowings from elsewhere. Additionally, many languages are born when different languages contact each other and mix, suggesting the concepts of pure and impure languages to be mere mental constructs. Thus it could be argued that the notion of the English taught in school as being absolutely pure and perfect is unrealistic. Furthermore, in certain situations another form of language can serve the speaker better than the standard variant. One such situation is chatting with other players in online video games, where the players are more accustomed to the slang and can thus potentially understand each other better while utilizing it over standard English.

Players have gradually created terms and phrases for various phenomena in video games. The function of these terms is to quickly and easily describe objects and events and thus relay information to other players, as well as create a sense of community among the ones who understand them. In the present study we have discussed some of the most typical video game vocabulary in Appendix 2. In MMORPGs, slang includes, but is not necessarily limited to, the use of abbreviations such as 'LOL' (laughing out loud), some specific terms exclusive to the MMORPG in question like 'Fally' (the town of Falador in RuneScape), as well as other terms that are more or less universal in every MMORPG, such as the term 'boss' (a stronger monster that has to be defeated in order to gain loot). These forms together with whatever other words players continuously invent result in the vernacular that is known as slang. Several of the participants noted the possible effects the usage of such slang may cause if it is utilized too often, especially in the wrong contexts. This is in accordance with Ortiz de Gortari (2015: 3), who mentions the possibility of players using video game slang for their own amusement and having non-volitional verbal outbursts containing said slang. Participant 2 in particular stated that using slang may hinder the ability to be understood when communicating with those not familiar with it, such as in official contexts, where the use of correct English is encouraged. In official contexts, the use of this kind of slang could be frowned upon, even if the other person understands what the speaker is referring to. Moreover, Participant 3 also mentioned that the use of profanities is exceedingly common in MMORPGs, but can be rather troublesome if utilized elsewhere. However, it is also important to note that the same sort of problems can be traced to every other type of language learning as well: even formal language can be frowned upon if used in a very casual context, and it is an advanced level of language proficiency to be aware of all of these minor nuances in register.

Participant 4 introduced the possibility of gaming affecting one's English learning at school. As he mentions, this can potentially be caused by mixing British and American English, for instance. If only one of these variations is used at a time in school, the player can mix it with the other form that they have often encountered during his or her gaming. A typical example of this is the word *center/centre*. As this

is a common word encountered in gaming and both of these forms are sometimes used, there is a potential risk of using them incorrectly. Mixing British and American expressions does not necessarily cause considerable damage to one's English, but, according to some sources, such as Mohammad (2018: 15), it negatively affects the text's quality. He emphasizes the need to use the variety of English suitable for the target audience. Mixing can also sometimes lead to misunderstandings, especially when words have different meanings in each dialect. An example of this is the word 'chips', meaning french fries in British, and potato chips in American English. Additionally, the various possible errors mentioned above, such as the mixing of *your/you're*, can potentially affect the learnt English if the incorrect form is seen and used too often. However, as the correct forms are in frequent use at school, the risk of using the incorrect form can be somewhat diminished. Using MMORPG slang or other genre-specific terms in school work can also become a problem, as teachers are fairly unlikely to understand the references, unless properly explained. Additionally, schools often encourage the use of standard English, in which case even when fully explained, some forms can cause reduction of points in a test, for example. This is also the case for the mixed registers and profanities discussed above, but teachers are nowadays often rather lenient when it comes to minor details like this and appreciate the effort that the student has made, as long as the overall message is understandable.

All in all many of the participants shared similar views regarding both the positive and negative aspects of language learning in MMORPGs. The participants generally felt that the language already available in the game is almost always useful and a good source of language input. Interacting with other players, a major aspect of MMORPGs, however, has both potential positives and negatives. This is due to the fact that when interacting with other players the input one receives is not necessarily comprised of proper grammar but rather potentially contains mistakes. However, even though these interactions were not thought to be always strictly beneficial for one's language learning, in total positives outweighed the negatives. In the final chapter we will be analyzing and discussing the general trends we saw in the data, reflecting on the present study and considering possible future implications.

5 DISCUSSION AND CONCLUSION

The present study strove to examine how MMORPGs facilitate learning English in a Finnish context. Our data consisted of five diaries written by participants ranging from ages 20 to 28. The data was qualitative in nature and was subjected to qualitative content analysis. In this chapter, in order to answer our research questions, we will proceed to discuss the general trends in our data and the implications that they have as a whole, while also comparing our results with previous studies. We will also reflect on the study itself and how it could be improved, as well as how the topic could be further pursued and the results utilized to their fullest potential. Lastly, we will summarize the overall results of the study and provide a concise conclusion.

5.1 General trends

When looking through the data a few general trends can be clearly seen. One such trend is what makes MMORPGs different compared to other game genres, namely social interaction. Unlike most of the other video game genres social interaction is one of the key components of MMORPGs, and most of them do in fact offer various possibilities for interacting with other people, such as in-game chat boxes or voice channels for spoken communication. Most MMORPGs make it possible to join in some kind of communities, be it guilds or trading groups, for instance. This can possibly prove an excellent platform for practicing one's English skills. Additionally, as Granic et al. (2014: 73) mention, playing games with civic interactions can have a connection to having the same types of interaction in everyday life, further boosting social skills and language learning affordances. Most of the participants noted the effectiveness of using and producing language with other people. Some of the participants interacted with complete strangers, such as Participant 4 in section 4.1.1 when he communicated through microphone in GTA V's FiveM-mod, while others, such as Participant 3 in section 4.1.2 in RuneScape, played and communicated with their friends. All of the participants, even those who interacted less with other people,

felt that MMORPGs have the potential to be especially beneficial for one's language learning.

Several participants felt that a sense of progression is a great source of motivation in gaming and thus, also in language learning. This is in consensus with Suh et al. (2010: 376), who also found that motivation was one of the leading factors that made MMORPGs useful for learning. If the quests, stories and interactions the MMORPG provides are interesting and engaging enough, the player wants to come back for more and progress further in the game. Additionally, interesting games are great in getting the player's attention and forcing them to focus. As Eskelinen (2019: 50-52) also found, at least some degree of English proficiency is required for progression, for the player needs to understand the stories, quests and various instructions. While gaming the players receive many different kinds of English input and they try to translate and understand what the input is about. Therefore, as the player progresses further in the game, so may their English skills. One participant in particular noted how their English skills were still lacking when they were younger and they used to progress through games by trial and error. This is in accordance with Gee's (2005: 35) theory introduced in section 2.3. We can concur with these experiences, having learned a great majority of our English skills and vocabulary through gaming. For us, the extrinsic motivation of achieving in-game goals was more helpful for learning than formal instruction, which we also discussed in-depth in section 2.1.2.

One of the key components in learning, repetition, emerged a few times in the participants' diaries. The participants mentioned that while gaming, the player can receive certain input multiple times consecutively. One of the participants in particular noted how they were to passively pick up aspects of English language while playing just by hearing and reading certain pieces of texts repetitively. Such input can be, for example, various notification messages when acquiring in-game items. This is in accordance with Teittinen (2017: 62), who also reports regular, repetitive and authentic language input to be quite effective for learning said language. One participant was leveling their woodcutting skill in RuneScape, which

requires chopping down wood in large quantities and therefore, seeing the message of having picked up wood many times. This, of course, requires one to play long enough to receive a substantial amount of input. On the other hand, one participant held conflicting opinions regarding the usefulness of repetition. The participant felt that when grinding, meaning doing certain actions repetitively while playing, one does not use much language and therefore, it would not be necessarily beneficial for one's language learning. This provided an interesting new point of view that differs from ours, as the participant most likely did not account for unconscious processing of such input.

Most of the participants noted and discussed the effect of the different types of English language encountered during gaming. While the language in the game put in by the game developers is generally grammatically impeccable, the English used by other players is not always as perfect. Many of the participants felt that the English spoken and written by other players is prone to various mistakes, such as grammatical errors or mixing different varieties of English. While we agree that grammatical mistakes are quite common in online interactions, the reverse is also a possibility. If one does commit a grammatical error it is rather likely that some other player would point out the mistake or even try and fix the error. It is also possible for a player to be utilizing a word incorrectly, but upon seeing others use it correctly change their own usage as well. On the other hand, while mixing varieties like American and British English is often thought to be harmful to one's texts (see e.g. Mohammad 2018), we believe that the two varieties are not necessarily separate from each other in other mixed varieties such as EIL (English as an International Language). EIL prioritizes understanding, and as such it is somewhat unnecessary to worry about the varieties mixing or some minor grammatical errors, as long as the message is still delivered and understood without issue. In EIL, it is emphasized that English is not only owned by the native speakers of the Inner Circle, but is rather an international language that should be available for everyone. Furthermore, it is important for EIL to teach awareness about other varieties of English as well, as opposed to the native ones (Bokhorst-Heng and McKay, 2017: 196-197). As supporters of EIL over the teaching of purely native varieties, we think that mixing

varieties just makes English more diverse and is not a negative aspect of EFL learning. This also makes the learner more sensitive to understand different varieties of English, which is a very beneficial skill to possess in the modern world, where there are countless different varieties that are used in different areas.

Additionally, the game slang, while useful when used in the right context, may actually be harmful when wanting to be understood outside of gaming. This is due to game slang being overly specific in many cases, such as the names for items or places that do not exist in the real world. Furthermore, many slang words used in MMORPGs can mean very different objects in the real world, especially if said words are derived from nicknames, such as the word “boots” referring to an item that increases movement speed in some games, while not necessarily even having anything to do with footwear. Consequently, it is important for a gamer to recognize the difference between a formal and informal register in order to be understood and not confuse his or her discussion partner. This is especially essential in formal contexts, where the situation may not allow reformulation of a certain expression, such as in an essay or a job interview.

All in all, the general consensus seems to be that MMORPGs are a suitable platform for language learning. While some of the aspects discussed above can be potentially harmful, they are in reality quite minor and rarely detrimental. As Participant 1 stated, all interaction and language usage is beneficial for one’s language learning, which we wholeheartedly agree with.

5.2 Reflection on the present study

While our study yielded quite fruitful results that aligned with our presumptions about the topic, it is still a fact that our study’s reliability could be considered quite lacking. The number of participants being only five, as well as one of the participants not fully filling the diary form were unfortunate obstacles that we had to face. Although the study was qualitative in nature, we had hoped to find more than five participants, so

that we could have had more variety in the answers. In addition to this, due to the difficulty of finding the participants, we were inclined to recruit some of our friends and family members to participate, which might have also affected their answers. We had somewhat expected the decline in motivation since our study was quite extensive in the effort it required from the participants, hence offering movie tickets as a reward for completing it. Because of this, however, some of the participants might have had little intrinsic motivation to complete the diary, possibly further affecting their motivation to answer thoroughly.

Also affecting the reliability of our study were the differences between each participant regarding the diary. Due to the voluntary amount of play required (at least one hour per session) to complete the diary, some participants might have played considerably longer amounts of time than others. Some participants might also have divided a longer session into short one-hour-long parts just to diminish the effort, possibly resulting in multiple very similar sessions. We could have, in retrospect, worded the instructions more clearly, so that the sessions could have perhaps included more varied data, though this was not a major issue in the present study. The diary itself was an interesting platform for a qualitative study, and has not been utilized very frequently for this purpose. This added another form of uncertainty to the study, though making it somewhat unique in nature. It would have been fruitful to be able to advise the participants in person regarding filling the diary, so that the participants could have asked all the relevant questions beforehand, if any had happened to arise.

Another typical problem for a self-regulated diary is that not only can the participants choose what to do during their sessions, but they can also choose what to include in the diary. Hence, they may have chosen not to include some interesting aspects of gameplay, for either privacy or various other reasons. For example, a participant might have wanted to only participate in gameplay that is very interactive for the sake of the study, somewhat affecting the overall results, the effect of which is amplified in such a small sample size. Furthermore, the participants' personal preferences are very impactful when the participant chooses what to do in their

gameplay. For example, if a particular participant loves role-playing while others do not, it can result in data where all the instances role-playing are covered by a single participant, which was the case in our study as well.

Overall, the study, having both a low budget and a rather small time-frame, is not as extensive as it could be. There are a multitude of other research angles that could be explored in more detail with a greater number of participants in a larger scale study. However, the study does provide an ample starting point for such efforts, and is quite useful for finding examples of the usefulness of MMORPGs in learning. With more time and a larger budget, as well as a larger pool of participants, we believe the study could be improved tremendously. Furthermore, a number of different angles could be covered in subsequent studies, such as how other games compare to MMORPGs or what other languages could be learned this way. Additionally, changing the study from a qualitative study to a quantitative one might also certainly provide some interesting insight into how MMORPGs affect learning on a larger scale, although the results would be much less precise. Moreover, the present study was enacted strictly in a Finnish context, and it would be fairly fruitful to explore how MMORPG learning compares in other countries, or perhaps even globally.

5.3 Conclusion and future implications

MMORPGs are a hugely popular and expanding genre in the gaming world, and as the games become advanced, so do their mechanics and interactions. For example, the VR equipment that has been developed in the past decade has the potential to revolutionize MMORPGs and possibly even their learning potential as well. Being able to make learning a kinesthetic experience to the point where it is difficult to discern from reality, as well as enabling nonverbal language as a resource for learning is very impressive. This, along with the hugely amplified immersion factor, could be very motivating for many players and students alike. It would be highly interesting to see how different kinds of games, or even just different kinds of MMORPGs, affect learning at different ages, for example.

All in all, the results of our study point towards MMORPGs being a potentially vast resource for English language learning, although they might not be completely free of flaws. They motivate students extrinsically through entertainment and a sense of progression, giving them a great deal of input along with many instances to utilize the language daily. In addition to language use, they also provide the player with chances for social interaction with other players, resulting in authentic input and enhanced learning. While slang and errors might also be present in the utilized language, the overall effect on English learning seems to be overwhelmingly positive.

As to how the results of our study could be utilized, we believe that there are a number of ways they can be useful. First, using them for reference in conducting a larger scale study would arguably be the most effective, as the results of our study by itself can hardly be generalized. However, if one wanted to utilize them as they are, it could be fruitful to consider some of the implications above in teaching. For example, as informal learning is often left unaccounted for in a formal context, exploring MMORPGs and giving students some alternative ways of learning in their spare time could be highly effective and motivational.

In addition to the development of traditional MMORPGs in an informal context, it could be quite effective to directly adopt them into a formal context as well. This could either happen through any MMORPG currently available, or even through a MMORPG that is specifically made for learning languages. It would be highly interesting to see how this kind of an approach would affect the students' motivation as opposed to the regular MMORPGs, as it would turn from extrinsic to intrinsic due to the changed objective of the gaming. However, as Caillois' theory of *play* (1961: 9) suggests, ordering students to play instead of them playing from their own volition might hinder their overall motivation to learn. While there have been some instances of MMORPGs being utilized in teaching, such as the study by Suh et al. (2010), we believe that they are yet to be explored to their fullest potential.

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APPENDIX 1 The unfilled diary

Maisterin tutkielma: kuinka MMORPG:t auttavat kielenoppimista?

Tutkimuksen tarkoituksena on selvittää lukio- ja yliopistoikäisten käsityksiä MMORPG-peleistä englannin kielen oppimisen suhteen: millaisiin kielenoppimistilanteisiin opiskelija päätyy pelatessaan, vaikuttavatko nämä interaktiot opiskelijan mielestä kielenoppimiseen ja mitkä ovat opiskelijan yleiset käsitykset kielenoppimisesta MMORPG-pelien avulla?

Päiväkirja on osa maisterintutkielmaa, joka tehdään Jyväskylän yliopiston kieli- ja viestintätieteiden laitoksella. Tutkimuksen tekijöiden yhteystiedot löytyvät lopusta. Päiväkirjaa kirjoitetaan täysin anonyymisti, eikä sinulta kysytä mitään tietoja joista sinut voitaisiin tunnistaa. Kirjoitathan päiväkirjaa aivan rehellisesti: siinä ei ole oikeita tai vääriä vastauksia. Vastaathan kaikkiin kysymyksiin.

Taustatietoja

Ikä:

Sukupuoli:

Millaiseksi koet englannin kielen taitosi? Miksi?

Pelattava peli/pelit:

Millaisista asioista pidät MMORPG:issä? Mikä näissä peleissä vetoaa sinuun?

MMORPG-kielenkäyttö -pelipäiväkirja

Päiväkirja on tarkoitus täyttää kahden viikon aikana ja siihen tulee sisällyttää merkinnät **seitsemästä erillisestä pelisessiosta**, joista kukin olisi mielellään vähintään **1-2:n pelitunnin mittainen**. Suositeltu aika seitsemän pelisession pelaamiseen ja päiväkirjan täyttämiseen on noin **2 viikkoa**, minkä jälkeen voit palauttaa päiväkirjan meille sähköpostitse tulosten purkua varten. **Viimeinen**

palautuspäivä päiväkirjalle on: 31.12.2019 (yhteystietomme palautusta varten löydät tämän lomakkeen lopusta)

Kuvaa kunkin pelisession kohdalla,

1. Mitä teit pelissä pelisession aikana?

Kerro suurin piirtein, mitä kaikkea teit, kun pelasit: tässä kohtaa voit kirjata myös epäinteraktiivisia tekemisiä kuten "vihollisten kukistamista yksin", "farmaamista", tms. Kuvauksissa saat käyttää pelisanastoa, eli esimerkiksi jos kävit "raidilla killan kanssa", voit muotoilla sen miten haluat.

2. Millaisiin kielenkäyttötilanteisiin pelatessasi jouduit/päädymät? (esim. Erilaisten "questien" ohjeiden lukeminen, muiden pelaajien kanssa chattaaminen kirjoittamalla ja/tai puhumalla, kiltatoiminnassa erilaisten ilmoitusten kirjoittaminen jne.) Tee eri tilanteista mahdollisimman tarkat kuvaukset. Jokaiselta pelisessiolta olisi erittäin suotavaa ottaa kuvakaappauksia (screenshotteja) tai valokuvia itse pelaamistilanteesta ja liittää (copy-paste) oikeat kuvat oikean pelisession alle.

3. Mitkä yllä mainitsemistasi kielenkäyttötilanteista koit erityisen hyödyllisiksi englannin oppimisen kannalta ja mitkä taas vähemmän hyödyllisiksi? Miksi ajattelet niin?

PELISESSIOT:

1.

2.

3.

4.

5.

6.

7.

Vastaa tähän osioon vapaamuotoisesti vähintään muutamalla lauseella (ei sanarajoitusta) kun olet täyttänyt kaikki seitsemän pelisessiota:

3. Kuinka hyödylliseksi koet MMORPG-videopeligenren kielenoppimisen kannalta?

4. Millaiset asiat pelatessa auttavat sinua oppimaan kieltä?

5. Voiko joistain asioista olla jopa haittaa kielenoppimisen kannalta MMORPG-pelejä pelatessa? Millaisista ja miksi?

6. Onko sinulla muuta vapaata sanottavaa tai palautetta tutkimukseen tai päiväkirjaan liittyen?

Kiitos tutkimukseen osallistumisesta! Mikäli sinulla on jotain tiedusteltavaa tutkimukseen liittyen, tai haluat palauttaa täytetyn päiväkirjan analyysia varten, ota yhteyttä sähköpostitse joko osoitteeseen petri.e.d.autio@student.jyu.fi tai jesse.j.takamaa@student.jyu.fi.

Terveisin

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APPENDIX 2 Video game vocabulary

As in any ethnic or cultural environment, it is no surprise that video games often have their very specific set of vocabulary items. The reasons for this can also be very similar to the ethnic vocabulary: for example, some foods in certain countries do not have an equivalent in other countries, making a new word necessary. This is often the case in video games as well, because the creators of video games often tend to implement a very intricate, complex world with its own cultural quirks, which calls for the need of new words. These new words can be influenced by existing words or other cultures (or even other fictional worlds), or they can be completely made up by the creator. An example of a new word, created specifically for a game, is the word 'mako', or '魔晄'. Mako is the word for the liquid energy of the planet's lifestream in the world of Final Fantasy VII. Coincidentally, mako is also a special kind of vehicle in another game called Mass Effect. Sometimes, these different worlds can overlap linguistically, when the same word is used in exactly the same way, despite having no function in the non-fictional world. An example of this would be the word adamantium, which is known as an extremely hard metal in a variety of games.

There are also a multitude of words that are necessary specifically in the genre of MMORPGs, for instance. While there can be synonyms that essentially mean the same and are sometimes used for variety's sake, it is very common for many MMORPGs to implement at least some similar words as other MMORPGs, in order to make them easily approachable by someone who is familiar with the mechanics of an MMORPG. An example of this would be the word 'guild'. In most MMORPGs, there is a way to found a group for players to join and help each other, effectively forming a sub-community of approximately ten to a hundred players. Below, we will list some of the most common words used in MMORPGs, as they can be very useful in analyzing and understanding the diaries that our participants write. The definitions for the MMORPG slang terms below are derived from both Nedrezova and Brikunova (2015) and our own experience with MMORPGs due to the lack of adequate sources.

A 'guild' or 'clan' as mentioned above, is a group of players (often comprised of like-minded players or players sharing the same objectives) organized together by the founder or leader of the guild, interacting and helping each other complete quests, defeat enemies etc.

A 'gank' means to kill or be killed by another player in a surprise attack. An example of a gank in an MMORPG is when one player leaves the safe area of a town and outside they are met with a band of other players that surprise the sole player, kill their character and acquire loot and experience points.

'LFG', short of "looking for group", is a typical message or status in world chats in MMORPGs. The player that typed the message "LFG" is trying to find other players in order to be able to engage in some of the harder content the game provides. If the player was to partake alone in these activities, even if it was possible, they would almost certainly not be able to complete said activities.

'PUG', short of "pickup group", means that if a player is at the time unable to group up with their guildmates in order to take on the harder content the game provides they are able to form these pickup groups in which they work together with other random players in various activities.

'EXP' or 'XP' mean experience points, which are awarded upon either defeating an enemy, completing a quest or another type of activity in-game. They are usually used for 'leveling up' or powering up one's character.

'Farming' refers to an activity in which the player repeats certain actions to either accumulate experience points or resources or to acquire a certain in-game item. These actions include, but are not limited to, killing certain enemies repeatedly or using certain resource nodes, such as ore deposits.

A 'boss' is a powerful enemy with a large amount of health, which usually either guards an objective or drops some important items when killed. Bosses can be either killed by one player (soloed) or by a group of people (duo, trio and so forth).

A 'raid' is an extensive boss fight, consisting of one or multiple bosses, which usually requires a large number of players to defeat. Upon victory, each player that participated is usually rewarded with items or experience. It is also possible that the items are distributed randomly or equally among the participants.

A 'noob', or 'newbie' means a player that has just started the game, but it can also be used to refer to a player who is not particularly skilled, and is as such believed to be a newcomer.

'Loot' or 'drop' are words referring to rewards that either are awarded from quests or dropped upon defeating a boss or other enemy, for example. Players can also drop items upon death. Loot can also refer to items found from chests or other fixed sources of rewards. Both words can either be used to refer to guaranteed rewards, or in many cases chance-based rewards.

'Stats' or statistics are values that measure the player's level or abilities in different forms, such as combat prowess and non-combat skills. The term 'stats' can also be used to refer to the statistics of an item or even a player's score on a mini-game.

'HP' or hit/health points refer to the amount of damage a character is able to endure before dying or falling unconscious. It can often be increased by wearing appropriate gear, leveling up or training the constitution skill, for instance.

'Endgame' means activities that high level players engage in. The endgame often consists of hard in-game content, such as raids or PVP (see below) and is sometimes seen as the goal for many players.

'Gear' is a word used to refer to the equipment the player can wear or use. It is most often used for equippable items, such as weapons or armor. A player's strength is usually comprised of both his or her gear and stats. Gear is often the only way to increase the player character's power level at maximum level and they are the most sought after drops.

PVE or PVM (Player Versus Environment/Monster) means the player engaging in combat with some of the game's non-player characters. In contrast to PVP (see below), the drops of non-player characters are often either predetermined or randomly chosen from a list of items.

PVP (Player Versus Player) means the act of engaging in combat with another player. This can happen in at least two different ways: either in an organized manner in an arena or another similar facility with leaderboards, or freely inside a PVP-restricted area. In the latter case, it is possible for the players to receive some or all of the other players' items upon victory.

'Instance' means that in many places, once a certain number of players is achieved, a copy of that location is created and others may no longer enter the same instance. The game's players are divided into many different instances in order to make the world less crowded and more manageable for gaming hardware to run. For example, even if two different players are in the same place at the same time, they will not be able to see each other if they are not in the same game instance. Loot and drops are also additionally often instanced, meaning that players are not able to see what items other players were able to acquire and thus, stealing other players' items becomes much harder. Some game hubs, however, are not always instanced. These may include major cities or different market places, for example.

'Aggro' means the player getting the enemy's attention and having them target him or her. This is often done in a certain manner in order to have control of combat engagements.

'Holy trinity' refers to the combination of three player classes 'tank', 'healer' and 'dps'. The tank takes the aggro and absorbs the damage so that the other classes, who are not equipped for it, do not have to. The healer is often focused on keeping the tank alive by using all manner of healing spells and items. The dps' job is to deal the damage and vanquish foes. The combination of these three classes is often the most effective for engaging the in-game content.

'Buff' is a strengthening spell or consumable used on the player character. Buffing increases player's stats and combat prowess and therefore makes it easier for the player to be able to engage in particularly harder in-game content. These can often be results of either spells or potions, for example.

'Debuff', on the other hand, is the opposite of buff. The purpose of debuffing is to weaken the target, making it easier to defeat. Examples of debuffs could be weakened defensive capabilities or prevention of the use of certain abilities. Debuffs can also be the effect of a spell or a side-effect of a regular attack with a certain weapon. Players can also be weakened by NPCs' attacks this way.

'AFK' or away from the keyboard means that the player is either playing while not physically present near the gaming device he or she is using, or that he is in fact present but does not have to necessarily do anything in order to progress. For example, a player can leave his or her character in a crowd of enemies, which get defeated automatically while the player can do something else in the non-virtual world.

'Lag' is a word referring to the delay in responsivity when trying to do something in-game. It can either be that the computer has trouble handling the amount of output required by the game, or that the server is currently experiencing some connectivity issues. Lag often results in frustration, as the player is unable to control his or her character as he or she wants.

Another term that can often be preceded by lag is a 'dc' or disconnection, which means that the player lost the connection to the server entirely. This can be caused

by internet connectivity issues on the player's or the server's side, both usually resulting in the game being unplayable for a while.

'Rez' or 'res' refers to resurrection. When the player's character is defeated they will die. In order to continue playing, they have to be resurrected, which often takes them back to an earlier checkpoint in the game or they can be in some games resurrected on the spot if an ally has the appropriate skill or item.

'Main' refers to the character that the player plays most often and wants to progress with. Main is usually the first character the player creates in any given game and therefore, plays it the longest and the most frequently. The mains can, however, change during the course of the game if one grows bored of the original main.

'Alt', short for alternative, on the other hand, is any player character that is not the main. These characters see play less frequently. Sometimes this can also refer to a separate account entirely, which can even in some games be against the terms of use.

'Mule' is an alternative character that does not see much play if any at all due to its main and often only purpose being a storage for the player's items.

'Grinding' refers to a player activity in which the player repeatedly kills enemies in order to get experience points on his or her character. This is often done without regard to a quest, for example, and the enemies often are the same ones in order to be efficient. Many players see this as a boring part of the game and some even utilize 'bots', which are programs that mechanically repeat the same action until the desired goal has been achieved.

'Quest' refers to an objective that is often given to the player characters by an NPC. The quest requires the player to perform a certain activity successfully in order to be completed. These can be either very simple, like bringing an item from an NPC to

another, or very complex like proceeding through dozens of intricate tasks and cutscenes to accomplish a greater goal in the story.