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English Vocabulary Development Through MMORPGs

A theoretic study on the impact of vocabulary development through playing MMORPGs

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Acknowledgements

This thesis marks the end of my teacher's education at the University of Tromsø. As I am writing these final words, I have come to understand that the end of an era in my life is over. I have learned a lot in the process of the last 5 years and look forward to taking experiences into the classroom, as a teacher.

I would like to thank my supervisor, Kristin Killie, for the great guidance she has given me throughout the challenging process of designing and writing this manuscript.

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Abstract

This study investigates how MMORPGs influence the vocabulary L2 learners through comparing the existing research on vocabulary acquisition to shed new light on research on vocabulary acquisition within MMORPGs. Furthermore, it examines how the findings of the reviewed research can influence English education as we know it today. The research question are as follows: *How does playing online role-playing games influence the vocabulary of learners of English, and should any research findings in this area be taken into the English classroom?*

To address my research question, I have split the thesis in three separate parts. The first reviewing research on vocabulary acquisition, the second looking into four studies concerning learning English as an L2 through MMORPGs, and the third a discussion on the didactic implications the findings of the studies from the second part may have on English education.

The results of this study indicate that MMORPGs are great tools for creating a language learning environment. The Knowledge Promotion curriculum (Ministry of Education, 2017) encourages the use of medias as tools for learning, and demand diversity in education. MMORPGs and the principles of the games within the genre can prove to be very beneficial in future English education.

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1 Introduction

Language development through digital games and the internet is a highly relevant theme nowadays and has drawn in many interested parties (see e.g., Sundqvist, 2019; Reinhardt & Thorne, 2016) Gaming has been on the rise in later years and is now one of the largest industries in the world, whose effect on language acquisition is continuously being measured and researched. The field of L2 acquisition and gaming is rapidly growing. This study focuses on research on Massively multiplayer online role-playing games (MMORPG).

This study will use existing research on vocabulary acquisition to find how playing video games influences the vocabulary of learners of English. It will further discuss the various implications that this might have on English education in Norwegian schools. The research question is:

How does playing online role-playing games influence the vocabulary of learners of English, and should any research findings in this area be taken into the English classroom?

The study will be split into five different sections. The first section will include the background and introduction of the study. The second section will discuss theory of vocabulary acquisition and the methodology of the study. The third section will discuss existing research on vocabulary acquisition in MMORPG and reflect on how the principles of an MMORPG facilitate language acquisition, tying in the theory provided in section 2. The fourth section will discuss the implications that MMORPGs can have for English education, drawing in the new curriculum (Ministry Of Education, 2017 & 2019). The fifth and final section will summarize and conclude the study, as well as providing an outlook for future research.

2 Theory and Methodology

There are multiple factors that are known to be favorable to vocabulary acquisition. In this paper only the most central ones will be discussed, viz. input, output, interaction and motivation. Since this study is predominantly focused on the learning of vocabulary through gaming, the theory presented will also include relevant research on vocabulary learning and acquisition through gaming. The theory will also include concepts within MMORPGs that are favorable for L2 acquisition.

2.1 Methodical Considerations

This is a literature study that is meant to provide a review of the field of vocabulary research within MMORPGs as well as discuss this research in relation to vocabulary acquisition research in general. The research used in this study was thoroughly reviewed to find the material that suited the purpose of the research question. The studies used, were found through using different combinations of the search words MMORPG, SLA and vocabulary acquisition.

Now for some definitions:

An MMORPG often consists of a huge player base that has entire communities within them. Players of MMORPGs are often pressed towards being a part of a one of these communities to best serve themselves and to see results in their progress within the game. MMORPGs are constructed around the persona the players create for themselves. This allows an escape from reality and creates a dimension in which the players can become whoever they want to be. The roles within these games are also versatile, and even though every part often requires battle or war to progress, there are often multiple unorthodox paths that often leads the player to further progress within the communities of the game.

Extramural English (EE) is defined as informal learning, the activities that happen outside the classroom or any institution. As defined in Sundqvist and Sylven(2016), EE is any activity that encompasses a learner taking the initiative to any language learning process. This activity would include input, output, interaction and production of language.

This text frequently uses the terms acquisition and learning. In language acquisition, the linguistic rules of a language are said to be internalized more or less unconsciously in a natural learning environment. By contrast, language learning is taken to be a conscious

process, which typically involves explicit instruction, and there is no guarantee of ultimate success (Krashen, 1981). However, in my view the two processes cannot be kept completely separate, and gaming may have elements of both. Thus, gamers will learn new vocabulary by themselves, through coming across an expression again and again in appropriate contexts, but also through explicit negotiations of meaning with co-players. An example of the latter is given in section 3.4. Since acquisition and learning cannot be kept apart in practice, no attempt has been made to do so in this thesis either.

2.2 Input

2.2.1 Comprehensible Input

Comprehensible input (CI) is often referred to as the most important factor in acquiring a language. All acquisition is reliant on the exposure to linguistic data, or input. The nature of the input needs to be within the learners reach, and it has to happen in contexts that are known to the learner. In that way, the learner will broaden his/her vocabulary and get a greater understanding of the language (Krashen, 1981). The difference between learning and acquiring a language is said to be explicit instruction. Krashen (1981), dismissed the use of explicit instruction to acquire a language, only focusing on communicative ways of getting input as well as constructing natural language learning, acquisition. This sort of language learner was meant to imitate the natural acquisition of one's first language. Naturalistic acquisition is heavily dependent on a massive amount of exposure, which a classroom with L2 learners cannot possibly provide. In studies performed by Pienemann (1984,1989) he concluded that even though learners that were instructed students generally develop along the same line as a naturalistic learner, the instruction may speed up the progression of the student. Explicit learning may facilitate acquisition and make up for limited input in instructive contexts. Explicit instruction may therefore be beneficial for acquisition of an L2, but input, and the nature of it, is crucial towards second language acquisition.

The nature of the input provided in language acquisition heavily influence how comprehensible the input is. As mentioned above it needs to be within the reach of the learner for it to manifest itself into actual acquisition (Krashen, 1981). The nature of input in this context, is how understandable it is for someone who receives it. It is the relevancy of the input, to the current knowledge in which the learner already possesses. If the nature of input is within a learner's grasp, it includes words and concepts that are known to the learner. The influence of input will heavily be affected by the learner and his/hers predisposition towards

the target language (TL), as well as the context in which the learning will occur. One would imagine that players of a video game will be predisposed towards learning in situations within the game. They are familiar with the topic within the game, the goals of what they are trying to achieve, as well as the strategies that need to be used to reach said goals. There is also a constant visual support within MMORPGs that allow learning to a much higher degree, as it constantly puts the players in learning situations where the input is comprehensible, and where the co-players supply scaffolding.

Krashen (1985, p. 81-82) described a part of his input-hypothesis called “The affective filter hypothesis”. He reasoned that comprehensible input was not sufficient for the acquisition of language and that an affective filter could put what he referred to as a mental block on the learners of a language. The mental block was described as interfering when the learners are unmotivated or anxious. The learner would then put himself into a defensive state where he wanted to hide his weaknesses. These weaknesses would be his/hers proficiency in the TL, which would lead to the learner closing himself to learn and acquire the TL. The affective filter would not interfere with the acquisition of language when the learner was not concerned with the possibility of failure and considered himself a part of the group that spoke the TL. Interactions that facilitate the acquisition of language then needs be safe and collaborative, so that the learners are encouraged to test and fail their own hypotheses on the TL.

2.2.2 The amount of input

A study performed by Dahl and Vulchanova (2014), investigated the receptive vocabulary development of two groups of children. The children were from two different schools and had just started the first grade of elementary school. The data collection was done through a comprehension test, that uses pictures and gave the learner a set of four alternatives for each picture. The first group was exposed to a standard amount of input, and this group did not show a significant increase in their receptive vocabulary during the first year. The second group, did show a significant increase through a moderate increase in English input in the classroom compared to the standard classroom norms. The researchers gave no instructions to the first group, as they would act as a base for comparison with the second group. In the second group, the teachers were instructed to actively use English more outside of English classes. Morning greetings, simple instructions and reading aloud were to be done in English.

Anne Dahl (2014) performed a study of the same nature, that tested the receptive vocabulary and sentence comprehension with younger learners. The participants were split into two

classes, where the English education were applied differently. Both of the classes having similar backgrounds and having Norwegian as the L1. The difference in the application of the instructions being the main factor for the development of their language skills throughout the period of one year. The first group was instructed in Norwegian, where all tasks and explanations were performed in the pupils' native language. The second group was instructed in English. To limit the variables of the study, both classes used the same book and performed the same tasks throughout the year. The teachers of the classes were responsible for report the amount of time allotted to usage and exposure to English. The two different teachers reported a weekly use of 45 and 70 minutes of English exposure respectively. The results of the study indicated that increased exposure to English within a normal curriculum can lead to acquisition in young learners. Mainly influencing sentence comprehension, showing a significant difference in favor of the class that had more exposure to the L2. This shows that even when input cannot be as substantial as wanted, it can lead to acquisition and show an increase in language competence. The fact that both Norwegian and English are both Germanic languages helps new learners acquire the L2 and makes words and phrases more comprehensible.

2.3 Output

Learner generated noticing is a well-known factor within SLA and is defined by Swain (1985, 2005), in the context of L2 output. Swain (1985: 249), in proposing the 'Output Hypothesis', argues that output in the target language may serve as “the trigger that forces the learner to pay attention to the means of expression needed in order to successfully convey his or her own intended meaning” According to the hypothesis there are four main functions of output and the effect they have on SLA. The functions are:

- The fluency function
- A testing of one's own hypothesis
- The metalinguistic function
- Learner generated noticing

The first one is the fluency function, which describes that a learner needs to have access to situations in which they can use the TL. The fluency function is necessary for a learner to achieve fluency in a language. The second function of output is the testing of one's own hypotheses on the TL. As the learner reflects his/her own hypotheses of the language, they also reflect on their own production of language. This in turn, amplifies the awareness

towards his/her own rules and forms, that is if the context of production is communicative in nature. The third function is that the production of language has a metalinguistic function, which allows the learners to assess the various challenges they face when producing the TL. Through this process of producing language the learners will become aware of the continuous process of producing the TL, allowing them to monitor their own progress and grammatical encoding. The awareness will ultimately raise a state of alertness within the learners and lead them into different paths of improving on their language. The path in which the learners will take is reliant on the circumstances of the production of the TL and will impact the way in which they would need to improve. The ways of improving the TL are found by using the four functions of output by identifying, testing and making new hypotheses about one's own capabilities in the TL. The fourth and final function of output is that it provides learner generated noticing. The learners might notice a gap between what they want to communicate and what they can communicate. The noticing of this gap, and recognizing it leads the learner to figure out what they know, and what they need to learn. Noticing will probably lead the learners towards discovering more relevant input on the matter at hand, and this in turn will make them progress in their TL. Swain argues that after noticing what they need to improve on, learners will naturally be testing hypotheses about how to correctly use what they noticed before and modify the output according to the response of the recipient, expecting feedback on one's own language. A key factor for this to take place is to be in an environment that allows testing your language, opposed to testing it in a situation with a stranger, which is likely to be less comfortable.

To summarize, the output hypothesis claims that output can facilitate the acquisition of a language, by allowing learners to expand and improve upon their TL through testing their current knowledge. The production of the TL invites feedback from peers, teachers and many other sources. The responses that learners get, might cause them to seek their own knowledge on the subject or search for input that is relevant for the further progression on the TL.

In a study performed by Zalbidea (2021), she found that continuous cycles of output-input enhanced the benefits found and assumed in earlier research on the subject. She further explained that her findings suggested that a continuous input-output cycle can extend beyond noticing and increase the processing ability of the learner, making them more aware of form and meaning in relevant L2 input. This will in turn lead to a more observable and concrete improvement in the capabilities of the learner.

2.4 Interaction

It has been made clear that interaction is an important part of L2 learning and is decidedly one of the more important factors to learn a second language. There are three main perspectives of interaction within L2 acquisition that have been proposed throughout the years. (Sato & Ballinger, 2016).

The first perspective is the cognitive one. Long (1981, 1983) presented what he called the interaction hypothesis, which argues that interaction is crucial in second language acquisition. It stated that a situation occurs between a native speaker and an L2 learner whenever the communication is halted by an issue in comprehensibility. This sort of interaction was labelled negotiation for meaning. In such a negotiation the native speaker must adapt his/her language to better suit the level of the L2 learner, to make it more comprehensible. Long (1996:2015) further improved on his views, stating that corrective feedback was the most important component within interactions between the native speaker and the L2 learner. Corrective feedback is whenever feedback is given on the production of language of the L2 learner. This can trigger learner generated noticing as mentioned above in the paragraphs on output. Learners that experience corrective feedback, shift their focus on ways to improve on their own communication, while still having the main focus on delivering the message that was to be communicated. In this process the learner will be challenged to improve upon his/her language and is in some way guaranteed to profit in the exchange.

The second perspective is the sociocultural one, predominantly originating from Vygotsky (1978), and his sociocultural learning theory. The original idea of this theory was, scaffolded support for learners, from a person that was more competent, (e.g., a native speaker). Knowledge develops through interactions with society, and by internalizing these social interactions, is when learning happens. This has been challenged and discussed in various different studies at later dates (Donato,1994: Swain and Lapkin, 1998, 2001, 2002). All of these studies drew peer interaction into the mix, and introduced new empiric evidence that by collaborating, learners would achieve a similar scaffolding. Learners would use their collective mind to assess and generate alternatives to resolving a linguistic problem. Together they would achieve a negotiation of meaning that would in turn activate their learner generated noticing.

Storch (2002) performed a study that mapped different types of interaction within pairs and found four different patterns collaboration, collaborative, dominant/dominant,

dominant/passive and expert/novice. The collaborative nature as well as the expert/novice one, was found to be more likely to allow scaffolding. In the collaborative pairs, both learners often pooled their resources whenever they were uncertain of language choices. In the expert/novice pairs, one of the learners assumed the role of the expert, simulating the role of a teacher in a teacher-student relationship. Through this, the expert provided responsive and able assistance to the less able peer. In the other two pairings however, there was few instances that suggested the transfer of knowledge between the partners. The study concludes with stating that a collaborative pairing as well as an expert/novice pairing are more likely to facilitate learning and acquisition.

In the type of collaborations described above, a shared perspective of the situation at hand, and/or a shared understanding of the TL needs to be in place for the learners to construct language learning situations. This concept is intersubjectivity as Rommetveit(1985) called it. When individuals work in collaboration to define both concrete and abstract objects, they establish intersubjectivity. This will allow them to work in the zone of proximal development and facilitate language acquisition. In other words, for a collaboration to successfully facilitate language learning, the nature of the interaction between the peers needs to not only achieve the functions of scaffolding, but also allow for a shared perspective when defining linguistic constructs. Maintaining intersubjectivity is much more challenging and requires the learners to constantly redefine their existing definitions and adapt to one another. In interaction with others using an L2, one will eventually face problems of the communicative nature. The maintenance will then occur and the collaborative relationship between the learners will depend on their own ability to adapt and rephrase their formulations so that the message is understandable for the peers that are being interacted with.

The third perspective on interaction is one of socio-cognitive nature. As the name implies, it is a combination of the two formerly mentioned perspectives. They are in fact based on the view that language learning and language use is hard to define without taking both the social and the cognitive aspects into consideration. An examination of learner interaction done by Storch and Wigglesworth (2010) showed that learning and acquiring was dependent on the feeling that the feedback gave learners in interactions with others. Learners had to feel like the feedback was useful to them and coincided with their understanding of the use of their L2. Attitudes, beliefs and their own understanding of the language affected the way in which they received and processed the feedback.

2.5 Motivation

Gardner and Lambert (1972) defined two different types of motivation concerning second language learning. In their work they distinguish between integrative motivation and instrumental motivation. In accordance with the definition of the two types of motivation the attitudes of learners were emphasized to have great effect on the amount, and the type of motivation one would have towards learning a TL.

2.5.1 Integrative Motivation

Integrative motivation (Gardner & Lambert, 1972) is the motivation that may drive a learner to acquire a second language. This sort of motivation comes from within and comes from the attitudes that a learner has towards the culture associated with the TL. To learn a second language, a learner needs to be prepared to take on characteristics of the native people of the TL.

“The learner’s ethnocentric tendencies and his attitudes towards the members of the other group are believed to determine how successful he will be, relatively, in learning the new language.” (Gardner & Lambert, 1972, p. 3)

The excerpt explains that how successful the learner will be in acquiring a TL language is reliant on his attitudes towards culture and the members connected to the TL. Ethnocentric tendencies refer to an individual’s way of looking at his own way of life to be the correct way of living. If the learner's ethnocentric tendencies are at a manageable level and that he is open-minded in his way of looking at other cultures, he is much more likely to acquire the TL. In Gardner (1985, p.11) further argued that the learners with an integrative motive to learn a second language had two main goals by learning the TL. Those goals were to either being able to communicate with a larger variety of people, or to understand the culture of the members of the TL. Gardner (1985, p.54) argued that a learner with integrative motives to learn a second language may have a higher intensity of motivation than learners with other orientations towards learning the TL. The learners that have negative attitudes towards the culture surrounding the TL, shows significantly lower chances to succeed in the TL (Gardner, 1985, p. 56-57). These attitudes could be prejudices towards the culture or skepticism towards the people speaking the TL.

2.5.2 Instrumental Motivation

Instrumental motivation (Gardner & Lambert, 1972, p. 3) is when a learner wants to learn the TL based on using it towards achieving a goal or task. An instrumental form of motivation reflects a utilitarian value of linguistic achievement, which entails that the learning of the language is a means to an end, rather than learning language being a goal. The goals are often related to jobs and/or getting ahead of one's competition, giving them a head up when applying for a position in a company/firm.

“The contrasting form of orientation we did give attention to is referred to as an *instrumental* orientation towards the language-learning task, one characterized by a desire to gain a social recognition or economic advantages through knowledge of a foreign language” (Gardner & Lambert, 1972, p. 14).

The excerpt above describes instrumental motivation to be the contrasting orientation of motivation than the integrative one. At the extreme, a learner that is instrumentally oriented towards learning the language is mainly interested in using the culture connected to the language as an instrument for personal gain. The interest for trying to establish connections in the culture connected to the TL, is lacking, and the learner will struggle to see the value of becoming integrated into the culture itself. In such an extreme case, the learner will only be motivated to learn the language if he/she gains anything from it. Attitudes towards the group in which the culture is present, evidently convinces the learner that there is little value in learning the TL itself.

3 Research on gaming and vocabulary acquisition

This will consist of an investigation of different studies that have researched the effect of games on the acquisition of vocabulary. The studies that will be presented will for the most part be in the context of MMORPGs, but also include studies in other game genres. The reasoning behind this, is that multiple similar mechanisms of language learning is represented in these studies. For each study, the aim of the study, the methodology, the main findings of the study and how the results are explained will be evaluated and clarified. After the initial clarification of each of the studies, there will be a discussion, linking them to the theory of the acquisition of vocabulary. The discussion will also include my own observations on the subject.

3.1 Sundqvist (2019)

3.1.1 The aim of the study

The purpose of the study was to explore the relations between playing video games and learning L2 vocabulary. The type of video game used was of a general fashion as it used commercial video games as its material, and not a more specific genre of games. To further enlighten the discrepancies between a learner that plays video games and a learner who does not, there were made comparisons with a group of learners that did not play video games. Sundqvist provided four different questions that guided the study:

- 1: “To what extent is there a relation between the time spent playing COTS games and L2 English vocabulary test measures?”
- 2: “To what extent is there a relation between four type-of-game-preference groups (i.e., non-gamers, SP, MP, and MMO) and L2 English vocabulary test measures?”
- 3: “What does an examination of solution rates (percentage of correct answers) of individual vocabulary items in a productive levels test reveal about gamers’ productive vocabulary? Is it different from non-gamers’ productive vocabulary? If so, how?”
- 4: “What does an examination of infrequent vocabulary in essays reveal about productive vocabulary use among gamers? Is it different from non-gamers’ productive use of infrequent vocabulary? If so, how?”

The first question looks to explore to the relation between the time playing commercial of-the-shelf games (COTS), and the acquisition of vocabulary with L2 learners. The second question is asking to what extent different genres of games work to influence the acquisition of L2 vocabulary. SP is single-player games, where there is only one player interacting with a world of NPCs(non-player-characters), MP is multiplayer games in general, where you interact and compete with other players, and the last genre is MMO-games, also known as massively multiplayer online games. The final one is what is most important for study that is being performed as of now. The third question looks to map which part of the vocabulary that is impacted by gaming, and if it is any different from a non-gamer's vocabulary. The fourth and final question looks to examine the meaning of the usage of normally infrequent words and phrases within the gaming group, and how it is different from the non-gamers.

3.1.2 Method

As this was aimed to be a larger-scale study, the researcher decided it was time to start the project when six schools agreed to contribute to greenlight the project. 16 classes made up Sample A, in three different groupings of ninth graders. In total 1069 students from nine different Swedish schools participated, 81% of the total that was invited. 17% of the participating students of the project had another L1 than Swedish roughly making the group representative for the Swedish population, where 20% of the population has a different L1. Collecting empiric data was done, through one contact teacher per school. The researcher trusted the contacts to collect and gather the information in a reliable way. The contacts in turn found great value in getting the tests that were performed back, as they got information on their own students' vocabulary. Sample B was a grouping of 16 students at one school, where all were familiar with the researcher. These were invited to an interview study to provide information on gaming as extramural activity.

The data were drawn from a questionnaire, a vocabulary test, an essay, results from a national test, and interviews. Through the questionnaire the researcher collected data on the L2 English learning provided by digital games and the internet in general. The questions that were used, was all related to English learning and use of digital tools and the internet. The contact teachers on the schools collected this data for sample A, and the researcher collected it while performing the interviews for sample B. Two different tests were used to measure the vocabulary of the learners. One tested the receptive vocabulary and the other tested the production vocabulary. Spelling errors as well as assessing how frequently the participants

used long and challenging words was measured through the written essays. The national test was used as a controlled measure to accurately map the learners writing, listening and reading skills. As for the interviews, they were semi-structured, while focusing on the aspects of language learning through playing games and internet. The interviews were held in groups of two or three participants respectively. The researcher gave a brief, but impactful comment on the ethical considerations of the study, giving information that all participants were informed on their rights to withdraw the contribution of data from the study at any given time. In addition, all participants were granted anonymity, and where there are names used in the presentation of data, the researcher ensures that the names used, are pseudonyms. The nature of this study was mixed in methods using both qualitative and quantitative data collection methods. The main part of the data collection can be considered quantitative, as the various test did not allow for the participants to reflect over what data they provided. The interviews were done in an inductive fashion, allowing the researcher to make the participants reflect on the degree of how their use of internet and gaming affected language learning and vocabulary.

3.1.3 Findings of the Study

To give the most accurate presentation of the results of the study, the following paragraph will present the relevant findings to each of the research questions presented above, separately. The results presented for research question 1 expresses the relation between time spent gaming and vocabulary. Both vocabulary tests, showed a significant role of gaming towards vocabulary gain, and more so to the receptive vocabulary. It shows that frequent gamers had a larger and more refined vocabulary than more infrequent gamers. The researcher found that there were implications that time spent playing COTS games had a positive correlation with L2 vocabulary proficiency. As for research question 2, of what game genre which impacted the vocabulary the most, the researcher could read from the findings that gamers of MMO and MP games tested significantly higher than non-gamers and SP gamers in vocabulary score. Between MMO and multiplayer games, there were no significant differences, indicating that the genre of the game not necessarily has the biggest amount of impact. Findings also showed that time spent on the games had a more influential role in improving the participants' L2 vocabulary. The productive vocabulary of the participants was tested on 3 different levels where the frequent gamers averaged a higher score compared the non-gamers, on all levels. For especially difficult words the gamers' scores were twice as high as the non- gamers, indicating that gamers had a more advanced productive vocabulary. Through comparing the essays to the interviews of the same students, the researcher found

that those who frequently played video games had a significantly more advanced vocabulary. Other factors also played into the part, as the general use of internet also was included in the discussions of the interviews. This was also deemed to play a part in the participants' acquisition of English vocabulary, as they would often communicate with speakers of English in their private messages, as well as reading English articles on the internet on a day-to-day basis.

3.1.4 Conclusion, strengths and limitations of the study

The researcher states that an important conclusion can be drawn after performing the study. The main finding is that playing video games is related to L2 English proficiency, but that it seems like the different game genres that were categorized in this study, only seems to be of a mediating effect. The vocabulary of the gamers was of a more proficient nature than the non-gamer and the gamers specifically excelled at difficult words. The MP and MMO games were found to be more beneficial for English learning, but that there seems to be little to no difference between the two. The large scale of this study also makes it unique as it has mapped and could generalize the information gathered based on the representability of the groups of teenagers that participated.

As for the limitations of the study Sundqvist (2019) found that it was difficult to comment on the relation between L2 language proficiency and specific game genres. When gathering the data for the study, the of the amount of English education, that was available to use for the study were limited at all the schools. The time and workload of the contact teachers had to be respected, which left less time for the collection of data. There are some additional factors that might have been commented on. Even though the database for the study in general was huge, and incorporated over 1000 participants, the interviews were performed in small groups with 16 students. Even though all the participants of the interview were familiar with the researcher one might ask if this could influence the data gained. This is largely made up for by the fact that the researcher did not draw many conclusions form the findings of the interviews. Given the time, however, if more interviews were performed, the researcher might even more grounds to comment further on the relation between game genres and their different values towards L2 acquisition.

3.2 Bytheway (2015)

3.2.1 The aim of the study

The aim of the study was to examine the various types of autonomous learning strategies that learner uses when playing an MMORPG. Specifically, it was meant to better understand the vocabulary learning strategies of an L2 user playing an MMORPG. The research questions were:

- 1: “What vocabulary learning strategies do ESL learners select and use in MMORPGs?”
- 2: “How do vocabulary learning strategies identified in MMORPGs compare to vocabulary learning strategies and taxonomies identified in other contexts?”

3.2.2 Method

The project started with recruiting participants via posters that were displayed at a university. The results of the recruitment were six male students, that were aged between 20 and 30 years of age. Criteria were set for the selection of participants. They were all experienced gamers, who played MMORPGs for at least five hours every week, and had high level characters in the game. This was to justify that they were expert gamers. All the participants had English as their L2, and they had all completed their secondary education.

This study was of a qualitative nature. For the collection of data, a five-hour session was performed, where the participants were observed and recorded. To have a database for comparison, semi-structured interviews were conducted, that were recorded and analyzed. This was done to give the researcher a way to compare what the participants reported in their interviews with the data provided through the game session. The interviews were performed after and before the session, to better suit their schedule. As all participants were experienced gamers, the order of the two data collections were not seen as influential on the findings. The semi-structured nature of the interviews allowed the participants to express their thoughts and views on the matter and could choose how they wanted to tell it. It also allowed the participants to share significant experiences and reflect on them, as well as share their own interpretations on the subject. This process was guided by the researcher. The recordings of the game session consisted of the communication between the participants and other players, video of the situations that was encountered within the game and instructional texts provided by the game. Other texts that the participants used during the game session was also included

as data. After the data was analyzed and interpreted, the participants were asked to review it. This was to make sure that the data was not misinterpreted by the researcher, and to minimize the researchers own personal biases.

3.2.3 Findings of the study

The findings of the study were structured in 13 different categories of vocabulary learning strategies, which were mostly collected through the interviews, and compared to the recorded data. These categories were: (1) interacting with players, (2) playing in English, (3) reading in-game information, (4) looking up words in dictionaries, (5) noticing frequency of words, (6) requesting/giving explanations, (7) equating image/action to word, (8) recognizing knowledge gaps and selecting words for attention, (9) giving/receiving feedback, (10) noticing in other contexts and adding to existing knowledge, (11) guessing from context, (12) using words to learn word use and (13) observing players. (12) Using words to learn word use, is described as testing new words, and relying on the feedback one gets to achieve a greater understanding of the word.

The participants reported all the factors to be essential in learning a second language through an MMORPG. Interacting with others is one of the main strategies, and multiple of the other strategies are achieved and made possible through interaction. Requesting and giving feedback, recognizing knowledge gaps and selecting words for attention, using words to learn word use and observing players, are all strategies that require interaction. Through interaction players will use and encounter new words that they have not acquired yet, this will lead to the recognition of one's knowledge gaps and using the words in one's own production of language. After using new words when interacting with other players one will receive feedback and if the word is misused the learners will adapt and use the feedback to correct themselves in future uses of the words or phrases.

3.2.4 Conclusion, strengths and limitations of the study

This study examined the use of vocabulary learning strategies in MMORPGs and found that 15 strategies were used by the participants of this study. These strategies were reported to be used purposefully and that they achieved progression in English, having it as an L2. There was no strategy reported to manage motivation for learners within the game. The researcher reflected that the nature of the game provided all the motivation that was needed. She further reflected that MMORPGs seems to create a learning environment that provides the need to learn and develop one's vocabulary. Principles that are already established to influence

vocabulary learning seems to exist within an MMORPG. Strategies that were reported to be used by the participants, such as giving/receiving feedback and requesting/giving explanations are undoubtedly essential to a normal teaching environment. The difference being that the players of the game switch between these roles, giving and providing feedback and explanations for one another, in a setting that provides situations that require the players to cooperate and depend on each other to further progress. The participants had also reported that they did not use any of the strategies employed when playing an MMORPG, in real life. It is further argued that teachers need to identify what good learners of language do, and which strategies they use to progress their language. This needs to be in place for a teacher to shape his/hers teaching schemes to best suit the learners in a constantly more virtual world.

There are certain limitations with this study that makes generalizing the results rather difficult. Firstly, the participants of the study were categorized as expert gamers and had extensive knowledge about the game. This allowed them to focus on strategies to learn language and adapt within the game. For a new player one may think that there will be certain complications to employ all the vocabulary learning strategies found in this study and use them accurately, at least at first. They would most likely require an extensive introduction to the game and learn through experience how to employ said strategies. The results will therefore only be generalizable towards expert MMORPG gamers, and to what extent they use these strategies. Secondly, the scale of this study was small. Since there were only six participants, the generalizability of the study is limited (Bytheway,2015). However, the study provides an interesting look into what future research may look to establish about vocabulary learning strategies in MMORPGs. Finally, the age of the participants, as well as their education, is a factor to take into consideration. Many players and learners are of various ages and this study only examines the use of vocabulary learning strategies for adults between 20-30 years of age, that has completed secondary education. Many if not all the strategies might be employed by younger learners, but from the findings in this study nothing of the sort can be asserted.

3.3 Peterson (2012)

This study does not directly research vocabulary learning within MMORPGs it still explores the interplay between the mechanics of the game and social interactions to acquire English as an L2. Further it recognizes attitudes as influential towards L2 learning and how it may affect

a learning environment. It touches on various factors that needs to be in place for L2 learning to happen, and was for this reason, deemed valuable to this thesis.

3.3.1 The aim of the study

This study was of the exploratory nature, trying to shed light on both social interactions and learners' attitudes towards taking part in MMORPG-gaming as a tool in language learning. The goals of the study were split into two different parts. Firstly, the researcher sought to examine the development of MMORPGs, and to map their most significant features. Secondly, with a qualitative exploratory study, investigate social interactions and attitudes with four students of English at an intermediate level, in a MMORPG. The research questions were:

- 1: "What are the significant features of EFL learner linguistic and social interaction in a MMORPG?"
- 2: "What are learner attitudes toward participation in MMORPG-based gaming?"

3.3.2 Method

This was a small-scale study focusing on the interactions and attitudes of learners concerning MMORPGs. The participants were four students ranging in age from 23 to 25 years old. The students were all experienced computer users and had prior experience in gaming. They did not however have experience in playing MMORPG games in English. Two of the learners were Japanese, one was from China and the last one was from Iran. The game was designed on Japanese game and manga culture, which were familiar to all of them. The interface within the game was designed to be user friendly and allowed for multiple ways of communication with other players. The participants were provided with a set of emoticons that expressed various states on emotion as well as an easy-to-use text tool to manifest an environment that would facilitate social interaction. The game community also provided a set of sources outside of the game itself, through forums and wikis. For finding reliable empiric data, the participants were introduced to the game prior to the data collection. This was to orient them on the functions and tools that they were provided with. This was performed to avoid the possibility of the data being influenced by the fact that they were incapable of using the tools provided. As the researcher sought to find information on social interactions, concerning L2 learning, the incompetence of the participants to use the communication tools would have

been a limiting factor. The participants were also provided with a pseudonym to allow for anonymity when interacting with other players and the other participants.

The data collection itself was done in an easily manageable manner. The participants would play the game and their screens would be recorded using screen capture software. The researcher acted as an observer and was present at each of the sessions. Another source of data was collected with questionnaires for the participants both before and after all the sessions were completed, allowing them to evaluate their own progress as well as reflect on their social interactions within the game. In addition, the researcher conducted interviews with each participant after the conclusion of the final game session, for further exploration on the learners own attitudes towards learning L2 in a game setting.

3.3.3 Findings of the study

The findings were structured in six different categories that defines the various types of social interaction the participants met in their endeavors within the game. These categories are: (1) greetings, (2) use of informal language, small talk and humor, (3) leave-takings, (4) establishment of intersubjectivity, (5) maintenance of intersubjectivity and (6) participants attitudes. The categories are different types of social interactions the learners met when playing the video game. The first three categories are evidence of different types of social interactions that occurred during the sessions and are clear evidence that playing MMORPGs facilitate the acquisition of day-to-day English as they encountered situations to greet one another (1), take their leave (3), interact in small talk and the use of humor (2) in social contexts.

In interaction type (1), the learners experienced encounters that were immensely influenced by being in a game. Many of the regular face-to-face aspects of a normal social interaction are removed, as the players of the game have taken on a character, and contexts such as age, sex and appearance are reduced to a large degree. This gives the players an arena to express themselves and interact in a safe environment. Giving greetings is a part of laying the groundworks for further social interactions and is valuable towards showing a desire to a part of a group or community. In interaction type (2), when the learners had established a connection to other players and the other learners, there was clear signs of progression in the interactions between them. They started sharing personal information and expressing

admiration for the others' capabilities or situation. The use of humor also became evident, leading to a positive interaction, and more production of the TL. Through what the researcher describes as lengthy leave-takings (3), the interaction between the learners and other players was left at a positive. The leave-takings would often indicate how both learners and players had a desire to meet again and made an effort to leave a favorable impression on the other party.

The establishment of intersubjectivity (4) was evident in the data, as the players and the learners interacted to create teams and friendships in order to conquer the challenges of the game. They communicated with one another, defining the challenges they were going to face, and worked out what would be required of them to accomplish their goals. Various excerpts from the communication that was done, is also provided in the findings, and are clear evidence of the players and learners working together to better understand one another and the game itself. The maintenance of intersubjectivity (5), is also represented in the data, as the learners were frequently met with new and challenging tasks, that required them to interact with other players. In these interactions they managed to engage in situations where co-construction of TL was necessary and was performed successfully (see. section 2.8). This was measured through the learners' active role in asking other players for assistance when running into a problem that was unfamiliar.

The attitudes of the learners were further explored through the post-study interviews. In sum the participants of the study were largely satisfied with the project, and the results it provided. A problem all of them ran into was challenges of how to further progress in the game as the mechanics and progression system was hard to understand. The participants would have wanted a further elaboration and more explicit feedback system that were provided to them before playing the game. However, this issue was only evident in the first few sessions and was strongly related to the knowledge the learners previously had of the game and its functions, which were nothing. Getting more experience within the game and understanding the progression system, a sense of comfort was established. With the comfort, provided with more knowledge, the learners claimed that the computer-based nature of the game made it easier for themselves to communicate with others. The anonymity provided by the pseudonyms and avatars within the game helped to reduce the fear of using the TL, and even encouraged towards risk taking. One of the learners reflected that he felt no pressure in production of the TL and that he felt more brave communicating in-game, compared to real

life. In conclusion, all the participants reflected positively on the aspect of playing the game to improve their English skills.

3.3.4 Conclusion, strengths and limitations of the study

To answer research question one the analysis of the data showed that there were multiple important features of EFL (English as a Foreign Language) learner linguistic and social interaction that showed itself to be evident in the light of the data. The frequent use of positivity in the form of greetings, small talk, humor and informal language were the factors that facilitated the creation of meaningful relations that improved on the social interactions between the participants of the study and the other players of the game. These relationships allowed the participants to take part in teamwork and interact with other people in a collaborative fashion. The collaborative fashion of the interactions and relationships itself lead to the learners being in a low stress environment. The positivity of the environment within the game prevented lasting breakdowns in communication and put the learners in a position to succeed in practicing the TL. The data also showed that whenever the participants reached out to other players and asked for assistance, they would generally receive it. This provided opportunities for collaborative social interactions and co-construction of the TL. The scaffolding provided by the players of the game, contributed towards feedback and learner noticing. The participants mostly adapted quickly and provided coherent and an understandable rephrasing of what they said in the first place. In other words, they would start many of the beneficial processes towards facilitating acquisition of a language. Concerning research question two, the response of the participants was largely positive. They established that the low-risk environment allowed them enhanced opportunities to practice their TL and get feedback immediately. To the participants it seemed like their own reading and writing skill benefited from the experience. In their own opinion, they encountered situations and interactions they seldom would have in a normal language teaching classroom.

As for the limitations of this study, there are quite a few. Firstly, the number of participants was small, the number of sessions was inadequate, and the researcher was not able to schedule any additional sessions. These facts constrain the ability to generalize the findings of the study, and care needs to be taken when using the information in further studies (Peterson, 2012). Secondly, there can be certain complications with participants self-reporting some of the findings. They may be influenced by their own biases towards the subject. In this study in specific all the participants reported a wish to play the MMORPG in the future. If

this were to learn more, or because they that it was fun is a fact that is hard to establish. They may have been influenced to think that this is a great tool for language learning, as it may be, but the participants' own biases need to be considered in further interpretations of this study. As the study was of an examining and exploratory nature, it was not meant to assert the nature of learning within an MMORPG but sought to understand and examine the connections between social interactions and language learning within an MMORPG.

3.4 Zheng, Bischoff & Gilliland (2015)

3.4.1 The Aim of the Study

This study looked to probe the subject of vocabulary learning in MMORPGs and sought to do so through examining how vocabulary learning happen within such a game. The difference to other similar studies is that the focus was on the process of learning vocabulary, rather than looking at the results of an increase in vocabulary. The research questions were:

1: "How do language learners appropriate resources in co-play between a new and an expert player?"

2: "What does vocabulary learning look like within an eco-dialogical framework?"

3.4.2 Method

This was a case study, and as such, it examined a game session that lasted two hours. The collection of data through this session was deemed adequate for the purposes of the study. It rested on the context of the data and relied on theoretical grounding to state the saliency of the results. The participants of the study were two individuals, one native speaker of Japanese and a native speaker of English. The role of the Japanese native was to represent a second language learner and learn through the game. The role of English native speaker was to coordinate the activities in the game, as well as cooperating with the native Japanese speaker in endeavors within the game. The native of Japan was a student of English in the U.S. and had studied English for nine years. In other words, he was of a high proficiency in English at the time of the study. The Japanese national was given the pseudonym "Conan" for further reference. The American national was one of the researchers, namely Bischoff. He was given the pseudonym "Mediziner" for further reference. At the time he was a graduate of applied linguistics and had extensive knowledge on the language. Bischoff had studied Japanese as an L2 and had been working as English instructor in Japan. Bischoff had also played other MMORPGs at a high level, but the one used in the study he only had limited experience with.

The data was largely collected through interactions within the game as well as messages on Skype. The screen of “Mediziner” was recorded through the entirety of the game session. This allowed the researchers to monitor the chat and system logs that are in the game, to show both the interactions between the two players, but also messages that the game provided. This data was collected and analyzed at a later date.

3.4.3 Findings of the Study

The findings present three different learning situations that the pair encountered throughout the two-hour session.

The first situation was centered around the word “forest”. While performing a quest to kill eight enemy NPCs, and trying to locate the enemies, Conan misspelled the word “forrest” when inquiring where to find the enemies. The recorded chat between the two objects of the study, showed a conversation about the locations of the spies. After searching for a while, Mediziner suggested that they should look elsewhere in the “forest”. Mediziner cared to use the word forest in his explanation. The response from Conan is that he was not aware of the fact the “forest” is written with one r. Conan then went on to ask Mediziner of the correct spelling of “forest”. In the next phrase where Conan refers to the forest, he uses the correct spelling. The first situation also showed the usage of the quest log in the game, that provides information on the quest one is endeavoring on. In between the explanation Conan also checked the quest log and after that referred to “forest” with one “r”. The combination of an expert/novice interaction between the two players as well as the usage of the quest log, shows how the game design facilitate learning the spelling of various words. A similar situation would presumably happen again given time and would allow Conan the possibility to internalize another spelling of a word.

The second situation happened when Conan asked about the meaning of the word “loot”. After fighting and killing an enemy, Conan “looted” the enemy’s corpse and asked Mediziner about the meaning of the word. A back and forth started between the two players, discussing the meaning of the word. The back and forth consisted of Conan asking for the meaning of the word, and then Conan asked questions about the universality of the word. After some enquiries Conan made his own definition of the word, recognizing that he had internalized the information provided by Mediziner. Conan seemed satisfied with his knowledge on the word and started using it in the correct way. Similar situations happened throughout the session. This was whenever Conan was unsure about the meaning of a word in the context of the game

or encountered a new word entirely. The data collected from this situation was interpreted to help Conan get a better understanding of the word “loot” and how to situate the word in a wider social context.

The third situation concerned the word “repop”, which is a word specific to MMORPGs. Mediziner, a player familiar with the game's terminology, used the word in the context of an enemy respawning in front of them. Conan immediately responded, asking about the word, and Mediziner used a similar word to describe the meaning, namely “reappear”. Mediziner further elaborated by saying the word “repop” comes from the fact that enemies that respawn pops out of thin air. Conan then excitedly expressed his engagement with the new phrase and was satisfied with the explanation he was handed. This is another situation in which Conan could use the context of the word to better understand it. Adding on the explanation by Mediziner, Conan got a clear picture of what the word looked like in the specific scenario that the word is meant to describe.

3.4.4 Conclusion, strengths and limitations of the study

The first research question asked how learners appropriate resources in co-play, one could clearly see the benefits that Conan had, having access to a native speaker of English. Conan took advantage of his co-player, continuously using Mediziner to gain information and definitions that would help him further his understanding of the language. Through actively working on his language, Conan was an agent of his own learning processes. The MMORPGs' nature allowed Conan to be an agent of his own language learning by constantly providing situation in which he was encouraged to better understand words and their meanings. Conan used Mediziner as a resource and recognized that this was an excellent way of learning new vocabulary. Through the findings of the study, it is clear that if a learner is provided the resources, an MMORPG can be an effective way to learning new vocabulary and appropriating it to new contexts.

The second research question is answered through explaining the cycles that the two players went through when encountering new vocabulary within the game. Through constant perception checks and using the information provided by the game as well as the conversations between the two players, Conan and Mediziner achieved language learning and skilled linguistic action. Through tuning himself to the game and the contexts it provided, Conan problem-solved and deduced, to learn and benefit from the quests and challenges that he met in the game. In a classroom setting, Conan might not achieve the same level of

learning, as the context of the MMORPG largely helped him see concrete ways in which he could improve upon his language.

As for the limitations of this study there are a few. One might think that the low number of participants may reduce the ability for this study to be generalized. The results and conclusion are heavily supported by already established theory within the field, so that the findings of the study have a base to generalize from (Zheng, Bischoff & Gilliland, 2015). However, the participants of the study may very well reduce its generalizability, not because of the number of participants, but because of their prerequisites. As Conan was a learner of high proficiency in the TL, he heavily relied on his already established knowledge to deduce and understand new words. The continuous use of an expert in English, Mediziner, helped Conan reach new heights in learning language. Other players of MMORPGs might not have access to the resources described above and might not show the same amount of progression as Conan did. In other words, the study defines that in an optimal setting, an MMORPG may be a huge resource for language learning and specifically vocabulary learning. Other players may not have the same experience as Conan but will be in an environment that will most likely facilitate vocabulary learning.

3.5 Discussion

We have seen that gaming may positively influence English vocabulary acquisition. In this section, I discuss the mechanics involved, relating the research findings discussed to the theoretical concepts introduced in section 2.

The studies above seem to agree that interaction is the single most important factor in vocabulary acquisition. Sundqvist (2019) is the only one of them that does not directly comment on interaction, but one of her findings is that players MMO and multiplayer games were the most proficient in English. Even though this finding does not directly point to interactions being the reasoning behind the higher proficiency in language, it seems evident that what separates these two genres from the others is the presence of interaction. According to Knight, Marean & Sykes (2020), video games that create informal gaming spaces that allow the players to engage in meaningful interactions that leads to an environment in which learning is the natural way to progress within the game. Progressing through an MMORPG will in some way force the player to engage in interactions with other players and NPCs within the game. With what Black, Thorne & Sykes (2009) said about the universality of interactions that happen within an MMORPG, one would think that the interactions in these

types of games greatly benefits both the vocabulary and general language proficiency of the players.

The amount of input that an MMORPG provides is paramount in making it a tool for language acquisition. Another reason for the finding of Sundqvist (2019) that is described in the former paragraph is the amount of input that is provided through an MMO or MP game. Another finding that Sundqvist (2019) made is that time spent on playing a video game had a positive correlation with the proficiency and vocabulary of the learners. Dahl and Vulchanova(2014) describes the amount of input to be an important factor for the proficiency of the learners of an L2. Dahl (2014) also concluded in that the time of exposure to the L2 was significant in increasing the learners' proficiency. The two studies described in section 2.2.2 describes a situation where learners where frequently exposed to simple instructions and greetings throughout their school day. If one looks at MMORPGs in this context, it will continuously give the learners instructions in English, through quest texts, NPCs and other players. One could by those facts argue that an MMORPG is one of the medias in which you get the most input of English.

Interactions within MMORPG games facilitate the acquisition of vocabulary through providing possibilities for cycles of output and input between players. Zalbidea (2021) found as mentioned, that continuous cycles of input and output is beneficial for the acquisition of vocabulary and language in general. If we look at the findings in Bytheway (2015) on the different strategies that learners use in interaction with each other in a game, one could argue that these autonomous learning strategies will put the players of MMORPGs in situations that starts continuous cycles of input and output. This will in turn make the learners aware of their use of language and start to use the different functions of Swain's output hypothesis (cf. section 2.4). Learners will have a multitude of opportunities to use the TL and produce language, they will also be provided with possibilities to test their hypothesis on words and phrases and their meaning. Furthermore, learners will start noticing the gap between their current knowledge on the language and what they need to improve on. This learner-generated noticing (Swain, 1985) will inspire learners to seek new input that they can use to bridge the gap between their current knowledge and where they want to be. In an MMORPG the learners will be encouraged to seek out help from experts of the game, which may give them feedback on phrases, concepts and mechanics within the game, providing new input in the TL. An example of this can be seen in the case study of Zheng, Bischoff & Gilliland (cf. section 3.4). Even though the example provided in the study is an extreme example of the expert/novice

interaction (cf. section 2.4) between two players, it gives us an ideal on how beneficial such an interaction can have on learning new vocabulary and internalizing it. The expert/novice- as well as a collaborative interaction (cf. section 2.4 & section 3.3) allows the players to scaffold one another and provide comprehensible input for the other players, creating an environment that can facilitate the acquisition of language and vocabulary (cf. section 2.2.1). For such an interaction to facilitate the acquisition of language and vocabulary, not only does it need to provide scaffolding, but also establish and maintain intersubjectivity (cf. section 2.5). The player within an MMORPG needs to create meaningful and collaborative relationships, where they will have to share their perspectives and define words and phrases together. In this way the players will have to adapt to the perspectives of one another. If this is achieved, they will create a very beneficial relationship in which they facilitate the acquisition of language for one another.

The anonymity of the players within an MMORPG allows for a safe learning environment. Peterson (2012) found that conversations in an MMORPG are not influenced by the normal fears of L2 learners in producing the TL. He further explained that by humor and exchanging of personal information the players created a relationship in which they were able to express themselves without the fear of failing. Collaborative interactions that had these conditions were seen as valuable towards creating an environment in which testing and failing was allowed. Knight, Marean & Sykes (2020) touch on the same topic (cf. section 4.2). The players of the game can hide their identity behind their avatar within the game, which further allows them to work together and develop critical and analytical thinking skills. The learners are pushed beyond simply learning the words or phrases they come across, and they start to internalize them, enabling the learners to use their new vocabulary in a diverse set of situations. An example of this is displayed in the study of Zheng, Bischoff & Gilliland (2015), where through conversation one of the subjects deduced his way to better understand the word “loot”. In this example the subject showed no fear in sharing his thoughts and ideas about the phrase. On these grounds one would argue that for a learner’s vocabulary to benefit from an MMORPG, a safe learning environment needs to be in place. Due to the nature of an MMORPG and the avatars that works as personas for the players, they can be whomever they want to be. They can project whatever they want to the world and might in turn be fearless as it comes to learning new vocabulary and other skills through the game.

4 Implications for English teaching

To state the influence of using MMORPGs in English education concerning vocabulary acquisition, one first need to look at the implication the new curriculum (the Knowledge Promotion curriculum, 2020) has on English education as well as instruction in general. In addition, several studies will be used to discuss the influence that MMORPG games can have on English education in relation to the new curriculum. The studies that will be used for the discussion are Knight, Marean & Sykes (2020), Gee (2003) and Ryu (2013).

4.1 The Knowledge Promotion curriculum

The new curriculum within the Norwegian school system allows and encourages educators towards more varied instruction, both in general and within English education (Ministry of Education, 2017).

4.1.1 The Core Curriculum

The core curriculum is a description of the values that Norwegian education should consist of in the coming future. The following excerpts will describe values that should be implemented in all education (Ministry of Education, 2017):

1. “To create motivation and the joy of learning in the teaching situation, a broad repertoire of learning activities and resources within a predictable framework is needed.”
2. “Differentiated instruction applies to all pupils and shall for the most part take place through variation and adaptation to the diversity in the pupil group within the learning community.”
3. “In a time when the population is more diversified than ever before, and where the world is coming closer together, language skills and cultural understanding are growing in importance.”
4. “By varying its learning arenas, schools can give pupils practical and realistic experiences which promote motivation and improve insight.”

Excerpt 1 describes the need for motivation and joy in learning situations, attributing those two to a broad repertoire of learning activities, and learning resources within a predictable framework. This statement entails that the instruction needs to be varied to bring joy and

excitement to the learning activities in which the learners engage with. There also need to be a predictability to the activities so that the learners know what sort of challenges they will face. Excerpt 2 touches on the same subject and adds the information that the activities the learners face must be sculpted towards the prerequisites of everyone, so that the learners can experience the joy and excitement of learning in a safe environment. Excerpt 3 describes the situation the world is in today, with a focus on diversity and cultural understanding. It further defines language skills as a part of a larger framework to achieve understanding of one another as well as tolerance and acceptance of cultural diversity. As English is one of the dominant languages in cultural exchanges, this excerpt lends credence for second language education to be a big part of teaching cultural appropriation in schools. Excerpt 4 stresses that through varying education, schools can give learners realistic and practical experiences that promote motivation and insight. Variation in the learning arenas the pupils meet in day-to-day education will help them get a greater perspective on other people and cultures.

4.1.2 The English Curriculum

The following quote explains the central values and relevance of English according to the new curriculum:

“English is an important subject when it comes to cultural understanding, communication, all-round education and identity development. The subject shall give the pupils the foundation for communicating with others, both locally and globally, regardless of cultural or linguistic background. English shall help the pupils to develop an intercultural understanding of different ways of living, ways of thinking and communication patterns. It shall prepare the pupils for an education and societal and working life that requires English-language competence in reading, writing and oral communication.” (Ministry of Education, 2019).

In other words, the education and instruction that the pupil get in English are essential in his/hers cultural appropriation and development as human beings. English will help the learners in understanding the different cultures of the world and provide the tools for the learners to have the competence to communicate orally as well as through text. This excerpt only describes a small part of the new curriculum but has in common with the core curriculum that there is an openness to the ways in which the learners might reach the competence goals. What this implicates for English teachers is that if the goals are met, the way in which the teachers get their pupils to reach the goals, should not be the focus of the

education. Here are seven competence goals presented in the new curriculum, for pupils to reach after their tenth year of school (Ministry of Education, 2019):

5. “Explore and present the content of cultural forms of expression from various media in the English-speaking world that are related to own interests.”
6. “Use a variety of strategies for language learning, text creation and communication.”
7. “Use different digital resources and other aids in language learning, text creation and interaction”
8. “Listen to and understand words and expressions in variants of English”
9. “Ask questions and follow up input when talking about various topics adapted to different purposes, receivers and situations”
10. “Express himself or herself with fluency and coherence with a varied vocabulary and idiomatic expressions adapted to the purpose, receiver and situation”

Excerpt 5 leaves a lot up to the interpretation of educators of English. The goal stresses a fact that learners should encounter different cultural forms of expression and that they are supposed to get it from a variety of medias in the English-speaking world. However, the goal does not specify which types of culture that needs to be explored. This leaves all types of cultural expressions in the English-speaking world available for use in future English education. The last part of the goal concerns cultures of the learners’ own interests. It states that pupils need to be encouraged to explore their own curiosities within the English-speaking world. This can further be interpreted to learning through medias that are of the learners’ own interests. Excerpt 7 states that the use of digital resources as a means to learn English are necessary. Through combining the goals of excerpt 5 and 7 we can see that the use of digital resources of the learners’ own interests may encourage them to further develop their English.

Excerpt 6 is also a competence goal from the English curriculum and expresses the need for variety of learning strategies in English education. Learning strategies are used differently in every classroom, and the open nature of the goal at hand leaves everything up to the educators. The wide variety that is stated to be required is tightly knitted to the statements of the core curriculum that stresses the value of differentiated instruction (the Knowledge

Promotion curriculum, 2020). The use of differentiated instruction will facilitate learning for each individual student and meet the individual requirements for all pupils to learn.

The competence aims described in excerpts 9 and 10 are clear evidence that learners need to use and interpret English from a variety of platforms. The aims involve adapting one's language to situations and topics the learner might come across. Excerpt 9 specifically asks for the learner to evaluate to input that they get, and adapt their production of language to the context they are in. In order to do so the learner needs to be aware of his/her gaps in knowledge and becoming aware of them (cf. the discussion in section 2.2). Excerpt 10 asks for a variety of vocabulary and idiomatic ways to express one's meaning. The learner will come across new words and phrases as they encounter input in the variety of situations they will need to encounter through their education. This variety of vocabulary will have to come through various sources and medias. MMORPGs are arenas where they will encounter idioms and new vocabulary that the learners can use in their production of language (cf. section 3.4.3).

4.2 Knight, Marean & Sykes (2020)

In Knight, Marean & Sykes (2020), they define something called informal gaming spaces. Informal gaming spaces is situations the learners encounter within games, and where they may unconsciously learn or acquire language (cf. the discussion in section 2.4). The type of situation described above often occurs when players are faced with a new challenge, which they have not encountered yet. Knight, Marean and Sykes believe there to be a synergistic nature between games and language learning. Good games and good classroom activities have a meaningfulness to them, meaningful interactions, feedback and communication through working towards a goal that is achievable. Through working together, learners develop critical and analytical thinking skills that pushes them to move beyond the acquisition of the content itself (learning the meaning of words), but rather gets them acquainted with using that content in a diverse set of situations. In other words, good games have the possibility to scaffold the language learning process. Scaffolding is when a learner is provided the tools to understand input that is beyond his/her comprehension (Vygotsky, 1978). Knight, Marean & Sykes (2020) further elaborate that the learners are put into a low-risk environment, where failing to elaborate on or communicate something has very few repercussions if any. They are not themselves, but their characters, they can be whoever they want to be. Learners need to be in a safe environment for acquisition to occur, where they are not hindered by the fear of failing.

To ensure that they are in a safe environment, they need to be unconcerned with the possibility of failure and feel like they are a part of a group that encourages testing the meaning of new input. (Krashen, 1985).

There are certain things that need to be in place for gaming to be a constructive learning platform. The activity needs to be set in an informal setting for the best of results to happen, and the learning process is highly dependent on the fact that the subject is continuously confronted with new challenges and meaningful interactions. For an informal gaming space to exist there needs to be a meaningfulness, and a connection to the world (Knight, Marean & Sykes, 2020). The connection to the world is established with the other players of the game, and through interactions with them, there will be a constant challenge for the learner to improve on his/her language skills to keep up with the game. For gaming to be an environment where language develops, there seems to be a general understanding that an informal setting is needed for progression in L2. Continuous gaming might be a gateway to the type of informal learning one might want to expose to L2 learners (Sylvén & Sundqvist, 2012).

There are multiple existing EE activities outside gaming, both through the internet and other medias, that have some of the same aspects as an MMORPG but lacks the adventurous and exploring nature of such a game. Sylvén & Sundqvist (2012) encourages teachers of L2 to take advantage of EE and use it to further develop their teaching schedules, through constructing homework or classroom tasks that encourage language acquisition. These types of activities must fit the learner, so that they can work on language skills by doing something they like, something that encourages and motivates them to improve on his/her language skills. The activity needs to be specific to each learner and must include the specific interests of each learner.

This is in accordance with Black, Thorne & Sykes (2009). Online communities that front informal and participatory activities will have the potential to greatly benefit the proficiency of an L2 adolescent and boost their self-efficiency, meaning that through communicating with their peers, learners will gradually notice better ways to elaborate on various topics. Many of these topics is universal and can directly be implemented into the everyday life of a person. These types of interactions include day-to-day like activities, like crafting gear and clothes for your character, making food that enhances your persona and travelling to various locations within the game. The universality of the interactions that happen through these types of

activities can be argued to be largely beneficial for the players' SLA. The learners will encounter situations where they either need to get ingredients for food, or materials for crafting clothes, which the learners in turn can use in their everyday life. If they encounter words or concepts, they are not familiar with, the game will force them to seek help within the community or with NPCs. These characters might use text or sound to explain the concept for them. In other words, the game will constantly provide the information they need, and put them in positions to learn.

4.3 Gee (2003)

Gee (2003) derived a set of 36 different principles of learning that each player of a game undertakes as he/she takes on a new game. These principles were described to be very beneficial for use in schools, both for teachers and learners. All 36 principles might be relevant concerning learning through MMORPGs. The present study will use and explain six of the 36 principles as they seem to be the most relevant for learning within an MMORPG. These principles are: 1. Cultural models about the world, 2. cultural models about learning, 3. cultural models about semiotic domains, 4. transfer, 5. affinity group and 6. Insider.

The first principle - cultural models of the world – involves that learners are met with situations that make them reflect on the world itself and create new conflicting views that makes them reevaluate already existing views on culture. Situations like that are constantly met throughout a gaming experience and the structure of the learning within the game is set up in a way that makes the learners reflect on their own models concerning other cultures and their own identities, abilities and social connections (Gee, 2003). They will further be required to create new models that may conflict with their previous ideas of the world. This principle coincides with what Gardner & Lambert (1972) defined as integrative motivation. There is reason to believe that as learners create new models of the world and cultures through interacting with other players and in the cultures within a game, they create new attitudes towards the cultures that are encountered. The learners' attitudes will be challenged, which might make them reflect on other cultures way of living. If the learners' attitudes change, they might even be provoked to have an interest in learning of the encountered cultures. In short order, they will be motivated to learn more about the various peculiarities within the culture, and in turn learn language.

The second principle is about the learners becoming aware of the learning mechanisms that are in place when they learn a language (Gee, 2003). The learners begin to reflect and think

consciously on the ways in which they learn. This can in turn start to make the learners actively think about the strategies that make them learn and make them aware of what works best for them. This goes beyond any of the learners' previous attitudes on ways to learn. For new players this might entail the possibility of new learning strategies being discovered and employed in their future endeavors within language learning. The third principle is similar to the first two in that it refers to the learning being set up in a way that make the learners think critically about semiotic domains in which they encounter. Semiotic domains refer to a variety of different forms that take on meaning, images, symbols, sounds, gestures, etc. (Gee, 2003).

The fourth principle, transfer, are that learners encounter many situations within a game in which they gain the opportunity to practice using the knowledge they have from previous situations within the game. This adds a support to the learning process that makes them more able to encounter new situations, as well as practicing problem-solving. This speaks to the progression that needs to be within a game for it to facilitate learning, the player needs to meet new situations in order to practice his/her new skills and knowledge.

The fifth principle is the one called affinity group. Learners achieve great connections with the people that they share endeavors, goals and practices with. They will develop through creating groups that are supportive in nature and scaffolds (Vygotsky, 1981) one another in challenges they face within a game. Integrative motivation (see section 2.6) is crucial for this principle. Through finding common ground and taking an interest in the other members of the group, the learners will in turn get an inner drive to learn more about his/her peers.

The sixth principle is the fact that learners are insiders in a game. They constitute the role of an insider, a teacher and a producer within a game. Through their interactions with and customizability of games, learners can design their own game experience from start to finish (Gee, 2003). This gives the learners the opportunity to focus on areas that are required for them to progress, and on areas that are of interest to them.

To summarize, the six principles above describe how video games provide learning through constantly challenging the attitudes of learners towards cultures and the way in which they see the world. The learners encounter new and challenging situations, where they must learn to survive and progress within the game environment. Through transferring knowledge to new skills and providing new situations the learners can use their newly acquired skills and knowledge in, an environment is created that facilitate learning. To use this information to

further L2 education and instruction one needs a learning environment in which these principles are used.

4.4 Ryu (2013)

In 2013 Ryu performed a study that dealt with the issue of learning through gaming culture and beyond gaming culture, building on some of Gee's (2003) 36 principles. "Beyond gaming culture" was defined as the activities that the learner practices outside of the game, to enhance his/her skills, strategies and knowledge about the game. This involved videos, forums and other resources that provide information on the game on the internet. The study set out to find information on how cultural norms governed the English learning within gaming- and beyond-gaming culture.

The base of data collection was the endeavors of six participants with English as their second language, into gaming- and beyond-gaming culture. The data collection was done through observation and interviews with the participants.

The findings of the study were categorized into three main sections, which were: language learning through game play, language learning through beyond game culture and the relationship between game play and beyond-game culture.

Language learning through game play was very limited, as the game that was played was SP and the players had no opportunities to interact with other players. The participants learned some new words and phrases that was within the game. The newly learned vocabulary was mostly acquired through interactions with the NPCs within the game. The game play itself was not seen as a significantly different way of learning language than from other media. However, the lack of understanding motivated the participants to take part in online-communities that discussed the game. Here they enquired about the game itself and the websites provided the interactions that was lacking within the game.

Language learning through beyond-game culture was found through the interactions that the participants had with the online communities connected to the game. On these websites they actively discussed and debated strategies and mechanisms within the game. The participants of the online community collaborated to find out the meaning of words, develop new strategies and other activities. The online communities are called affinity spaces (see section 4.1). In these affinity spaces the participants could communicate with their peers in English. The communities were places where the participants could share vocabulary related to their

interests within the game. It was easy to collaborate with one another when they were encouraged by the easy-going nature of the community. The relationship between game- and beyond-game culture was obvious. As the participants of the study encountered situations that they were unable to handle within the game, they were driven to participate in the beyond-game culture.

The researcher himself commented on the limitations of his study. The results are not necessarily generalizable. However, the aim of the study was not to collect quantitative data but to explore a topic about which we have too little knowledge. In such cases, a quantitative study is often a natural first step (Ryu,2013). This study is still very relevant for usage in the present study on vocabulary acquisition through MMORPGs. Combining the findings of Ryu (2013), Knight, Marean & Sykes (2020) and Black, Thorne & Sykes (2009), all touching on gaming communities, there is a larger base for generalization.

4.5 Discussion

The didactic use of MMORPGs is something that we have seen, is agreed upon as a valuable tool to encourage language learning. However, there is little to no research on how to take the elements of such a game into the classroom. This discussion will state what needs to be in place for a teacher to use MMORPG elements when constructing their teaching plans. To round out the discussion, a suggestion of how these teaching plans may look, will be presented.

The learning principles within games, presented by Gee (2003), are in many ways descriptions of the core values of the Knowledge Promotion curriculum (Ministry of Education, 2017:2019). As many of the principles explain that games and situations within games challenges the world views of the learners, the core curriculum asks for learners to get a wide variety of impressions so that they can get used to a more diversified everyday life. Using these principles in the classroom will motivate the learner and get them a sense of joy in what they are doing. In order to do so, a teacher need to rethink the way in which they instruct his/her students. The teachers might continue to use explicit teaching but base their teachings on the implicit nature of the games the learners play in their spare time. By doing so the learners might use the classroom as an arena to test their knowledge, creating an environment where pupils are encouraged to give feedback on each other's language, and testing their vocabulary. Sylvén & Sundqvist (2012) mentioned this strategy. Using the EE activities to develop teaching schedules is a way to make the instruction interesting for the

learners while motivating them to continue their development in the TL. This will in turn make the learners feel the joy of working on their language, through that the activities are rooted in their own interests and spare time activities.

The learners need to work together to achieve goals and accomplish tasks for a learning environment that facilitate the acquisition of language. As mentioned above (cf. Section 3.5), one of the main factors for MMORPGs to be good facilitators for language acquisition, the games need to make the learners interact with one another. The English curriculum (Ministry of Education, 2019) state that the central values of the subject are communication, cultural understanding and being able to communicate regardless of differences between one another. The competence aims that are presented (cf. Section 4.1.2) all include interaction as a means to improve one's language. Focusing on the fact that the previously presented research (cf. section 3), one can see the value in creating activities that require learners to engage in meaningful interactions (cf. Section 4.2) within the classroom. For these meaningful interactions to take place, learners must feel comfortable in producing the TL and not have the fear of failure and the fear of receiving comments on their language. For a learner to acquire a language the fear of failing needs to be absent, and this can be accomplished when a learner feels like a part of the group the speaks the TL (cf. Section 2.1). In other words, when learners work together to achieve a goal in a group which allows for input-output cycles (cf. Section 3.5), they will be in an optimal setting for language learning. It will then be up to the teachers to create classroom situations that allow for interactions of the collaborative nature to occur.

The research done by Ryu (2013) lays the groundwork for how to structure tasks within the classroom to mimic the informal nature of gaming- and beyond-gaming culture. Even though Ryu (2013) does not directly say that the use of beyond-gaming culture can be a valuable resource in the classroom, there is clear evidence that working in the environment that he describes beyond-gaming to be facilitates language acquisition (cf. Section 4.4). In a perfect world one could imagine students playing MMORPG in classrooms and engaging in activities within the game, scaffolded by the interventions of a teacher. However, the structure and equipment required for such an endeavor is not in place in present day schools. The job of the teachers then becomes to create environments that could simulate the situations encountered in beyond-gaming and gaming culture, that allow for the creation of affinity spaces (cf. Section 4.3). The teaching schedules may then involve the use of beyond-gaming websites for the learners to engage in interactions that are useful tools to work on the words and phrases they encounter within the games they play in their spare time. This gives the learners an

immediate interest in what they are going to do in the classroom and drive them to learn and acquire more language and new vocabulary. If a teaching schedule is structured around the culture surrounding gaming, all the competence aims mentioned (cf. 4.2.1) within the new English curriculum will also be worked towards. The learners will encounter various new expressions, interact with a variety of people stemming from different cultures, and use varied strategies to learn English. The learning- strategies and principles of games then need to be used in education.

5 Summary, Conclusion and Outlook

This thesis set out to answer the following research question:

How does playing online role-playing games influence the vocabulary of learners of English, and should any research findings in this area be taken into the English classroom?

MMORPGs facilitate the learning of vocabulary through providing massive amounts of input and opportunities for producing language. The peer-interactions between players of the games are paramount in scaffolding learners to acquire new language. Through discussions of game principles as well as new language encountered, an informal learning arena is created, where the players are provided with an environment that allows them to test their own language and get the feedback needed to improve upon it. The anonymity of an MMORPG is what drives the learners to further develop their language skills and test new vocabulary.

MMORPGs should be taken into consideration when designing future education of English. The principles within these games are structured for the players to progress and uses multiple learning principles to achieve this. As it is hard to directly use MMORPGs in the classroom, educators need to be aware of the massive influence on learning that game principles can have if they are used correctly in the classroom. The creation of affinity spaces where pupils can talk about and use their interests to progress their language must not be underestimated. Beyond-gaming culture is most definitely a resource that needs to be further explored. The new national curriculum allows and encourages educators to use a variety of medias to further the pupils' education. MMORPGs as a learning tool and resource needs to be looked at in the same light as other internet- and media resources, as this thesis has established.

Many of the studies focusing on the various benefits of extramural English (EE; Sundqvist & Sylvén, 2016) through gaming, has mostly included adults as well as teenagers, in exception of some studies performed by Sundqvist (2019) and Sundqvist and Sylvén (2012), which focused solely on teenagers. Sundqvist (2019) points out the lack of studies focusing on specific demographics, and that any study within these boundaries would be very welcome to the field, as one has noticed when reviewing it as well. All the other research on vocabulary acquisition in MMORPGs used in this thesis, are studies where the participants are adults. This needs to change.

Future research might take a closer look at the didactic use of MMORPGs and explore the use of such games in the classroom. The results of such studies may revolutionize English education as we know it today, seeing the many benefits of playing these games. As the present study did not look at the different words and phrases that one encounters within MMORPGs, a mapping of this vocabulary would also be very welcome to the field.

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