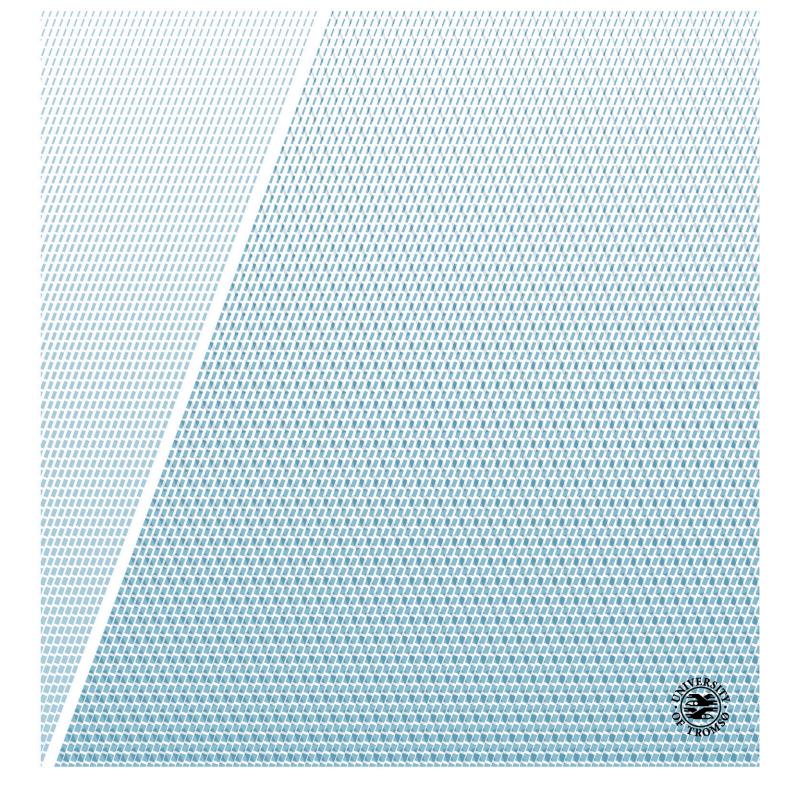


Institute of Teacher Education and Pedagogy

The Gamified Classroom: "It has been different because we know what we are talking about".

Runar Karlsen Lajord Master thesis in LRU-3902 English didactics May 2016. 30 study points.



Acknowledgements

The process of writing this thesis was more stressful than I have ever imagined. For someone

who just wanted to be a teacher when he grew up, suddenly being thrust into the role of an

academic researcher was both scary and unsettling. I have certainly learned a lot about myself

throughout this process.

First and foremost, I would like to extend my gratitude to the group of pupils and their teacher

who were kind enough to participate in my study. Without you guys, the game would have

been a lot less fun and interesting. Thanks for playing!

Ingrid, thank you so much for sharing this process with me. Thank you for all of the

supporting words, and thanks for being there when my mind took me to dark places. Most

importantly, thank you for being my significant otter.

I would also like to thank my family and my friends for keeping me grounded throughout this

semester, and for reminding me that there is a more important life to be lived after the

submission date.

Last, but certainly not least, I would like to thank my advisor, Hilde Brox, for all of your

support and guidance. Thank you for always pointing me in the right direction when I started

loosing sight of what I was doing.

Runar Karlsen Lajord,

18.05.16.

ii

Abstract

Video games and gaming is part of a large popular culture that many pupils today are engaged in on a daily basis. This is, however, something that educators have had little success in exploiting for educational benefits.

This study aims to explore how a gamified classroom can improve the oral activity of pupils of English teaching in lower secondary school. Implementing principles and mechanics of games into classroom teaching activity creates the gamified classroom, which is the setting for the research project. This study focuses on these principles and mechanics, and how they can be beneficial for the oral activity of pupils.

In the process of creating a gamified classroom, I designed a teaching scheme that facilitated a game in the classroom that the pupils were participating in. The game was designed on the basis of common principles and mechanics from games. Its tasks and problems were solved using oral language production. While the game was played, data was collected using logs that the pupil will write at the end of each lesson. Additionally, group interviews were conducted after all the lessons had been concluded.

The study shows that the gamified classroom can improve oral activity in pupils by facilitating active, extensive, creative and spontaneous use of the English language. The language that was used was situated within an authentic context where the pupils were encouraged to use their language for meaningful communication and problem solving. However, it is unclear whether the gamified classroom is a teaching tool that can be beneficial for all pupils.

Table of contents

ACKNOWLEDGEMENTS	I
ABSTRACT	II
TABLE OF CONTENTS	IV
1 INTRODUCTION	1
1.1 Background	1
1.2 Aim of the study	1
1.3 Disposition	2
2 THEORETICAL FRAMEWORK	3
2.1 Game-based learning	3
2.1.1 Gamification	3
2.1.2 A gamified classroom	4
2.1.2.1 Storyline	5
2.1.2.2 Customization	5
2.1.2.3 Problem solving	5
2.1.2.4 Choice and consequences	ϵ
2.1.2.5 Unlocking content	ϵ
2.1.2.6 Levelling systems	7
2.2 Language learning and teaching	8
2.2.1 Communicative approach	8
2.2.2 Situated learning	Ç
2.2.3 Authentic activity	10
2.2.4 Language production in the English subject	10
2.2.5 Dialogue	11
3 METHODOLOGY	13
3.1 Design of the study	13
3.1.1 Epistemological perspective	13

3.1.2 Case study	14
3.2 The group of pupils	14
3.2.1 Formal access	14
3.2.2 Real access	15
3.3 Lesson structure	15
3.3.1 Lesson 1: Creation and familiarization	16
3.3.2 Lesson 2: The first quests	17
3.3.3 Lesson 3: The dragon battle	19
3.3.4 Lesson 4: The summary	20
3.4 Collection of data	21
3.4.1 Pupil logs	22
3.4.1.1 Helping questions	23
3.4.1.2 Finishing log	23
3.4.2 Participating observer	24
3.4.3 Qualitative interviews	25
3.4.3.1 The interview guide	27
3.5 Ethical considerations	28
3.5.1 Power relationships	29
3.6 Analysis and reporting of data	29
3.6.1.1 Pupil logs	29
3.6.1.1.1 Lesson logs	29
3.6.1.1.2 Finishing logs	30
3.6.1.2 Interviews	31
4 FINDINGS	31
4.1 Pupil logs	32
4.1.1 Choice	32
4.1.2 Cooperation	32
4.1.3 Production	33
4.1.4 Learning	33
4.1.5 Interest	33
4.2 Finishing logs:	34
4.2.1 Question 1	34
4.2.2 Question 2	35
4.2.3 Question 3	35

4.3 Observations	36
4.3.1 Participation and oral activity	36
4.4 Interviews	37
4.4.1 Introduction	37
4.4.2 Gamification	38
4.4.2.1 Game-like experience	38
4.4.2.2 Choice and consequence:	38
4.4.2.3 Rewards	39
4.4.3 Language and oral activity:	39
4.4.3.1 Oral English in English lessons:	39
4.4.3.2 English as a requirement in gamified lessons:	39
4.4.3.3 Choice and language production:	40
4.4.3.4 Situational relevant language:	40
4.4.4 Dialogue and conversation:	41
4.4.4.1 Impactful dialogue	41
4.4.4.2 Meaningful responses	41
5 DISCUSSION	43
5.1 Communication	43
5.1.1 Meaningful communication	43
5.1.2 In-game dialogue	44
5.2 Gamification and language	45
5.2.1 Language use in problem solving	45
5.2.2 Producer-like roles	46
5.3 Culture	46
5.4 Benefits	47
5.5 Is the gamified classroom for everyone?	49
6 CONCLUSION	49
7 LIST OF REFERENCES	51
8 ADDENDUMS	52
8.1 E-mail to principal	52

8.2	Informational letter and consent form	53
8.3	Overview of factions	55
8.4	Interview guide	56

1 Introduction

1.1 Background

I have always been very fond of games. Ever since my first video game experiences with *Crash Bandicoot* on the *PlayStation* and *The Elder Scrolls: Morrowind* on the PC, I have enjoyed video games as an immersive experience where I could lose both my time and myself. The hobby of playing video games has never really left me, even after I now have entered what must be called an adult age. My games have stayed with me. After I started my education in teaching, a related interest started to grow with me. I started to think about the games that I have played all of my life in terms of how they can be used in a teaching context. Specifically, in the context of English teaching.

Pupils in English lessons today are bored. Teachers are having trouble engaging them in the material of schooling, which results in a low degree of participation. This is affecting results on tests and exams, which gives the impression that we have a population of pupils that are generally not very good at English. If one were to visit Norwegian pupils at home and observe them while playing video games, one would soon come to the conclusion that this is not the case. Young people are able to participate in games that are conducted exclusively in English, and use the English language actively within the context of their games. Video games are a part of a huge popular culture that traditional schooling so far has been unable to exploit. With this research project, I am not saying that we as educators should bring video games into teaching. I do not think that this is necessarily the solution. I am, however, interested in exploring how the principles and mechanics from these games can be used in a teaching context, and if they can have an effect on the pupils oral activity in the classroom.

1.2 Aim of the study

The aim of this study is to explore the benefits of gamification on oral activity in an English classroom. This results in the following research question: "How can a gamified classroom improve oral activity of pupils of English?"

A longer definition of gamification will follow in the theoretical framework, but for the sake of this introduction I will provide a shortened version: Gamification is the use of gamemechanics and game principles in contexts that are usually not associated with games. Over the course of this study, I aim to implement gamification in classroom-based English teaching to create a gamified classroom and study the effects that its principles and mechanics have on the oral activity of the pupils involved.

I will insert myself into an English classroom at a lower-secondary school. In this classroom, I will conduct the teaching that will be based on principles of gamification. The principles that I choose will be discussed in the theoretical framework. In the practical implementation, I will design a teaching scheme that focuses on the use of oral language in a setting that is based on principles of gamification. In other words, using these principles I will be facilitating a game in the classroom for the pupils to play using their oral language.

While the game is being played, I will gather data of the pupils' experiences through pupil logs. After the completion of the teaching, I will conduct interviews with the pupils in order to additional data.

1.3 Disposition

In chapter 2 I will be providing a theoretical framework that will inform my research. Chapter 3 will be dedicated to the methodology of the research project. I will explain how I implemented gamification into the classroom that I was in. I will also give a detailed overview and description of the methods of data collecting that I used, and how I analysed the data that was collected. In chapter 4 I will present the findings that the research project generated. These will be followed by the discussion in chapter 5, where I discuss the findings using the theoretical framework. Finally, chapter 6 will contain my concluding thoughts, as well as some reflections regarding future studies.

2 Theoretical framework

My research is placed within the field of game-based learning. This is an extremely varied field that includes many different perspectives and theories regarding how games can be beneficial to a learning process. I will also turn to the concept of gamification and present some different perspectives that help inform the concept. In the next part I will present some theoretical perspectives regarding language learning and teaching, with a focus on oral language and activity. Together, these theoretical perspectives will create a framework for exploring my research question.

2.1 Game-based learning

The concept of game-based learning has attracted much attention lately among many educators who are interested in progressive ways of teaching and learning. The origin of this concept is the notion that games and play is an integral part of every culture in the world, and is starting to be regarded as an integral part of learning as well (Poulsen, 2011, p. 17). From this notion, researchers and educators have begun to explore the potentials for learning that exits in games. The field of game-based learning is very wide and includes all games, from digital to non-digital and everything in between. Game-based learning is less interested in the nature of the game itself, it is more interested in the game as a facilitator for learning (Poulsen, 2011, p. 19). It assumes that good games create spaces for learning.

2.1.1 Gamification

Another popular concept in current educational discourse is that of "gamification". Gamification can be defined as a concept where elements associated with video games (game mechanics or game dynamics and principles) are applied to non-game contexts. It has mostly been explored in the areas of marketing and business, but its potential is starting to be noticed in other areas, such as Health, Government, Environment and Education (Simões, Redondo, & Vilas, 2013). The application of gamification in the business world has mostly been related to motivation, and creating incentives for investing effort. Video games all have their own mechanics implemented to keep the player involved and invested in the game, to keep the player playing. Upon completing objectives in a game, the player is often rewarded in different ways. The type of reward depends upon the style of game. Dicheva and Dichev (2015) conducted a study to map the use of gamification in education. The reward systems

included in this study were points, badges, levels, leader boards and virtual goods. All of these systems are commonly found in traditional video games.

Many who work within the field of game-based learning are reluctant to use the term gamification within the same areas as game-based learning. They claim that it is too limiting for both terms games and learning(Poulsen, 2011, p. 27). However, I choose to use gamification as the term that is most befitting of my teaching scheme. The reason for this is that the teaching scheme that I am implementing does not necessarily conform to any sort of expectations of what a game is or what a game should be. The scheme is first defined by the principles that I choose to implement in to the teaching, secondly by how the pupils react to these principles. In the following, I will argue how gamification is a term that is subject to change in the field of education and can be used along side game-based learning as an additive to teaching contexts.

2.1.2 A gamified classroom

Gamification is a term that can be subject to a change in definition, based on how it is used and what it is informed by. Kapp, (in (Poltronieri, 2014)), defines gamification as "using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning and solve problems". This is a much broader definition than the one provided earlier in the chapter in that it, in addition to mechanics, includes the aesthetics of games and game thinking. It also expands on what gamification can be beneficial for, to include learning and problem solving, which is where my use of gamification stems from. I am using the expanded sense of the term. This is also where gamification can be viewed in similar terms as game-based learning, where the two concepts can draw from each other to be beneficial to teaching contexts. How I define gamification in the context of my research project is the result of a process of developing gamification as a way of interacting with a situated context using language in a teaching setting. The design of my teaching scheme using gamification has more of a focus on narrative (which also includes aesthetical elements such as genre), player interaction, problem solving and action in context than external motivation and creating incentives, though these mechanics also have a place in the scheme. In the following I will present the principles that I chose to implement into my own gamificationmodel, along with explanations as to why I think they can be additive to an educational context. The practical implementation of these principles into the teaching scheme will be

found in the up-coming methodology chapter. I will also explain some terms that will occur later in the paper when I describe the implementation of the teaching in the classroom.

Many of the following principles are derived from James Paul Gees (2005) article about principles of video games that facilitate good learning. They are also principles that are commonly used to constitute and define game settings, and this is why I just to use them in my gamified classroom.

2.1.2.1 *Storyline*

In order to make the lessons feel fun and engaging for the pupils, I decided that it was important to have a narrative in the game, a story that the pupils could be engaged in. The content of the story also had a function in the execution of problem solving and the pupils' interactions with each other. The practical implications of this will be shown in the methodology-chapter. In implementing this into the teaching scheme, I used many of the principles of Storyline. The Storyline method consists of a thematic, problem-oriented sequence of teaching that encourages a high degree of pupil participation (Eik, 1999). The pupils are engaged with creating and interacting with a story, while the teacher facilitates problem solving by introducing situations to the story.

2.1.2.2 Customization

Most games will allow for some level of customization of the gaming experience. This depends on the design of the game. One way of implementing this is allow problems to be solved in different ways. Choices that players make with regards to their character and play style will affect how they will want to attack a problem or situation (Gee, 2005). In a teaching context, facilitating a setting where the pupils can customize their own experience can contribute to the level of ownership and agency that the pupils will have with the teaching.

2.1.2.3 Problem solving

"A game is nothing but a set of problems to solve" (Gee in (Corbett, 2010). Many games encourage creative and varied problem solving. The problems or challenges that a game offers should facilitate a situation where the players are able to use the tools at their disposal in order to solve the problem in an efficient way. More importantly, the player has to choose the appropriate tools to use based on the task at hand. The opportunity for creativity in problem

solving comes when the game allows for a problem to be solved in many different ways, depending on the players' choices and play style.

In an educational context, one can draw certain parallels between problem solving in games and the tasks that are used in task-based language learning. These tasks focus on using the target language to solve meaningful tasks that have a non-linguistic outcome (Nunan, 2004). In other words, the task needs to have an objective that is situated in some form of context. This makes it so that using the target language is not the main objective of the activity; it is the tool that the pupils use to achieve something that appears tangible and meaningful. Examples such tasks that are often used in English classrooms is calling customer service, shopping at the grocery store or getting you car repaired. An important part of the process in task-based learning is to determine what type of language that is most relevant for the situation; figuring out what tools that are needed for solving the particular task at hand.

2.1.2.4 Choice and consequences

Making decisions and choices is a staple feature of many video games. For example, games in *The Elder Scrolls* series facilitate quests and storyline elements to have many different outcomes or courses of action based on the choices that the player makes. The best video games, in my opinion, are the ones that make your choices as a player have tangible consequences for the further progression of the game. The decisions then feel more impactful, and it makes the players feel like they have an important role in how the game evolves and progresses. In addition to adding to the level of agency, it gives the player a feeling of being a producer rather then just a consumer in the gameplay (Gee, 2005). This is an ideal that should be sought after in teaching as well. The pupils should be able to have a producer-like role in the teaching and with the curriculum that they are taught.

2.1.2.5 Unlocking content

A common feature of Gamification in education is the concept of unlocking content (Dicheva & Dichev, 2015). This stems from a very common idea in traditional video games. When you complete objectives in the game, you gain access to additional content. The nature of the content that is unlocked varies. Sometimes the player will unlock the ability to explore geographical locations that they were unable to before. Other times, the player will be able to progress the story after completing an objective. The player can also unlock skills or attributes that will make his/her character stronger, or make it be able to experience other facets of the

game. An example can be found in the game that was played in the classroom in my research project. After completing a quest in the game, the pupils unlocked selectable combat skills that would be used to complete a quest later in the game. Combat skills in a game context can be defined as different abilities that a player can utilize in a combat situation, facing one or more opponents. The nature of these abilities can vary from dealing damage to the opponent(s), restoring health to themselves or other players, as well as providing beneficial attributes that can make players stronger. The skills themselves, and how they are presented, depends on the genre of the game. In a fantasy-game one will often find things like magical spells, as well as skills that involve swords, shields or bows.

2.1.2.6 Levelling systems

As I mentioned earlier in this chapter, motivational mechanics are common in most games. One of these mechanics is some kind of levelling system. Tasks that are completed in the game reward the player with an increase in level, which is beneficial for the player in some way. Very often, the player is given access to new skills or attributes that helps the player progress in the game as a reward in addition to the level increase. This is also attributed to the principle of unlocking content. Motivation is large factor in these types of reward mechanics. The reward mechanics of good and engaging games involves elements of both intrinsic and extrinsic motivation.

Having reward mechanics in classroom teaching can have its benefits. One approach to this is to simply reward positive behaviour with something that the pupils can attach some value to within the classroom context. An example of this could be awarding stars or other symbolic imagery for completing homework or doing something positive. These types of reward systems can to a large extent be attributed to principles of extrinsic motivation and behaviouristic learning theories, with regards to principles of stimulus/response and reward/punishment (Imsen, 2010, p. 30). Another way of thinking about rewards in teaching is to embed the rewards in the content and context of the situation. The rewards could then consist of things that are applicable to the design of the teaching, something that the pupils have an actual use for. This builds upon the principles of intrinsic motivation, where the reward is the activity itself.

2.2 Language learning and teaching

In current times, there is a shift in language learning from a paradigm where the aim of the teaching is the acquisition of symbolic mental representations of language, to a paradigm where learners are considered participants in learning environments where they can collaborate to create meaningful language learning situations and contextualised practises. This paradigm considers knowledge as fundamentally situated in practice. "It assumes that the most effective way of learning a language is to participate in a community in which the target language is used to communicate in a real context" (Abdallah, 2015, p. 2). This is called situated language learning. As my research project is focused around oral English teaching, this change in focus is a very interesting perspective to bring to the discussion because it can help inform the pupils' experiences of using their oral language in a gamified classroom. In the following I will present additional theoretical perspectives on language teaching and learning, with a focus on oral activity in the classroom.

2.2.1 Communicative approach

The communicative approach is an approach to language learning that is very centred around the learner, and emphasizes the learners' use of language for the purpose of communication. Communicative competence is the main aim of practitioners of the communicative approach. The ideology behind this approach is that language learning is not simply the acquisition of grammar and lexical elements. It also involves innovation and creativity in language production. Learning is achieved through authentic meaningful communication where learners are encouraged to produce different types of language while using different language skills. Conveying meaning is the primary focus of classroom activities (Szecsy, 2008).

The communicative approach can be divided into two separate approaches, the *weak* version and the *strong* version. The weak version emphasizes learning to use the target language for communication. The strong version focuses on learning the target language through communication (Szecsy, 2008). These are two very different approaches to language learning, and they represent different ways of informing teaching. The weak version assumes that the grammatical and lexical frameworks of the language are already acquired. It seeks to teach the pupils communication as a skill, using the target language as a tool. The strong version on the other hand, seeks to teach the grammatical and lexical elements of the target language using communication as a tool.

Another important aspect of the communicative approach is that making mistakes is imperative for learning. It claims that language learning is a process of creative construction and involves trial and error (Szecsy, 2008). In a communicative setting, the participants will get instant feedback on their language production. The person on the receiving end of the communication will provide signals if they have trouble understanding something, either verbal of with body language. This is a good opportunity for a learner to rethink and find the most efficient way of conveying the meaning of their statement. The meaning is then negotiated and constructed between the participants of the interaction.

2.2.2 Situated learning

Situated learning theory claims that learning is situated, that it is embedded within activity, context and culture. It is based on participation in cultural and social processes, and therefore is often unconscious and unintentional. Lave and Wenger (1991) have named this a process of "legitimate peripheral participation". They claim that learning is an integrated and inseparable aspect of social practice (Lave & Wenger, 1991, p. 33). Within these social practises, the learning that occurs is part and parcel of the context in which it is presented, the activities that are available within that context and the culture in which all the participants are evolving as members.

Gee (2003, p. 35) claims that traditional school learning is "often about disembodied minds learning outside any context of decisions and actions". With this, he is referring to the traditionalist view of learning as a matter of skill and drill, along with what can be considered shallow understandings of subject-related terms. According to Gee, good and efficient learning must be considered a cultural process, as opposed to a natural or instructed process of attaining knowledge, because we seldom learn anything outside of our role as a member of some form of culture (Gee, 2003, p. 11). Furthermore, Gee (2003, p. 35) claims that learning as a cultural process involves having specific experiences that facilitate learning. Video games, as a form of cultural process, facilitate these experiences very efficiently and, in the case of good video games, without the use of overt instruction. Learning occurs through the situations that the player is presented with and the skills and knowledge that they are asked to employ are situated within the context of the game.

2.2.3 Authentic activity

When participating in any part of traditional schooling, pupils are engaging in the activities and behaviours of a specific culture. A problem that traditional school activity has is that it takes place within one culture, but is often attributed to another. For example, solving math problems in a maths book takes place within the culture of a school, but is attributed to the culture and practices of mathematicians (Brown, Collins, & Duguid, 1989, p. 34). This can be aid about most of the classroom activity that happens within the culture of schools. A major consequence of this is that the pupils seldom experience activity related to the culture that they are actually participating in. This is called authentic activity, which is defined as "the ordinary practices of a culture". The meaning and purpose of these activities are socially constructed by the members of the given culture (Brown et al., 1989, p. 34).

In the context of English teaching, the notion of authentic activity has a significant implication. If we follow the logic of the definitions given in the paragraph above, pupils who are participating in English lessons, orally or in writing, are members of a specific culture. This culture can be defined as a culture of people who use the English language in some form or another. With this in mind, one could make the argument that the activities that are usually implemented in traditional English teaching are attributed to the culture of schools, not to the culture of people who use the English language. Classroom tasks that are designed within the culture of schools, often associated with testing and mapping, can fail at providing the contextual features that allow for authentic activity to happen. The context of activity is a complex network of elements from which practitioners of a culture draw essential support. The source of this support is often not recognized by the designers of classroom tasks (Brown et al., 1989, p. 34). In order to achieve authentic activity in a classroom setting, the teacher will need to successfully establish a culture in the classroom that the activities of the lesson can be attributed to.

2.2.4 Language production in the English subject

The curriculum for Norwegian schools states the following about the purpose of English teaching for learners: "To succeed in a world where English is used for international communication, it is necessary to able to use the English language and to have knowledge of how it is used in different contexts" (Norwegian Directorate for Education and Training, 2013). With this statement, the curriculum puts emphasis on two important aspects of English

teaching: Communication and context. As is the case with the many facets of teaching, these two terms are functionally connected. Communication can be defined as "the transmission and interacting of facts, ideas, opinions, feelings and attitudes" between two or more participants (Rayudu, 2010, p. 13). In this interaction, language is one of the more essential tools in order for communication to be successful. The content and meaning of the interaction is negotiated between the participants, based on the context in which the communication is had. This is an excellent opportunity for language learning. A lot of language acquisition happens in the process of ordinary communication that is situated within a context that is relatable for the learner (Brown et al., 1989, p. 32). One of the largest challenges educators has in attempting to facilitate this process, is to create this relatable context as a setting for meaningful communication. Teachers, as well as textbooks, attempt to situate their teachings in a context where learners feel that their language production is relevant. The following are competence aims after year 10 in Norwegian lower secondary school:

- Choose and use different listening and speaking strategies that are suitable for the purpose.
- Express ones self fluently and coherently, suited to the purpose and situation. (Norwegian Directorate for Education and Training, 2013)

These competence aims further emphasize the aforementioned important aspects of English teaching with regards to oral activity. As we know, the competence aims of a subject are the official mandate for teachers. They inform the practice of teaching to a large extent.

2.2.5 Dialogue

According to Dysthe (1995), the term dialogue in a classroom context can be defined as the interaction between the participants that are part of that classroom setting. In association with her research project, Dysthe has broadened the term to also include interactions involving the written word, texts, as well as oral activity. In this paper, however, I will focus on the most basic definition of dialogue. This is to me the oral interaction involving the pupils and the teacher.

Dialogue between people can in many ways be defined as a negotiation of meaning. The notion of meaning is particularly interesting here. According to Michail Bakhtin, meaning is generated in the interaction between the talker and the receiver (Dysthe, 1995, p. 63). Meaning and understanding of what is being said is as much dependent on the response that it

elicits, as it is on the content of the original statement. Therefore, the meaning of content is negotiated between the people who are participating in the dialogue. Dysthe refers to response as "the activating principle" (own translation), and states that a response creates the foundation for an active and engaging understanding of meaning (Dysthe, 1995, p. 64). Further, Bakhtin claims that dialogue is not only a matter of exchanging of statements. It is also defined by the tension, and sometimes conflict, between the statements of the communicators. This tension can often occur in an interaction where the participants are of different, and conflicting, opinions. It has the potential to create new opportunities for interpretation, which progresses the negotiation of meaning and understanding (Dysthe, 1995, p. 65). Subsequently, the interaction is developed and encourages further use of language.

3 Methodology

The purpose of my research project is to explore the benefits of gamification of classroom teaching on a selection of pupils' oral activity in the classroom. In this chapter, I will cover the methodology of the research project. Topics that will be covered are the design of the study, sample selection, the structure of the lessons, methods of data collecting, reliability and validity and ethical considerations, as well as my methods for analysing the data that was collected.

3.1 Design of the study

This project employs qualitative research methods. Qualitative research studies typically separate themselves from their quantitative counterparts in their design, purpose and methods of data collecting. According to Merriam (2014), qualitative research aims to gain an understanding of how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences. Quantitative research methods are on the other hand designed to systematically describe the facts and characteristics of a given phenomenon or the relationships between events and phenomena (Merriam, 2014, p. 5). I choose to use a qualitative approach to my research project due to the nature of its design and the nature of the research question. As the design of my project is to implement gamification into classroom teaching, it seems natural that the pupils' own experiences makes up the majority of data collected. I choose to use pupil logs and interviews as my main sources of data. Additionally, I am considering myself a participating observer, as I was present in the classroom for the entirety of the project.

3.1.1 Epistemological perspective

My research design is situated in the epistemological perspective of social constructivism. According to Merriam (2014), social constructivism is an important element in the process of informing interpretive, qualitative research. It "assumes that reality is socially constructed, and that there is no single, observable reality. Rather, there are multiple realities, or interpretations of a single event" (Merriam, 2014, p. 8). Although I had certain expectations when starting the project, I have very limited knowledge of how gamification is actually going to affect the pupils. The knowledge that I as the researcher am seeking will be constructed socially in the classroom, through the process of implementation and the written and oral records of the pupils' experiences.

3.1.2 Case study

My project falls under the definition of a case study. A case study is defined by Merriam (2014) as and in-depth description and analysis of a bounded system. The definition of a bounded system is a single entity, something that can be "fenced in", a unit around which there are boundaries (Merriam, 2014, p. 40). A classroom is an excellent example of such a bounded system, as it is a somewhat closed environment where there is ample opportunity to study the effects of a process or a "contemporary phenomenon within its real-life context" (Merriam, 2014, p. 40).

The decision of designing my research project as a case study was made on the basis of the knowledge that I am hoping to acquire through the projects implementation. I am not aiming to test a clearly formulated hypothesis. Rather, I am interested in interpretation, discovery and insight into a single entity (Merriam, 2014, p. 42): An English classroom where I had implemented gamification.

3.2 The group of pupils

3.2.1 Formal access

The process of determining the group of pupils that would participate in my study, and where the study would take place, started with an e-mail request. The e-mail was sent out to the principal of a particular school in Tromsø municipality. The e-mail in its entirety can be found in the addendum-section. The principal then proceeded to forward the e-mail to some teachers under his employment, and asked if my project would be of any interest to any of them. Luckily, one responded positively, and I was quickly put in contact with a teacher whose class would become the selection for my project.

The group itself consisted of nine pupils, aged 14-15, in an English specialization class. The class consisted of eight boys and one girl. After the first meeting with their teacher, it was clear that I would have full freedom of action for the lessons that I had planned. This allowed me to conduct my research without having to relate to any set plan for the subject. One of the pupils, one of the boys, followed an alternative teaching plan so he was not present in the lessons that I conducted.

3.2.2 Real access

Following the process of attaining formal access into a research setting comes the process of attaining real access into the group. Gaining real access starts with the amount of trust that the group has in me. As a visiting researcher who was going to conduct actual teaching in a group of pupils, my way in was through the teacher who was responsible for the class. She had prepared the class prior to my arrival in the classroom, and given the class information about what it was that I was coming to do. With this, she assigned me a position in the group, a position that lent itself to a certain level of trust. My impression of the position that I had when I started was that the pupils had trust in me as a teacher. That position was solidified through my continuous presence. As I will go into further later in this chapter, the distinction between the role of a researcher and a teacher in a setting like this very easily become blurred. The trust that the pupils had in me in the role of a teacher transferred to situations where my role of a researcher was clearer, for example in the interview situations. The research setting that I was facilitating created somewhat of a power relationship between the pupils and me. I will discuss this aspect further in the part of the chapter where I discuss ethical considerations.

It quickly became clear why the teacher had initially thought that my project would be fitting for her class. Most of the pupils claimed to be very preoccupied with video games on their spare time, and stated that they played for anywhere between 4 to 7 hours every night. The only one who claimed to have little to no previous experience with video games was also the only girl in the class. Instead of looking at her as a challenge that I would have to work around, I decided to rather look at her as an asset, providing interesting data for how someone lacking experience with games would respond to the lessons.

3.3 Lesson structure

In this part of the chapter, I will explain the lessons in which I implemented gamification in detail. The teaching was conducted over a period of 4 lessons, each lasting 60 minutes. The classroom was equipped with a projector and a screen, which I utilized for all of the lessons to provide visual and audible aids. I will explain my choices for tasks and the elements that I chose to introduce into the lessons. All of the oral activity that happened in these lessons was exclusively in English.

3.3.1 Lesson 1: Creation and familiarization

The theme of this first lesson was creation of, and familiarization with, the game world. I started with an introduction where I explained parts of what was going to happen for in the following lessons. In my presentation of the tasks, I made it clear to the pupils that the fictional world was theirs to create and that I would provide some general framing to hold it all together. I explained it through the metaphor of a sand box. The largest frame that I provided was that the world was to be set within the fantasy genre. This seemed to resonate well with the pupils, who expressed a high degree of familiarity with the conventions of the fantasy genre. I handed out a booklet to the pupils for writing their logs at the end of the lesson.

The main task of this lesson was to create the game world, using some keywords and questions that I provided. These keywords were: Races, landscapes and creatures. I had already made up the name for the world in which the game would be situated in: Illdaria. The pupils first discussed in groups, and then presented their thoughts out loud. The pupils used their familiarity with the fantasy genre and video games in order to contribute to the content of the world, and their suggestions were clearly inspired by other, well-known, conventions of the fantasy genre. I decided not to limit this creation process in any way, such as limit the pupils to any conformity of fantasy universes. This resulted in a world consisting of an exiting mix of elements from many different universes. The contributions in the category of race included Dwarves, Cyclops, and Blood Elves etc. In this process, I would often ask follow-up questions or ask them to explain something that they had said. As I expected, the pupils were able to produce rich explanations for everything they had produced. I wrote down their contributions on a document on the projected screen so that they all could see what the world was starting too look like. I also planned to use the document in a later task. I used pictures of fantasy landscapes from the Internet, as well as fantasy music on YouTube for inspiration, and to create a multi-sensory experience for the pupils. I chose to play the background music for the entirety of the lesson in order to create the feeling of a game environment. Traditional video games are often scored by continuous theme music. The pictures that I chose to use were rather generic, inspired by different fantasy universes. The pictures were not meant for the pupils to attach anything related to the game, they were purely for inspiration. The pictures were playing on a loop on the projected screen for the whole lesson.

The second task that the pupils were given was to create their own characters. I asked them to choose between the races they had produced in the previous part of the lesson, as well as name their character. Next I grouped them together, three in each group that resulted in three different factions, and asked them to create a faction, an alliance between the three characters. I aksed the pupils some questions that would define their factions. These questions were as follows: *In what landscape is your faction located? What resources are available to you?*What is your faction's main trait? This resulted in three very different factions: The Cyclops Clan, the Ice-Iron Mountains and the Daggerfall Pact. An overview of the factions can be found in the addendum section. All of these choices that the factions had to make, made an impact on how they ended up playing the game. They influenced how the players solved quests and how they related to the other factions. Perhaps the clearest example of this was the choice of the faction's main trait. The factions were given three options: Warfare, trading and politics. The pupils were told that the choice of main trait would define how their faction interacted with the gameplay. How this ended up affecting the game will be clear in the next lessons.

3.3.2 Lesson 2: The first quests

The lesson started with the first Meeting of the Factions, where the pupils where given their first quest. The quest entailed presenting their faction to the other factions at the meeting, using the requirements from the previous lesson. This was important for the development of the game, as the resources and main traits of other factions have an effect on the decisions you make in the game, as I will show later. This first quest was rewarded with an increase in level, to level 2, as well as a new universal skill that was given to all participants: The skill of diplomacy was given, followed by a short discussion of what that meant, and how it could be used in the game. The pupils reacted positively to being awarded something that was useful for them in the game. The idea behind this game-element in the planning phase was that it would give the pupils a feeling that they were unlocking content in the game, which is important in order to have a real sense of progress.

The second, and largest, part of the lesson was devoted to yet another quest. This time, the factions were presented with a game element that affected their own factions in many different ways. In this case, it was the arrival of an elven faction from a neighbouring land. The following is the quest text that I presented to the pupils:

"A faction of elves from the neighbouring land of Salari has landed on the shores of Illdaria. They have made a statement to all factions, informing of their intentions to settle in Illdaria. With them, they have brought a cargo of precious metals and different kinds of food (meat, fruit, and fish) that they will use for trade. They have large boats that can be used for both fishing and warfare. They also have a fairy large army. How can this faction positively or negatively affect your faction, and how will they affect the other factions? How do you choose to deal with these newcomers? Your factions' main trait should affect your choice.

Take notes as you will need them later."

As is shown, the quest text illustrated what resources the elven faction brought with them, the size and nature of their army and their intentions of settling in Illdaria. I also used pictures on the projected screen to illustrate the quest text. The factions were asked to discuss this new element internally, and make decisions on how to deal with it based on their own resources and main trait, before meeting the other factions.

Then, we had another Meeting of the Factions, where all the factions were asked to present their viewpoint on how to deal with the elven faction. There were lively debates about the subject, as the three factions had made different decisions based on their own current standpoint defined by the choices they had made earlier, with regards to resources and their main trait. I, the teacher, took on the role of a representative of the elven faction, asking questions and following up on what the pupils said, moving the debate forward when it was needed, which it rarely was as the pupils themselves were thoroughly engaged. The factions were able to reach an agreement that everyone was somewhat satisfied with. It was decided that the elven faction would settle in a wooden forest, located on the outskirts of the homestead of one of the factions, The Daggerfall Pact. This faction, with warfare as their main trait, saw great potential in being able to cooperate with the elven faction, utilizing their great army along with their own to succeed in military endeavours. The Ice-Iron Mountains, which had chosen trading as their main trait, insisted on having the ability to engage in commerce with the elven faction, and that The Daggerfall Pact would not disrupt this in any way. The goods and wares that the elven faction had brought to Illdaria would conveniently supplement their own shortcomings, such as food, which is hard to come by in the mountains. The participants were rewarded with yet another level. They were also rewarded with their own combat skills, which they were to think of themselves by the next lesson.

The purpose of this lesson was to introduce the concept of choice in games, and the consequences that these choices have. An important part of gameplay in many games is the ability to interact with the content of a game at the will of the participants. Along with this comes the ability to make choices as the game progresses, and see the affects that those choices have on the game. In this lesson, the choices that the pupils made in the creation of their factions affected how they chose to relate to an in-game element: The elven faction. As will be shown, the choices that were made in this interaction had consequences for how the next lesson played out.

3.3.3 Lesson 3: The dragon battle

I started the lesson with a quick recap of what had happened in the game so far. Some of the pupils were absent in the previous lesson, so this was mostly for their benefit. I then proceeded to ask the students to sit with their factions, and introduced the quest for the day. The purpose of this lesson was to introduce a combat situation that the characters had to deal with using relevant and appropriate language. The quest was to fight a large dragon that was determined to destroy the world that the pupils had collaboratively created. The following is the quest text that was shown to the pupils:

"There have been reports from the northern scouts of a Dragon roaming the skies. The dragon is called Isgramar the Destroyer. If he is not dealt with, he will destroy the world with all its factions and inhabitants. The factions will meet to discuss how to handle the dragon-threat."

First, we had a Meeting of the Factions where the pupils were asked to give a description of their combat abilities. Then, through discussion with each other, the pupils strategized and tried to figure out the best way to defeat the dragon using their own combat skills in synergy with each other. We discussed the different roles that each of the pupils would have in the battle. For instance, one of the pupils suggested that one or two of the combatants should have the role of someone who is able to take large amounts of damage before dying, and could taunt the dragon into attacking them, allowing the others to deal damage to the dragon undisturbed. Subsequently, someone should have healing abilities that helps the other players stay alive. When the strategy had been laid, the participants ventured into battle.

For the combat situation itself, I chose to implement a dynamic combat system in which I would play the role of the dragon. What I mean by dynamic is that the combat situation would be constantly changing based on what the pupils chose to do using their combat skills. I played a loop of music that I found on YouTube, which consisted of music that is typically played during combat situations in fantasy games. I also used a picture of a dragon that I projected on to the large screen. The picture was up throughout the entire fight with the dragon. I used this as a visual representation of what the pupils was fighting, to create an atmosphere resembling that of video games. The pupils used language to convey their actions to me, based on what combats skills they had chosen, which I then responded to. After about 10-15 minutes, with all the pupils having used their combat abilities in appropriate situations, the dragon was dead. Because the factions had decided to allow the elven faction to settle in Illdaria, and because of their cooperation with the Daggerfall Pact, they were able to use the elven army as an aid in combating the dragon. However, a decision was made during the course of the combat situation to sacrifice the elven faction in order to slay the dragon more easily. This decision could have large consequences, as will be shown in the next lesson. The characters advanced to level 4.

3.3.4 Lesson 4: The summary

The fourth and final lesson was conducted a bit differently than the previous three. Instead of introducing new quests or tasks to the game, I wanted the pupils to reflect on the events that had already happened. Firstly, I wanted them to think about the major choices that they had made in the game, with regards to quests and the larger events. I asked them to briefly recount what had happened, and to think about how their choices in these events had consequences for the game. Secondly, I asked them to think about how things could have played out differently, and which courses of action that might have led the game in different directions.

I started the lesson by asking the pupils for a detailed recap of what the previous lessons had entailed. I asked them what situations they had to face throughout the game, which quests they had been given, and what tasks they had solved. Several of them had a good recollection of what had transpired and were able to give detailed accounts of their experiences. We then proceeded to have a conversation about how the game-world looked like now that all of the lessons were concluded. We discussed how the world had been changed by the events that

had occurred in the previous lessons, and the by the decisions that they had made. For instance, a major decision that was made in lesson three was to sacrifice the elven faction in order to successfully slay the dragon Isgramar the Destroyer. We discussed to great length how that decision would affect the world and the factions, with regards to the arrangements that the different factions had with the elves. The decision to sacrifice the elves was mainly made by a member of the Ice-Iron Mountains who saw greater benefit in defeating the dragon than continuing their current trade-relationship. As part of the discussion about what could happen further, the pupils suggested that this could trigger a war between the Daggerfall Pact and the Ice-Iron Mountains. The Cyclops Clan, who had chosen politics as their main trait, would then have to pick a side based on what would be most beneficial for their faction. One of the pupils made a reference to diplomacy, which was a skill that had been given as a reward in the first lesson. The pupil used the term in the context of negotiating between the factions. It was clear that he had assigned some meaning to the term, and was able to use in the context of the game.

At the start of the lesson, many of the pupils seemed a bit distant and disengaged. That could just have been connected to their general energy level of that day, but I suspected that it had something to do with that I announced early that there would be no new quest or task this lesson, and that we were just going to discuss the previous lessons. The pupils had probably become accustomed to doing something engaging and game-like, and the prospect of just having a conversation might have been less exiting to them. This is probably something that I should have thought about, and designed the lesson differently. However, their level of engagement rose substantially when the discussion pivoted to what could happen further in the game. They seemed eager to keep playing, and had many ideas as to how the game could be developed and new elements that could be introduced.

3.4 Collection of data

In this part of the chapter I will explain my choices of methods of collecting data from the research project. I will explain why I feel that these methods are appropriate for my research project. I will also give a brief description some of the problems that these methods can bring to a data collection process.

3.4.1 Pupil logs

At the end of every lesson, I asked the pupils to write a short log. Merriam (2014) places logs in the category of personal documents. As a method for collecting qualitative data, studying personal documents can be a reliable source of data with regards to a participants impressions and experiences with a given event. They reflect a participant's perspective. By nature, personal documents are highly subjective, and are limited to what the author found relevant to write (Merriam, 2014, p. 143). I regarded written logs as a relevant and useful method of collecting data for two main reasons. One is that it would provide me with the pupils' immediate reactions. If I were to solely rely on a qualitative research interview, many details of the pupils' memory would likely have been lost. Additionally, their answers in the interview would probably be characterized by their experiences in the last lesson, as it would be closer in memory. Another reason is that the themes of the lessons, and the way that the pupils used English, were different in every lesson. Therefore, I viewed logs as a useful way of getting an impression of the pupils' unique experiences after each lesson. The logs were written in Norwegian. I made this choice because I wanted to avoid any language barrier that could prevent the pupils from expressing themselves fully.

The log consisted of the following two questions: 1. What have you done in this lesson? 2. How did you experience speaking English in this lesson? As part of qualitative research, the questions used are open-ended, and provide the opportunity to write very different answers. As I am studying the effects of a specific phenomenon, as part of a case study, I needed the questions in the logs to be formulated in a way that allowed the pupils to write whatever they felt the need to tell me with regards to their experience with speaking English. The process of narrowing down the formulation was long and required many different versions to be discarded, but I finally landed on the two questions above. They both have their own distinct function in the log. The first is meant to function as a way for the pupils to think about the lesson and what they actually did during the course of it. The second gives the pupils the opportunity to record their experiences with speaking English. The two questions are functionally linked together. How the pupils used English, and their experiences with speaking, is connected with what they did in the lesson. For this reason, I wanted the first question of the log to help towards bringing the activities of the lesson to the front of their memory in order to create a basis for answering the second question.

3.4.1.1 Helping questions

After the first two lessons of writing logs, I noticed a need to introduce some helping questions to the pupils. When reading what they had written in their logs, I came to the conclusion that some of the comments lacked depth and a level of reflection that could be useful for me as data. Some pupils produced statements like "it was OK to speak English in this lesson", or "it was a little bit difficult to speak English in this lesson". I was hoping that behind statements like these there was some kind of reasoning that the pupils had problems expressing. Therefore, at the start of the third lesson, I used the first few minutes to talk to the pupils about expressing fully expressing these thoughts using some follow up questions. I told them that if they wanted to write that it was "OK to speak English", to follow up that thought by asking themselves "why was it OK to speak English", or "what was it about this lesson that made it OK to speak English". The same principle would apply is something was difficult or challenging. I saw the effects of this in some of the logs after this third lesson, in that more pupils wrote longer, more reflected answers.

The problem of getting answers in the logs that would be less useful as data is something that I should have anticipated more then I did. The reasoning behind not putting more emphasis on guiding the pupils through writing their logs with these kinds of helping questions was that I wanted the logs to be a completely open through-way from the pupils to me where they could tell me whatever they had the need to tell me. I wanted to avoid anything that steered the pupils in any direction while writing. For this reason, the helping questions that I chose to introduce to the pupils were focused on completing thoughts that the pupils already had.

3.4.1.2 Finishing log

At the end of the fourth lesson, I asked the pupils to write a finishing log. This log had a slightly different focus then the previous. I wanted the pupils to answer some questions that had them reflect upon this particular way of working and using English in the classroom. The reasoning for this was to acquire more diverse data that said something about the pupils' experiences with gamified classroom teaching. The questions were as follows:

- 1. How was it to work in this way?
 - a. Explain your answer.
- 2. Has this been different to how you are used to working in English lessons?
 - a. How?
- 3. Has this way of working affected your oral activity in the lessons?

a. In what way(s)?

The process of formulating the questions asked in this finishing log started with the notion that I wanted the questions to be connected to what I would ask the pupils in the final interviews. A secondary purpose was that I wanted to start making the connection between gamification and the pupils' oral activity. The last question in the finishing log is the result of this purpose.

3.4.2 Participating observer

As a researcher in a teaching position, I had a unique possibility to gather data as a participating observer. The purpose of the observation was to capture impressions from the actions and interactions in the classroom as they were happening. According to Merriam (2014), observation as a research tool differ from everyday observation when it becomes systematic and connected to a specific research purpose. It also becomes a research tool when one attaches an expectation to the observation to produce trustworthy results (Merriam, 2014, p. 118).

Participant observation can be problematic. Many claim that data collected using this method can be affected by the subjective nature and limitations of human perception (Merriam, 2014, p. 118). In my own execution of being a participating observer, I had some significant challenges. The first was in having both the role of a teacher and an observer at the same time. The biggest challenge in this was that as a teacher, so much of ones attention is directed at the implementation of the teaching and all the elements that are at work in the classroom. The consequence of this is that one runs the risk of not being able to get a clear view of all the available data in the research setting. This is something that may have had an affect on the data that I was ultimately able to gather. Another challenge I found was that my observations in the classroom were at times coloured by my own perceptions of the research question, and my expectations of the effects of the research on the sample selection. This may have caused some data, not necessarily pertaining to these parameters, but still varied and useful, to have been neglected or overlooked in the process.

The teacher who taught the class on a regular basis was present in two of the four lessons. I regarded her as a potential source of valuable data because of her familiarity with the class, and her knowledge of their background in oral participation. After the two lessons that she

was present in, we sat down and talked about her impressions of the class during my teaching. Additionally, we had a lengthier conversation after the conclusion of the project where we discussed her impressions and thoughts. I asked her questions about things that were unclear, or asked her for her input on things that I hadn't fully understood regarding the class. We also discussed each and every pupil with regards how they had reacted to the project compared to their engagement in oral activity in normal English lessons. I will report my findings from these conversations along with my own findings as a participating observer.

When conducting any form of observations, it is always recommended to make detailed notes either during or immediately after the observations process. As I was in a position where I was teaching in a classroom, there was no opportunity for me to make any notes during the lesson. Therefore, my notes were made on the nearest possible occasion, usually immediately after the lesson was completed.

3.4.3 Qualitative interviews

A qualitative research interview is defined as a conversation focused on questions related to a research study, in which a researcher elicits information from one or more participants or informants (Merriam, 2014, pp. 87,88). There are several types of interviews, or way of conducting them, which are usually distinguished by their level of structure. Interviews are a suitable way of collecting data about a research project because of their flexibility and adaptability. It opens up a unique window into understanding what lays behind a persons actions and experiences (Robson, 2002, p. 272). This is very applicable to my study, because the understanding of pupils' experiences with gamification constitutes the majority of my data. There are, however, some disadvantages to using the qualitative interview as a method in a data collection process. Drawing conclusions from something that someone else has said can be quite difficult, and often comes down to a matter of interpretation (Atkins & Wallace, 2012, p. 86). Analysing statements from interviews is a very time consuming activity that requires the researcher to very methodical and spend a lot of time with the material in order to extract every nuance of the data. In a study that had as short of a time span as mine, time management is very important and the discussion has to be made of whether spending so much time on something is worth the data that it has the potential to produce.

In my research project, I chose to use qualitative interviews as a way to complement the pupils' logs. I viewed the interviews as an opportunity to ask questions from areas of the research that the logs did not necessarily cover, as well as questions that would provide a variety of data and supplement the collected data-pool. I chose to use a combination of semistructured and unstructured interview guide, which was characterized by a mix of more or less structured questions and open-ended questions, as well as a flexible ordering (Merriam, 2014, p. 89). Most of the questions were exploratory and aimed at the experience that the pupils had with a gamified classroom, and how they used English in the lessons. The interview sessions themselves lasted between 23 and 25 minutes. I was expecting them to last a little longer, aiming for over 30 minutes. This is one of the things that points to my lack of experience as a researcher, not being able to predict how much the pupils would be able to answer on each question. Robson (2002) claims that an interview under 30 minutes is unlikely to be fruitful. I found that to not be the case in my research. The interviews gave me some valuable data that helped me inform my research. Whether longer interviews would have given more usable data, is subject only to speculation. I chose to conduct the interviews in Norwegian, in order to avoid any sort of language barrier that could affect the pupils' answers.

Originally, I planned to interview the pupils in groups, dividing the class in two at random. This would give me two focus groups of 4 pupils to interview. I chose to use focus groups because of the benefits that it brings to the interview situation. According to Merriam(2014), knowledge is constructed through the social setting of the group, with the participants being able to interact with each other, as well as reflect and build upon each others answers. I also thought that the group situation would help make the situation less formal and more comfortable for the pupils, and facilitate an informal conversation between the pupils and myself that would encourage the pupils to speak more freely.

The first group interview, with the first four pupils, was conducted during the next lesson after the project had been completed. It took place in a small room adjacent to the classroom. The interview was recorded on a hand-held digital recorder. I chose to use a recorder, instead of simply taking notes, because I was worried that important impressions and nuances would get lost. The process of transcribing interviews from a recording is very time consuming, but the prospect of keeping valuable data makes it worth it.

The second group interview was scheduled to take place in the following lesson. Upon my arrival in the classroom, I was made aware that two of the pupils that were scheduled for an interview on this day, were absent. There remained only one pupil that could be interviewed in that lesson. I proceeded to interview that pupil, thinking that he would be able to produce useful data without the added benefits of the group-situation. My impression from that interview is that the interview guide that I had developed worked on a single participant as well, although I would have preferred to include this pupil in a group interview. The following weeks after this lesson was occupied by a weeklong winter break, followed by a weeklong work placement for the pupils. The next opportunity for me to come back and conduct the final interview was two weeks after. I came back hoping to be able to interview at least 3 pupils that I knew had not been interviewed yet. One pupil was again absent, so the final interview consisted of just 2 pupils.

With transcribing the interviews, some decisions had to be made with regards to the process itself. There are many ways to transcribe interviews, and their level of success is dependent on the experience that the researcher has with them. As I am very much a novice researcher, with little to no experience with transcriptions, I did quite a bit of research on different methods and tools that could be used in the process. Some decisions also had to be made with regards to if there was anything from the interviews that could or should be omitted in the transcript, utterances or phrases that could be considered unimportant. I made the decision to transcribe everything said in the interview, omitting only longer pauses.

3.4.3.1 The interview guide

As I mentioned earlier, the interviews that I conducted were somewhere in-between semi-structured and unstructured. The interview guide that I used for the interviews was structured as a list of larger topics that I wanted to get through, with an overview of questions and talking points that could provide useful data from the pupils. Each of the larger topics covered different areas of what I wanted to learn. Different theoretical perspectives that I had read leading up to the initiation of the project inspired these areas. I also had an introductory part that had a bit of a different function. As I mentioned earlier, a potential problem with conducting interviews following a teaching scheme like this is that the answers the pupils produce in the interview are likely to be connected to the part of the project that is closest in memory; their experiences in the very last lesson. As the events of the lessons were very

different, it was very necessary for me to record data about their experiences in every lesson. In order to circumvent this problem, I made the introductory questions of the interview function as a way of recapping the events of all of the lessons. The interview guide as a whole can be found in the addendum-section.

3.5 Ethical considerations

As a researcher, there are a number of ethical considerations that one needs to relate to in every chain of the process. In this part of the chapter, I will explain the ethical considerations that affected my research project and what measures I took to keep my project on firm ethical ground.

My project was reported with the NSD, the Norwegian Centre for Research Data. The reason for this is that a combination of indirect personal information (gender and home-municipality) would be gathered that could potentially reveal the identity of the participants. Because all of the participants of the study were under the age of 16, it was necessary to get the consent of their legal guardians. I managed this by writing a letter with information about the project and a description of what I was putting their children through in the classroom. The letter was given to the pupils before the start of the project, for them to present to their guardians at home. Along with the letter of information, I attached a consent form where guardians were given the option to sign, giving their child permission to participate in the project. The letter of information and consent form, as well as the project assessment from the NSD can be found in the addendum section.

A large ethical element that I had to consider was the anonymity of the participants throughout the entire process. After the project had been completed, the pupils log entries were transcribed digitally and, in that process, made completely anonymous and treated as a collective body of data. The logbooks were kept locked away during the entire process, and later disposed of. The recorded interviews were transcribed quickly after they had happened, and the recordings were deleted. In the interim where I was not working with the recordings, they were locked away in a locker with a padlock.

3.5.1 Power relationships

When conducting research that involves other human beings, it is important to keep in mind the element of power relationships. This occurs when the researcher is in a position of power in relation to the informants. The teacher-pupil relationship is a very clear example of this, and it may prove to be problematic in a research setting, especially in the interview process. A power relationship between researcher and informant may contribute to the informants not feeling like they can express themselves freely in fear of being put in less regard with their teacher figure. As Atkins & Wallace (2012, p. 87) states, this may be a matter of choosing the setting for the interview with care. I chose to conduct the group interviews in a room where the chairs were more or less in a circle with a table in the middle. That way, I was not sitting behind a desk where the pupils can have associations to a position of power. We were sitting in a room as equals, and the setting was a conversation between us.

3.6 Analysis and reporting of data

In this part of the chapter I will explain the methods that I employed for analysing the data material collected from both the pupil logs and the interviews.

3.6.1.1 **Pupil logs**

After the conclusion of the four lessons I was left with three sets of logs from the first three lessons, as well as the finishing logs that the pupils wrote after the last lesson. I employed different methods for analysing and reporting data from the lesson logs and the finishing logs, which I will explain in detail in the following sections.

3.6.1.1.1 Lesson logs

In the process of extracting data from the lesson logs, I used a variation on a method that Nilssen (2012) refers to as open coding. The method involves identifying, coding and naming central patterns and themes in the material (Nilssen, 2012, p. 82). This requires a good familiarity with the material, and a certain level of confidence in the material that you have. After multiple close readings of the logs in their entirety, I was able to extract five categorical statements that were represented in the material. The amount of times that these statements occurred varied, but I chose to include every statement that could represent a finding. As I mentioned multiple times in this chapter, the pupils' experiences with gamification are what

my data consists of. Therefore, the experience of a single pupil should be treated with the same respect and level of interest as the experiences of multiple pupils. Extracting the statements also included a process of eliminating statements that were not useable in any way. A process of determining which statements lacked any sort of content defined the elimination. I mentioned these occurrences in the section about pupil logs earlier in this chapter. It is important to note that after I introduced the helping questions, which were designed to avoid statements without content, they occurred much less in the following logs.

After the categorical statements had been extracted from the material, followed the process of interpreting what they meant, what the pupils were actually saying. They were very different in nature. This is to be expected, as different pupils will have very different experiences with speaking English in lessons like these. After a close look at the categorical statements that the pupils had made, I decided that the best way of interpreting them was to make a theme, a headline for each statement. In doing this, I condensed the statements into one-word, or two word, phrases that represented the statements as accurately as possible. For the purpose of this paper, I chose to call these phrases "themes". According to Nilssen (2012), it is important that these themes are not just a repetition of what the participant has said. The researcher needs to use terms that are more analytical or theoretical (Nilssen, 2012, p. 86). This gave me something very concrete that I then was able to attach meaning to and analyse on the basis of that meaning, while still being very loyal to the original material. When reporting the data, I chose to first present the categorical statement in its entirety. I then followed that with the phrase I had condensed it down to and a short description of the meaning that I had attached to that phrase. There were some statements from the logs that did not fit into any of the five categorical statements that I had made, which could represent some interesting findings. These statements will be presented at the end of the section, along with an interpretation.

3.6.1.1.2 Finishing logs

When analysing the finishing logs that the pupils wrote at the end of the fourth lesson, I took a slightly different approach then I did in analysing the lesson logs. This is mainly because the questions that were asked in the two different logs were different in nature. The questions asked in the lesson logs were very open ended. The second question in particular opened up the opportunity for the pupils to record vastly different experiences in the way that it was phrased. Therefore, it made sense to code the answers into categorical statements that

represented these experiences. In the finishing logs the questions were less open ended, more structured and sought answers to more specific and pre-defined experiences. This required a more structured review of the material. I went through the logs question by question and wrote down the findings. I then color-coded them by question so that they would be easier to keep track off. The same elimination process from the lesson logs also applied here. I omitted answers that lacked any form of content, of which there were not many. In reporting the data, I followed the same structure. I reported my findings organised by the questions that they were derived from.

3.6.1.2 *Interviews*

As I have shown previously in this chapter, the interview guide that I used for the interviews was structured into topics of conversation, followed by more specific sub topics. When analysing the transcriptions of the interviews, I started with assigning a colour to each of the topics. Then started many close readings of the transcriptions where I marked interesting statements and answers with the colour that corresponded to the topic under which they were found. I then made a summary document where I structured the extracted statements under the different topics and sub topics. This was to give myself a more structured overview of the material. I continuously made analytical notes for myself as I was working with the statements in order to create a bigger picture of the material.

When reporting the data from the interviews, I will keep the structure of the interview guide. The results will be presented according to the topics where the results came from.

4 Findings

In this chapter I will present the findings for both the pupil logs and the following interviews. I will also present relevant data from my own role as an observatory in the classroom, as well as some impressions that I gathered from the teacher whose class I conducted my research in. I will present any aspect of the data that I found interesting whether one or several participants stated them.

4.1 Pupil logs

As a part of reporting the results from these logs, I will start with presenting the themes followed by their categorical statements. I will then follow every statement with a description of my interpretations that will be the basis for the discussion later in the paper. As all the log entries were in Norwegian, I have translated them into English.

4.1.1 Choice

Categorical statement: "We were able to decide".

In the data material, there were several statements from pupils whose experiences were defined by being able to decide and make choices about the content of the lesson, and by extension the game, when speaking English. They attached importance to what they were using their language for, rather then what type of language they were using. In a gamified English classroom, the language that a pupil uses is his or her way of navigating the game world. The pupils who stated this had that experience in the lessons. The lessons that were designed for this research project were, as can be seen in the methodology chapter, full of instances where the pupils were encouraged to make choices about the game. Therefore, it is to be expected that the pupils would have the experience of making decisions while using their language. It is also a very interesting finding that can be the basis for a relevant discussion.

4.1.2 Cooperation

Categorical statement: "We worked together a lot, and everyone contributed".

One of the pupils chose to bring in the aspect of cooperation and collaboration into their log entries. This was heavily present in the lessons. This pupil has also chosen to mention the notion that every participant of the game had the opportunity to contribute something to the situation. This is an interesting observation, because it is one of the most important aspects of collaborative games. The design of a game is successful when it has built a platform where everyone feels like his or her contributions are valued and makes an impact on the gaming experience. This particular pupil also chose to bring in a negative aspect of the collaborative setting in the following statement: "I was a little scared of saying the wrong things". This pupil might have felt uncomfortable with the setting, and afraid that his or her contributions would be considered wrong or less valuable to the rest of the participants, and also to the game situation.

4.1.3 Production

Categorical statement: "We spoke a lot of English".

Some pupils wanted to record their experience of producing a lot of English language throughout the lessons. They felt like they had the opportunity to speak a lot. This is a very interesting observation. One pupil stated the following: "A great way of speaking English actively, and much better then sitting in a boring lesson just watching the blackboard or the book". Another stated "it was much better to speak English when you are active in a game like this". This tells me that the pupils are attaching some importance to being able to be active in their English lessons. They have seen a benefit from being part of a setting that allows for the oral production of English, as well as oral interactions between the people present.

4.1.4 Learning

Categorical statement: "This was a good way to learn English".

Some pupils stated in one way or another that they felt that this way of working is a good way to learn English. Exactly what kind of learning that they have experienced, or the content of that learning, is unclear. Some clarification can be found in the following statement from a pupil: "I learned some new, cool terms". This pupil feels that the learning that happened was related to the acquisition of new words and expressions. This is understandable, as the fantasy-game setting offers many words that are exclusive to that specific context. The learning that the other pupils are referring to is likely implicit, in that they are learning to use their English in a communicative fashion. I say this because the design of the lessons lacked explicit knowledge, such as could be found in a textbook, so it is unlikely that the pupils are referring to that. Some pupils reported having learned some new words and terms throughout the lessons. This can be an example of the learning that they are referring to.

4.1.5 Interest

Categorical statement: "I like to speak about things that interests me".

A number of the log entries spoke to the element of interest and likeability in what the pupils where doing. They expressed that "it was fun to work with a theme that I know a lot about" and "it is better to speak English when we are interested in what we are doing". These statements are likely the result of the fact that I was working in a class that was interested in,

and familiar with, video games. They still offer a very interesting finding: The pupils attached importance to the content that they used their English language with. Their statements are also indicative of the notion that increased interest leads to increased participation. Whenever the pupils get to talk about something that they are interested in, they are more inclined to participate.

4.2 Finishing logs:

In this part of the chapter, I will present the result from the finishing logs. I will present the results sorted by the questions that were asked in the logs.

4.2.1 Question 1

The first question of the finishing log was as follows: *How was it to work in this way?*Explain you answer. The pupils had a variety of things to say about his, and many of the statements offered interesting data. One pupil said, "It has been fun and something new. I felt like I used my English, but I did not learn a lot of new words". Another stated, "It has been informative and exiting. A little boring when I didn't understand something. That was when I didn't understand some difficult terms". These two pupils have had similar experiences with being exposed to gamified classroom teaching in that they both found it fun and exiting. This is to be expected when introducing something into a class that differs from traditional classroom teaching. They have had different experiences in the content that they were exposed to. The first pupil has likely had enough of a familiarity and comfort level with the fantasy genre, so that the words that they used and were exposed to were not new to them. This pupil also stated that they used their English a lot, which can be a testament to their comfort level with the vocabulary and specific language that the game setting required. The other pupil is probably lacking in that familiarity and found it boring when he or she was exposed to words that were unknown to them.

A statement that occurred twice as an answer to the first question was "It was easier to speak English freely" and "I felt like I had more freedom to speak English". These are very interesting statements, because they say something about the experience that the pupils had with regards to their oral activity. They attach importance to the notion of being able to have a sense of freedom when speaking English in a classroom setting. This is an important finding when considering the benefits of gamification.

4.2.2 Question 2

The second question of the finishing log was: *Has this been different to how you are used to working in English lessons? How?* As an answer to this question, most of the pupils chose to point out the fact that there are differences between the way in which these lessons were conducted, and the lessons that they are used to normally. The differences that the pupils wanted to highlight varied. One pupil wanted to point out the following: "We are not working with the same thing, everyone has their specific role". Another stated: "It has been different and exiting. We have used a lot of oral language". A third said: "It has been different because we know what we are talking about." A fourth pupil stated: "It as been very different. In normal English lessons we just do tasks". The largest element to take away from all of these statements is that pupils experience differences in working methods in very different ways. The differences that they latch on to are probably defined by their own personal preferences in working with English, and how these preferences were met in a gamified classroom. This is a very interesting finding.

4.2.3 Question 3

The third and final question of the finishing log was: Has this way of working affected your oral activity in the lessons? In what way(s)? One pupil made some very interesting statements as an answer to this question, which I choose to present in its entirety: "Yes, it has changed it a little bit because we are working with an important role individually. And no, because it is the others, and the same others, that are active orally in the lesson. I can answer questions that have a true answer, not be creative and imaginative". This statement contains three different facets that can be discussed individually. Firstly, the pupil has chosen to highlight the notion that the role each pupil has in a gamified classroom can and should feel important. It should also feel weighted in the sense that each pupil feels like the role that they are playing has an impact on the games progression. This particular pupil has not had this experience his/herself, which is made clear by the next part of the statement. He or she feels that working with English in this way has not done anything to change his/her own oral activity in the classroom, which is expressed through the observation that it is the same pupils who are active in the lessons. This pupil is excluding his/herself as one of the pupils who are active in a setting like this with the last part of the statement. The pupil expresses the nature in which he or she prefers to work with oral English in the classroom. The preference is defined by

being asked questions that have set answers, which is a frequent activity in traditional English teaching. In a gamified English classroom these types of questions are not as frequent, as the setting encourages creativity and spontaneous language production. This pupil was clearly out of his or her comfort zone in the lessons that I conducted.

One pupil stated the following: "I have not learned a lot of new words, but I have used my English and learned better pronunciation". This pupil has reflected on the fact that the continuous production of English could lead to an improvement in ones pronunciation. He or she has seen a clear benefit to being in a setting where the use of English is encouraged and necessary as a way of participating in what was happening in the classroom. Another pupil offers another perspective on this: "These lessons have given me the opportunity to speak more English. It is an interesting topic to talk about, and it is sort of required that we speak in the lessons". It is a very interesting observation that this pupil, and others, has made.

4.3 Observations

In this part of the chapter I will present the observations that I made in my role as a participating observer within the research setting. Additionally, I will present some impressions that I gathered from the teacher that taught the class on a regular basis.

4.3.1 Participation and oral activity

One of the most notable observations that I made during my time in the classroom was that there was a high degree of pupil participation. The pupils responded positively to the design of my teaching scheme, and showed this by contributing to the collective activity in the classroom. As I mentioned earlier the pupils, except for one, which I will discuss later, had an excellent familiarity with the principles and mechanics of video games. They were all familiar with the fantasy genre. I noticed in the beginning of the first lesson, which was mostly about creating the game world and their own characters, that the pupils seemed motivated by a need to display their own knowledge of the genre. Their contributions were inspired by what they themselves were currently occupied with in the world of fantasy media.

The one pupil that claimed not to be very familiar with video games was a very interesting object of observation during the lessons because he/she offered a different perspective than the other pupils. During the first lesson, this pupil was able to participate with the help of

knowledge of the fantasy genre. He/she was able to create the character without any problem, and was also able to contribute to the cooperative creation of the game world and the factions together with the other pupils. The limitations of his/hers ability to participate showed in the actual gameplay, the problem solving phases of quests that required communication between the participants. At these stages of the game, this pupil needed a lot more encouragement and coaching than the other pupils, who knew how to interact with this kind of creative problem solving in a gameplay setting. This pupil stated in one of the finishing log that he/she was more comfortable with answering questions that have set answers in English lessons, rather than being creative and spontaneous in the language production. This showed throughout the game. This pupil did not participate to a large extent, unless he/she was encouraged to make a contribution. This is a very interesting perspective, which will be addressed in the discussion.

Another notable observation was that there was a high amount of language production in the lessons that I conducted. The pupils spoke English a lot, and in every phase of the game. The teacher who teaches the class regularly made a very interesting observation regarding this. She said that she was used to some of the pupils answering in very short fashion, not motivated by anything else than answering the questions. When she observed the pupils in my lessons she said that not only did they speak more spontaneously, but also they were listening to what others were saying to them, they reflected on what they had just heard, and then responded appropriately. This is a very communicative approach to language use, and is what you could expect from anyone participating in any conversation. However, this is something that can be difficult to truly facilitate in a teaching setting. This is something that I will discuss further later in the paper.

4.4 Interviews

In this part of the chapter I will present the results from the interviews that I conducted with the pupils following the lessons. I will present them by subjects as they were discussed during the course of the interviews.

4.4.1 Introduction

In the introduction, the pupils were asked to recollect what had happened in the lessons in order to make a solid basis for the interview conversation. They recollected different elements of the lessons, and explained them in different ways. The specific elements that were highlighted were the problem solving, the discussions between participants and the decisions

that the pupils had to make. To summarize, the pupils showed a good awareness of the different elements of the game, and how they affected each other.

4.4.2 Gamification

4.4.2.1 Game-like experience

The pupils expressed that the experience that they had in the lessons resembled video game-like experiences. This was defined by the elements of the games design. One pupil emphasized the feeling of immersion that he/she experienced when participating in this setting. As part of that immersion, another pupil described being able to make decisions that affected the game experiences as an important part of the game-like feeling of the lessons. Other pupils emphasized genre-specific elements as additive to the experience, such as factions, characters, weapons and magic.

4.4.2.2 Choice and consequence:

The pupils were asked if they felt like they were able to make choices in the game, and whether these choices had tangible consequences for themselves and how the game evolved. They expressed having freedom of choice to a large extent in the creation of the factions, with regards to their location, resources and main trait. Others expressed feeling a freedom of choice in the creation of their own characters. Additionally, some pupils experienced having a freedom of choice in the problem solving throughout the game. The quests and tasks that the pupils were faced with, encouraged creative problem solving, and that is how they experienced it.

Some pupils expressed that the choices they made had consequences for how the factions related to each other, and how they solved different quests. An example that was expressed was that the choice of where the factions would settle, and the resources that they acquired from this location, affected how the different factions proposed to deal with the elven faction. Another tangible example was the choice of main trait, which played a part in defining the factions' course of action in problem solving.

Some expressed that they did not really feel the consequences of their choices, but that this might have changed if the game had lasted longer.

4.4.2.3 *Rewards*

When asked what kind of rewards the pupils preferred to receive in the game most of them stated that they preferred to receive a new skill or ability, to just an increase in level. The reasoning for this was that getting a new ability was something that they had an actual use for in the game, and that could have an affect on how they played the game.

4.4.3 Language and oral activity:

4.4.3.1 Oral English in English lessons:

The pupils were asked how they normally use in regular English lessons. One pupil claimed to not being very orally active in English lessons, but said that he would answer if asked something by the teacher. He emphasized using his language for mostly answering questions that had a correct answer that he could extract from the content of the lesson. Other pupils emphasized using their language mostly for oral presentations. Some of them drew comparisons between regular English lessons and our gamified lessons, and pointed out that they experienced the element of communication to a larger degree in gamified lessons. This is a very interesting observation, which will be discussed further.

4.4.3.2 English as a requirement in gamified lessons:

An important topic of discussion during the interviews was whether the pupils felt required to speak English to a larger extent during these gamified lessons. They expressed some different perspectives on this topic. Some emphasized the importance of speaking English because the game was conducted in English, and using language was how you navigated the game. Others felt that it was important to be able to communicate with the other participants of the game. This was mostly for the purpose of strategizing, and figuring out how they were going to solve a problem or deal with a situation in association with a quest. If the participants were unable to have a common means of communication, the quest would fail.

The pupils also emphasized the notion that because the subject of the lessons was so interesting to them, they felt more motivated to participate and speak English. This was also mentioned a number of times in the pupil logs. One pupil who claimed not to be very familiar with the fantasy genre made a very interesting statement. He/she said that the ability to participate orally was limited by the lack of familiarity with the genre. However, the pupil

claimed to feel engaged by the setting and was picking up and learning words and terms as the game went on. A solution to this problem that the pupils themselves suggested was to have one or two introductory lessons where the pupils were made familiar with the genre. This might have removed the barrier to entry that the pupil in question experienced.

4.4.3.3 Choice and language production:

The pupils were asked if the choices that they made in the game had an effect on their use of the English language. They stated, using different examples that they had to explain their choices in every stage of the game. They had to provide explanations for their actions, as well as argue their point of view in matters and decisions that concerned all of the participants. One pupil emphasized the instance in which the pupils were asked to choose their own combat ability. This choice had to be thoroughly explained so that everyone understood its practical use in the game. The common understanding of every participant's abilities led to them finding their place in the process of strategizing. Another pupil pointed out that their choice of main trait affected what kind of language they used. A specialized language was required for all three main traits. A faction that chose warfare used a different language than a faction that chose politics, according to the pupil.

4.4.3.4 Situational relevant language:

During the interviews I asked the pupils whether they felt that the language that they used, the English that they spoke, was relevant for the what was happening in the classroom and the situations that they faced during the course of the game. One pupil made a very interesting comparison between the language that was used in this game and the different tools that are available to you as a player in regular video games. This pupil said that part of being a good player in any game, is being aware of the tools that are available and knowing how to use them in appropriate situations. This translates well into gamified English classrooms. The participants' tool is their language, and how they use that language is dependent on the situation that they are in. Other pupils stated that their language felt relevant with regards to the different quests in the game. The nature of the quests defined how their language was used. One pupil emphasized the notion of genre-specific language. All of the words and terms used in the game were connected to the fantasy genre and was relevant to the situation in that sense.

4.4.4 Dialogue and conversation:

In this particular part of the interview, some of the pupils had a little trouble understanding what it was that I was asking them. This might have been due to unclear formulations in the questions, or that I used terms that were unfamiliar to them. This led to a need for some explaining and rephrasing of questions. I tried my hardest to not make these rephrased questions sound in any way leading.

4.4.4.1 Impactful dialogue

The pupils were asked whether their dialogue and conversations had a tangible effect on the game. The most notable example that was brought forth was the meeting of the factions that occurred several times throughout the game. The pupils pointed out that the dialogue that happened in these meetings defined the course of the game to a large extent. They stated that it was important to discuss and converse to decide what was going to happen in the game.

4.4.4.2 Meaningful responses

I was interested in finding out if the pupils felt that what they said in the game elicited meaningful responses from the other participants. Again, the pupils put emphasis on the many conversations that defined the progress and outcome of the game. One pupil illustrated a situation that he/she had experienced in one of the meeting of the factions. This pupil had attempted to propose a solution to the second quest of the game, regarding the elven faction's arrival to the world. The solution that he/she proposed was based on his own factions' main trait, which was warfare, and the outcome of his proposal would greatly benefit his faction in their ventures. He/she experienced that the other participants felt threatened by this potential outcome, and expressed this during the meeting. This caused him/her to consider their views and propose an alternative solution that would be to the benefit of all factions in some way. The response of the other pupils in this situation was meaningful to this pupil, and led to the further development of communication.

Another pupils stated generally that opinions were often met with counter opinions, which led to a negotiation of the outcome of in-game elements. The example above illustrates this very well, and is an important addition to the discussion of oral activity in gamified classrooms.

5 Discussion

In this chapter, I will discuss the findings from the research project using the theoretical framework provided in chapter 2.

Large portions of the data are pupils stating in various ways that they experienced the opportunity to speak English to a large extent in the course of the lessons. Inside of this aspect, the pupils have emphasized how they were able to use their English language. I will be discussing these aspects in terms of communication, language and learning culture.

5.1 Communication

A notion that occurred a number of times in the data was that language was used for communication and collaboration. The pupils emphasized that communication between the players was essential within the context of the game, especially in instances where in-game elements needed to be discussed. These instances were highly represented in the game, and the clearest example was the meeting of the faction that occurred in association with quests.

Some pupils expressed having experienced collaboration between them in the game. The categorical statement from the pupil logs sums this up appropriately: "We worked together a lot, and everyone contributed". This ties into the element of communication, and more specifically what communication was used for.

5.1.1 Meaningful communication

Communication was employed in order to work together towards the common goals that the game facilitated. The pupils produced statements, particularly during the interviews that speak to the validity of this. As we have seen, Rayudu (2010) defines communication as "the transmission and interacting of facts, ideas, opinions, feelings and attitudes". I find the aspects of opinions, feelings and attitudes particularly interesting in this discussion. In order for meaningful communication of these aspects to occur in an interaction, the participants need to have a vested interest in what is being said. Opinions, feelings and attitudes are deeply situated within the individual, and are therefore difficult, if not impossible, to truly simulate in order to facilitate communication in a teaching context. A very common practice in the classroom, in my experience, is to attempt to engage pupils in a communicative interaction by asking them to talk about and discuss topics from textbooks or other teaching aids. This might

be an adequate activity for pupils who are used to speaking English in a communicative setting. Many pupils will likely feel disconnected from the material, which in turn removes any need for them to interact with others using that material as a basis for discussion. They do not have any investment in the discussion, which makes it difficult to employ feelings and attitudes to communicate an honest and informed opinion. When being an active participant in a game, the invested interest and connection to the material should occur naturally if the participants feel that they have a stake in what is happening. When pupils feel that what they are doing actually matter, because they have a level of ownership with the context, then opinions, feelings and attitudes will work its way into the content of what they want to convey to the other pupils. In the data, many of the pupils stated that the subject matter and aesthetics of the gamified classroom was something that they were very interested in. This added to the level of ownership that the pupils had with the progression and development of the game. This is how meaningful communication can be facilitated through the gamified classroom.

5.1.2 In-game dialogue

According to Bakhtin in Dysthe (1995), meaning in a dialogue is negotiated when the tension and conflict between the participants' standpoints create new opportunities for interpretation and understanding. Additionally, meaning and understanding are as much dependent on the response that a statement elicits, as it is on the statement itself. Dysthe (1995) refers to this as "the activating principle". In the interviews, the pupils were asked if they felt that the conversations they had with other participants had an impact on the game. They were also asked if what they said during the game elicited meaningful responses from other participants. One pupil brought up a very interesting example of this, as mentioned in the findings chapter. This pupil stated having experienced in one of the lessons that something he presented as a solution to a problem in the game was met with negative responses from the other pupils. These negative responses were motivated by the fact that the first pupils' solution would impact them negatively in the context of the game. This led to a dialogue between the participants that resulted in a solution that was suitable for everyone. This dialogue was a negotiation of new meaning and understanding within the context that the participating were operating in, which was the game that they were playing. Because of choices that were made earlier in the game, with regards to customization of main traits, locations and resources, the pupils had very different standpoints before going into the aforementioned problem solving. This is what created the tension between participants that facilitated a dialogue where

meaning and understanding was negotiated. The tension was created through the elements of the game, and was beneficial to the communication that occurred in the classroom.

5.2 Gamification and language

In the continued discussion of what the pupils' language was used for in the lessons, I will here have a closer look at the use of language as a way of interacting with the game. Specifically, I will discuss how gamification required the pupils to use language because of its design, based on data provided by the pupils.

The pupils expressed a need to use language in the lessons because that was how you played the game. Without the production of language, nothing would have happened, and the game would be at a standstill. This seems obvious given the context, but it says something interesting about the agency with which the pupils used language. In the data the pupils produced statements like "it was much better to speak English when you are active in a game like this", "I felt like I had more freedom to speak English" and "It was a great way to speak English actively", as well as other statements that echoed the same sentiment. With this, the pupils are expressing that they experienced a certain sense of agency with regards to oral participation and using their language in order to be active in the game. This brings up the discussion of what the game context provided that helped towards creating this level of agency within the pupils. This will be the main focus of the following sections.

5.2.1 Language use in problem solving

The teaching scheme that I used for this research project had many instances where the pupils were encouraged to engage in problem solving. Additionally, the element of choice and consequences was present in the scheme. As I have shown in the theoretical framework, these can both be viewed as principles of gamification. They are also prevalent examples of how gamification can facilitate active use of language in a classroom. When talking about situational relevant language, one pupil made the remark that in a game context in the classroom, the pupils' language is their tool for problem solving. As the main activity of the game, instances of problem solving was where the pupils produced the most amount of language. The type of problem solving that they were doing can be compared to the tasks that are employed as part of task-based learning. As we have seen in the theoretical framework, these tasks focus on using the target language to solve problems that have a non-linguistic outcome (Nunan, 2004). Defining the non-linguistic outcome is important in this discussion.

How I interpret this is that the activity needs to have an objective that is tangible and real within the context so that the participants get a sense that what they are doing actually matters. In other words, the purpose of the activity is the use of language, but the objective of the activity needs to be something beyond this in order to create a sense of agency and ownership in the participants, for the activity to be experienced as "real". This makes the production of language feel like a tool to achieve something with, not just language production for the sake of language production alone. From what I have seen through the research project, and prevalent in the data that the pupils have provided, the gamified classroom can offer the facilitation of such an outcome.

5.2.2 Producer-like roles

In both the pupil logs and the interviews, the pupils stated that they experienced being able to make choices and decisions throughout the game. Also, they saw that their choices had an impact on how the game progressed. As I mentioned in the findings chapter, this tells me that they find it important what they are actually using their language for, and that their use of language has an impact on the over-all context. This can be an indicator of the notion that pupils find it beneficial in some way to have a producer-like role in settings where they are asked to use their language. For some pupils, this creates an incentive for an increased level of participation in English lessons. According to Gee (2005), having principles like this integrated into teaching can also add to the sense of agency with which they are participating and the ownership they have with the material. The gamified classroom is beneficial for creating this kind of setting, as the data shows.

5.3 Culture

In the previous part of this chapter, I brought up the idea of activities that are experienced as "real" for those who are participating in it when talking about task-based learning. I argued how the gamified classroom could contribute to facilitating such activities through its design elements. In this part I will continue the discussion of real activities in the light of situated learning theory and authentic activity.

Lave & Wenger (1991) say that learning occurs when people act as members of a specific culture. Learning is part and parcel of the activities that are available in the social practice that happen within these cultures. This is referred to as situated learning theory. The culture of schooling is no different. Pupils are active members of this culture and are participating in

activities that are supposed to facilitate learning. According to Brown, Collins & Duguid (1989), the activities that occur within the culture of traditional schooling are often attributed to other cultures. They are done in isolation from their real life applications. This can be said about all school-related activity, in all subjects. These activities can be experienced as purely academic exercises, because they are designed in the image of traditional schooling. They attempt to simulate the activities of the cultures they are derived from, like maths and science. The success in completing them is only valued within the context of school, and is limited to serving as an indicator of how well a pupil is doing academically. An example of these activates can be found in the data, where the pupils were asked how they were used to using their language in English lessons. The pupils claimed to be using their oral English mostly for presentations and for answering fact-checking questions from the teacher.

While implementing gamification into classroom teaching, one could argue that a culture was established within the classroom. I will be referring to this as a game culture. The activities that happened within the game culture were attributed to the culture in which they were happening. This is what Brown et al. (1989) refers to as authentic activity, "the ordinary practices of a culture" (Brown et al., 1989, p. 34). In this gamified classroom, the pupils were participating in a culture that encompassed the activities that happened within it, and where the activities were situated in a context. The real life application of the activities that was done in the classroom was found within the game itself. When looking at the theoretical perspectives on this topic, this sort of culture with authentic activities are good facilitations for learning.

5.4 Benefits

The question that has to arise from this discussion is of the benefit that this game culture that was established in the gamified classroom has for the pupils that are participating in it. Are they learning anything, and if so, what are they learning? How is the oral activity improved? The data from my research project provides some answers to this. It shows that the pupils have had different experiences with how the gamified classroom has been beneficial for their English. A couple of the pupils claimed to have learned some new words in the course of the lessons. One claimed to have improved the pronunciation of his/her oral English. The acquisition of new words and the improvement of language production in a gamified classroom can be attributed to situated language learning. Gee (2004) talks about specialist

languages. He explains that when one is participating in any field, like science or maths, one uses a language that is highly specialized for navigating within that field. The language that is used is situated within a context. This is an example of situated language. Situated language learning focuses on the role of the context and the situation to which language is applied, and the potentials for learning that exists in that intersection (Abdallah, 2015). It considers the learners as active participants of authentic settings where they are in some way encouraged to use language, and thereby construct knowledge of that language. The language that the pupils used in the gamified classroom was situated within a natural and meaningful context that they were immersed in. According to situated language learning, this is where spontaneous acquisition of language occurs at its best.

Some pupils claimed to not experience the acquisition of new words, but that they learned to use their English in new ways. This is another benefit that can be extracted from the lessons: How the gamified classroom and the game culture facilitated for the English language to be used for meaningful communication in the lessons. There are several benefits to communicatively oriented teaching. As we have seen in the theoretical framework, the communicative approach is an approach to teaching that emphasizes the learners' use of language for communicative purposes. Further, it claims that language learning is not just about the acquisition of linguistic elements. It is also about being able to spontaneously and creatively produce language in different settings where it is appropriate. According to Szecsy (2008), the communicative approach can be used in two different ways. One way focuses on the acquisition of language through communicative use. The other values being able to communicate as a skill, and focuses on using the target language to teach this to learners. One could argue that the ideal language-learning situation happens when these two approaches work in unison. Language learning is a very complex process, and there are many different elements at play when a learner is acquiring a new language as well as learning how to use it. Earlier in this chapter I have argued how gamification can facilitate use of language for meaningful communication as well as some degree of language acquisition through situated language learning. It provides a setting where the use of situated language, both for communication and in general, is required. This setting is a good place for learning to use the English language appropriately for the purpose of meaningful communication, which is something that is emphasized in the curriculum. These are some of the benefits that the gamified classroom brings to orally focused English teaching that can work towards improving the oral activity of pupils.

5.5 Is the gamified classroom for everyone?

Another important topic to discuss when it comes to gamified classrooms is whether they are beneficial for everyone, meaning all pupils. Is the gamification of classroom adding something that can benefit all pupils, or is it something that is reserved for those who are interested in video games? As I have mentioned a few times in this thesis, one of the pupils in the selection for this study was purportedly not interested in gaming or games in general. This pupil reported, throughout the data material, that the activities the gamified classroom provided were not something that he/she was very comfortable with. An example of this can be found in one of the logs produced by this pupil: "I can answer questions that have a true answer, but I can not be creative and imaginative". This indicates that this particular pupil has recognised the activities that were typical for the gamified classroom, and come to the conclusion that these activities are not beneficial for his or her use of the English language. This pupil responds better to using language in order to provide answers. This is more in line with traditional classroom activity for English teaching. One of the biggest challenges of designing teaching schemes is to recognize the fact that pupils learn and respond to teaching differently. When looking at the data provided by this one pupil, the argument could be made that the activities of the gamified classroom, as I designed it, can alienate pupils who do not respond well to settings where spontaneous and creative language production is the focus of the activities.

6 Conclusion

The gamified classroom can improve oral activity in pupils by facilitating active, extensive, creative and spontaneous use of the English language. The language that was used was situated within an authentic context where the pupils were encouraged to use their language for meaningful communication and problem solving. Additionally, the pupils have a producer-like role with the teaching, which gives them a sense of agency and ownership with what they are doing. The benefits of the gamified classroom in terms of oral activity can be attributed to the fact that pupils are operating within a culture of learning where the activities are attributed to, and valued within, the culture in which they are happening. This makes the language that is used feel necessary. It is used as a tool to achieve problem solving within a context where the outcome is valued. As I have seen through this research project, the pupils consider playing a game as an activity that is worth putting effort into and participating in.

The elements that I have described here can contribute to both an increase in oral activity, as well as contribute to the content of what is being said in the classroom.

It is difficult to say, based on this research project, whether the gamified classroom can be considered a universal tool that can be beneficial for all pupils. As I have mentioned earlier, the class that I conducted my teaching in was very familiar with video games. This could possibly have influenced the results that I got from the group, as they responded very positively to the principles of the gamified classroom and its activities. Further studies can explore ways of implementing gamification into other areas of English classroom teaching, as well as work towards the possible universality of these principles. In order for the gamified classroom to be considered a legitimate teaching tools, there needs to be evidence that it can be beneficial for the greater population of pupils, not just those who have gaming as a hobby.

7 List of references

- Abdallah, M. M. S. (2015). *Situated Language Learning: Concept, Significance and Forms*. Paper presented at the College of Education Young Researchers' Conference, Assuit University, Egypt.
- Atkins, L., & Wallace, S. (2012). *Qualitative Research in Education*. London: Sage Publications Ltd.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, *18*(1), 33-42. Retrieved from http://www.jstor.org/stable/1176008
- Corbett, S. (2010). Learning by Playing: Video Games in the Classroom New York, USA.
- Dicheva, D., & Dichev, J. (2015). *Gamification in Education: Where Are We in 2015?* Paper presented at the E-LEARN 2015 World Conference on E-Learning, Kona, Hawaii.
- Dysthe, O. (1995). *Det Flerstemmige Klasserommet Skriving og samtale for å lære*. Oslo: Ad Notam Gyldendal.
- Eik, L. T. (1999). Storyline: tverrfaglig tilnærming til aktiv læring. Oslo: Tano Aschehoug.
- Gee, J. P. (2003). What Video Games Have to Teach Us about Learning and and Literacy. Gordinsville, VA, USA: Palgrave Macmillan.
- Gee, J. P. (2004). *Situated Language and Learning A critique of traditional schooling*. USA: Routledge.
- Gee, J. P. (2005). Good video games and good learning. Phi Kappa Phi Forum, 85(2), 5.
- Imsen, G. (2010). *Elevens verden Innføring i pedagogisk psykologi*. Oslo: Universitetsforlaget.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation* (B. Nake, Trans.). Cambridge University Press: The Press Syndicate of the University of Cambridge.
- Merriam, S. B. (2014). *Qualitative Research : A Guide to Design and Implementation : A Guide to Design and Implementation* Wiley (Ed.)
- Nilssen, V. (2012). *Analyse i kvalitative studier Den skrivende forskeren*. Oslo: Universitetsforlaget.
- Norwegian Directorate for Education and Training. (2013). *English Subject Curriculum*. Retrieved from http://www.udir.no/kl06/eng1-03/Hele/?lplang=eng.
- Nunan, D. (2004). *Task-Based Language Teaching*. Cambridge, UK.: Cambridge University Press.
- Poltronieri, F. (2014). Communicology, Apparatus, and Post-History: Vilém Flusser's Concepts Applied to Videogames and Gamification. In S. Fizek, M. Fuchs, P. Ruffino, & N. Schrape (Eds.), *Rethinking Gamification* (pp. 165-187). Germany: Meson press, Hybrid Publishing Lab, University of Lüneburg.
- Poulsen, M. (2011). Introduction to game based learning. In P. M. & E. Køber (Eds.), *The GAMEiT handbook* (pp. 15-33). Oslo, Norway.
- Rayudu, C. (2010). *Communication*. Mumbai, IND: Himalaya Publishing House.
- Robson, C. (2002). Real World Research (2nd ed.). Malden, USA: Blackwell Publishing.
- Simões, J., Redondo, R. D., & Vilas, A. F. (2013). A social gamification framework for a K-6 learning platform. *Computers in Human Behavior*, *29*(2), 345-353.
- Szecsy, E. M. (2008). Communicative approach. In J. M. Gonzàlez (Ed.), Encyclopedia of bilingual education (Vol. 2, pp. 156-158). Thousand Oaks
- Thousand Oaks, California: SAGE Publications, Inc. Retrieved from http://sk.sagepub.com/reference/bilingual. doi:10.4135/9781412963985

8 Addendums

8.1 E-mail to principal

Hei.

Mitt navn er Runar Karlsen Lajord, og jeg er sisteårs-student på Master i Lærerutdanning 5-10. I starten av vårsemesteret 2016 skal jeg i gang med en prosess som skal resultere i en masteroppgave i engelsk didaktikk. I den forbindelse skal jeg utarbeide et opplegg som jeg håper å få prøvd ut i skolen.

Masteroppgaven min tar utgangspunkt i et konsept som kalles Gamification. Dette konseptet går ut på å ta mekanikker og prinsipper fra video-spill, og implementere det i andre sammenhenger. Dette er prinsipper som ungdom i dag er godt kjent med, og responderer generelt positivt på i sin originale kontekst, dataspill. Prosjektet tar utgangspunkt i en tanke om at elever vil reagere positivt også når de blir møtt med disse prinsippene i en læringssituasjon, og at dette vil tilføre noe positivt til læringsprosessen. Prosjektet mitt går ut på å implementere Gamification i tradisjonell, klasseromsbasert engelsk-undervisning og studere virkningen av dette med spesielt fokus på mestring og motivasjon. Tiltenkt datainnsamling vil foregå gjennom refleksjonstekster(loggskriving) samt gruppeintervju med elever. Prosjektet vil meldes til NSD.

Opplegget jeg skal utforme til dette prosjektet er tiltenkt en klasse i engelsk fordypning på 8. 9. eller 10. trinn.

Jeg lurer i denne sammenheng på om en av deres lærere ved Sommerlyst kunne vært interessert i å være med på dette? Jeg har valgt å sende denne forespørselen til dere på Sommerlyst fordi jeg har tilbrakt to av mine praksisperioder der og er kjent med skolen, dens struktur og dens lærerkollegium.

Mvh,

Runar K. Lajord

8.2 Informational letter and consent form

Forespørsel om deltakelse i forskningsprosjektet

"Gamification of Classroom-based English Teaching"

Til elever og foresatte i (sett inn klasse)

Mitt navn er Runar Karlsen Lajord, og jeg er siste års-student på Master i Lærerutdanning 5-10. I starten av vårsemesteret 2016 skal jeg i gang med en prosess som skal resultere i en masteroppgave i engelsk didaktikk. I den forbindelse skal jeg utarbeide et opplegg som jeg håper å få prøvd ut i skolen.

Masteroppgaven min tar utgangspunkt i et konsept som kalles Gamification. Dette konseptet går ut på å ta mekanikker og prinsipper fra video-spill, og implementere det i andre sammenhenger. Dette er prinsipper som ungdom i dag er godt kjent med, og responderer generelt positivt på i sin originale kontekst, dataspill. Prosjektet tar utgangspunkt i en tanke om at elever vil reagere positivt også når de blir møtt med disse prinsippene i en læringssituasjon, og at dette vil tilføre noe positivt til læringsprosessen. Prosjektet mitt går ut på å implementere Gamification i tradisjonell, klasseroms basert engelsk-undervisning og studere virkningen av dette med spesielt fokus på læring, mestring og motivasjon. Tiltenkt datainnsamling vil foregå gjennom refleksjonstekster(loggskriving) samt gruppeintervju med elever.

Utvalget som inngår i prosjektet(klassen) ble plukket ut ved at jeg tok kontakt ved rektor på skolen.

som igjen satte meg i kontakt med ansvarlig lærer for klassen.

Hva innebærer deltakelse i studien?

Jeg skal i perioden 01.02.16-11.02.16 være tilstede i klassen å gjennomføre et undervisningsopplegg tilknyttet prosjektet. På slutten av perioden skal det samles inn data ved hjelp av gruppeintervjuer med utvalget. I tillegg vil datainnsamling foregå gjennom loggskriving på slutten av hver time i perioden prosjektet pågår. Deltakelse i prosjektet innebærer derfor primært tilstedeværelse på undervisningsopplegg og gruppeintervju.

Hva skjer med informasjonen om deg?

Alle personopplysninger vil bli behandlet konfidensielt. Det skal <u>ikke</u> under prosjektets gang samles inn noen form for direkte personidentifiserende opplysninger(navn etc.). Jeg skal derimot bruke en kombinasjon av indirekte personopplysninger(alder, bostedskommune). Disse opplysningene behandles kun av meg selv og ansvarlig veileder under hele prosessen.

Deltakere vil ikke kunne gjenkjennes i en eventuell publikasjon.

Prosjektet skal etter planen avsluttes 11.02.16. Lydopptak av intervju vil etter prosjektets slutt anonymiseres i transkriberingsprosessen og deretter slettet. Eventuelle data fra loggskriving vil også anonymiseres i masteroppgaven.

Frivillig deltakelse

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli anonymisert. Dersom du ønsker å delta eller har spørsmål til studien, ta kontakt med Runar Karlsen Lajord (studentforsker, tlf: 48048180) eller Hilde Brox (veileder, tlf: Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS.

Samtykke til deltakelse i studien

Jeg har mottatt informasjon om studien, og samtykker herved til at mitt barn	
	kan delta i forskningsprosjektet.
(Signert av foresatt(e), dato)	

8.3 Overview of factions

Cyclops Klan:

Landscape: Mountains

Resources: Ore (iron, gold, bronze), treasure.

Valuable items: Tools, Armor, Houses, and Weapons.

Main trait: Politics.

The Ice Iron Mountains:

Landscape: Ice Mountains, snow.

Resources: Diamonds, gold, rubies, stones, coal, ice.

Valuable items: Weapons, rings (jewellery), castles.

Main trait: Trading.

The Daggerheart Pact:

Landscape: Surrounded by mountains, large forests populated with dragons. Snow on top of the mountains.

Resources: Dragonskin, dragon meat, gems, iron, gold. Melt-water, wood.

Valuable items: Dragon Armor, iron Armor, swords (weapons), and catapults. Machines.

Main trait: Warfare.

8.4 Interview guide

Introduction

Gamification

Game-like experience
Choice and consequence

Rewards

Language and oral activity

Oral English in English lessons

English as a requirement in gamified lessons

Choice and language production

Situational relevant language

Dialogue and conversation

Impactful dialogue

Meaningful responses

Norsk samfunnsvitenskapelig datatjeneste AS

NORWEGIAN SOCIAL SCIENCE DATA SERVICES



Harald Hårfagres gate 29 N-5007 Bergen Norway Tel: +47-55 58 21 17 Fax: +47-55 58 96 50 nsd@nsd.uib.no www.nsd.uib.no Org.nr. 985 321 884

Hilde Brox

Institutt for lærerutdanning og pedagogikk UiT Norges arktiske universitet

9006 TROMSØ

Vår dato: 23.12.2015 Vår ref: 45893 / 3 / AGL Deres dato: Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 30.11.2015. Meldingen gjelder prosjektet:

45893 Gamification of Classroom-based English Teaching

Behandlingsansvarlig UiT Norges arktiske universitet, ved institusjonens øverste leder

Daglig ansvarlig Hilde Brox

Student Runar Karlsen Lajord

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/meldeplikt/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://pvo.nsd.no/prosjekt.

Personvernombudet vil ved prosjektets avslutning, 18.05.2015, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Katrine Utaaker Segadal

Audun Løvlie

Kontaktperson: Audun Løvlie tlf: 55 58 23 07

Vedlegg: Prosjektvurdering

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Kopi: Runar Karlsen Lajord runalajo@gmail.com

Personvernombudet for forskning



Prosjektvurdering - Kommentar

Prosjektnr: 45893

Utvalget informeres skriftlig og muntlig om prosjektet og samtykker til deltakelse. Informasjonsskrivet er godt utformet.

Foreldre samtykker for sine barn. Selv om foreldre/foresatte samtykker til barnets deltakelse, minner vi om at barnet også må gi sin aksept til deltakelse. Barnet bør få tilpasset informasjon om prosjektet, og det må sørges for at de forstår at deltakelse er frivillig og at de når som helst kan trekke seg dersom de ønsker det. Dette kan være vanskelig å formidle, da barn ofte er mer autoritetstro enn voksne. Frivillighetsaspektet må derfor særlig vektlegges i forhold til barn, og spesielt når forskningen foregår på eller i tilknytning til en organisasjon som barnet står i et avhengighetsforhold til, som for eksempel skole. Forespørselen må derfor alltid rettes på en slik måte at de forespurte ikke opplever press om å delta, gjerne ved å understreke at det ikke vil påvirke forholdet til skolen hvorvidt de ønsker å være med i studien eller ikke.

Personvernombudet legger til grunn at forsker etterfølger UiT Norges arktiske universitet sine interne rutiner for datasikkerhet. Dersom personopplysninger skal lagres på privat pc, bør opplysningene krypteres tilstrekkelig.

Det oppgis at personopplysninger skal publiseres. Personvernombudet legger til grunn at det foreligger eksplisitt samtykke fra den enkelte til dette. Vi anbefaler at deltakerne gis anledning til å lese igjennom egne opplysninger og godkjenne disse før publisering.

Forventet prosjektslutt er 18.05.2015. Ifølge prosjektmeldingen skal innsamlede opplysninger da anonymiseres. Anonymisering innebærer å bearbeide datamaterialet slik at ingen enkeltpersoner kan gjenkjennes. Det gjøres ved å:

- slette direkte personopplysninger (som navn/koblingsnøkkel)
- slette/omskrive indirekte personopplysninger (identifiserende sammenstilling av bakgrunnsopplysninger som f.eks. bosted/arbeidssted, alder og kjønn)
- slette digitale lyd-/bilde- og videoopptak