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Video games in the English subject

An exploration of video games for teaching about narratives

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Master's thesis in English didactics, LER-3902-1, Spring 2022

What Remains of Edith Finch

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thomas was alone

Acknowledgments

First, we want to thank our supervisor, Ingrid Jakobsen, for guiding us through this study. Thank you for your commitment, input, encouraging words, feedback, and provoking thoughts that helped us develop this thesis.

We would like to thank our families and friends for their support during this challenging year of master thesis writing.

Thank you to our fellow students as our discussions, friendship, motivation, and help has been valuable to us.

Next, we want to thank the participants of this study as your thoughts on the field of study have been helpful, and this study could not be done without you.

Last, we want to thank the staff of "Den Digitale Framtidssmia" for allowing us to conduct our lessons in their laboratory classroom.

Abstract

This study looks at video games as a way of teaching about narratives in English. More specifically, this study is going to answer to what extent *What Remains of Edith Finch* is a suitable video game for teaching about narrative perspectives in the English subject, and to what extent *Thomas Was Alone* is a suitable video game for teaching about character archetypes in the English subject. In addition, the study investigates how the game mechanics in *What Remains of Edith Finch* and *Thomas Was Alone* influence the students' gaming experience when learning about narrative topics in the English subject, and how video games suitable for teaching about narrative topics in the English subject can be found. The study concludes that *What Remains of Edith Finch* is a suitable video game to teach about narrative perspectives because of how the narrative and game mechanics of the video game complement each other. *Thomas Was Alone* was found to be less suitable to teach about character archetypes in narratives because of the difficult game mechanics, and how the game mechanics overshadowed the narrative of the video game. Finally, the study presents an example of a process for finding video games suitable for teaching about narrative topics, which needs to be further developed.

Key words: *video games in education, video game narratives, game mechanics, video games immersion, narrative teaching, process of finding video games for education, commercial video games, video games as text, English education, English teaching and learning*

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Sammendrag

Denne studien ser på videospill som en måte å lære om fortellinger i engelskfaget. Mer spesifikt, svarer denne studien på i hvilken grad *What Remains of Edith Finch* egner seg som et video spill til å undervise om forteller perspektiver i engelskfaget og i hvilken grad *Thomas Was Alone* egner seg til å undervise om ulike karaktertyper i fortellinger i engelskfaget. Videre vil studien undersøke hvordan spillmekanikken i *What Remains of Edith Finch* og *Thomas Was Alone* påvirker elevenes spillopplevelse når de lærer om temaer innenfor fortellinger, og hvordan man kan finne video spill som kan brukes til å undervise om temaer innenfor fortellinger i engelskfaget. Studien konkluderer med at *What Remains of Edith Finch* egner seg godt til å undervise elever om forteller perspektiver, hovedsakelig på grunn av samspillet til fortellingen og spillmekanikken. *Thomas Was Alone* egner seg ikke i like stor grad, da spillmekanikken i spillet overskygget fortellingen. Til slutt presenterer studien et forslag til en prosess som kan brukes til å finne video spill egnet til å elever om narrative temaer. Denne prosessen trenger å bli videre utviklet.

Table of contents

List of Figures

1 Introduction

"There's a place for a purposeful study of video games in today's English classroom because they represent some of the most important storytelling in the 21st century." (Ostenson, 2013, p. 71).

Video games are gradually making their way into school, and many students are interested in video games (The Norwegian Media Authority, 2020). Additionally, as mentioned in the quote by Ostenson, video games represent some of the most important storytelling in the 21st century. We will use the term video games in a similar fashion to Gee (2003) and Turley (2018), which encompasses games from game consoles, such as Xbox, PlayStation, Nintendo Switch, and computer games. Furthermore, this study uses *commercial video games* and not *serious video games*. Commercial video games are video games made mainly for entertainment. On the other hand, serious video games are video games made for educational purposes, such as online vocabulary quizzes and grammar games (Munden, 2021, p. 394). We use commercial video games as they have excellent narrative learning potential. Since commercial video games are made for entertainment, we think that there is a great chance for the students to become *immersed* (Brown & Cairns, 2004) in the video game.

In this study, students are referred to as primary- and lower secondary school students. Through previous research (Toomey, 2017; Turley, 2018; Ostenson, 2013), one could see some ways of using video games in an educational situation.

1.1 Background and motivation

Previous curricula were much more explicit regarding the literature that the students should work with. Our current curriculum is competence-based and values the competence that the students will gain, rather than dictating which texts the students must work with to achieve that competence (Gabrielsen & Blikstad-Balas, 2020, p. 87). This means that the teacher can use varied methods and whatever type of text that the teacher thinks is most beneficial and most suitable for the students.

> Language learning takes place in the encounter with texts in English. The concept of text is used in a broad sense: texts can be spoken and written, printed and digital, graphic and artistic, formal and informal, fictional and factual, contemporary and

historical. The texts can contain writing, pictures, audio, drawings, graphs, numbers, and other forms of expression combined to enhance and present a message (Ministry of Education, 2020, p. 3).

This excerpt is from the renewed curriculum for the English subject under the core elements. The term text can be interpreted in different ways by teachers due to the varied forms of expression that can be included. Our interpretation of this excerpt from the curricula is that if the purpose of the English text is to convey a message, then it can be used in the classroom.

Computer games [video games] also offer new opportunities for storytelling and new forms of engagement with digital texts that call on English and literacy educators to expand their understandings of 'the literary text' as they further investigate the potential these narrative forms may have for English classrooms (Toomey, 2017, p. 39).

In this study, we will look at narratives in video games, and furthermore, video games will be discussed as literary texts. Video games include many different forms of expression, which the Ministry of Education mentions, and video games are a form of text that can be used in a teaching situation.

We live in a society that becomes increasingly digitalized as the years pass by. It is common for people to use technology created to make everyday life easier, such as mobile phones and laptops. People also use technology with the purpose of being entertained, such as computers and other video game consoles. Playing video games is an activity that has become increasingly popular in recent years. Today, most kids play video games or have at least tried playing video games in their spare time. In 2020, a study conducted by The Norwegian Media Authority involved 3,400 students between the ages of 9-18 from schools in all counties in Norway. This study shows that the number of kids that play video games increases every year. The same study was conducted in 2018, and 96% of the boys in the study said they play video games, and 63% of the girls said the same. In 2020 the number of boys that play video games was 96%, and the number of girls increased to 76% (The Norwegian Media Authority, 2020, p. 3). From this study, one can say that playing video games is still popular among boys and increasingly popular with girls. Of all the 3,400 pupils involved in the study, seven of ten said that video games make them better at English. The narrative aspect of video games was also asked about in the study. 45% of the pupils agreed that playing video games is an

excellent way to experience stories (The Norwegian Media Authority, 2020, s. 3-7). Many of the students were not sure if playing video games was an excellent way to experience stories, which may indicate that they do not focus on the stories in the video games when they are playing, or they do not play video games that focus on stories. Video games are popular among students, and they would most likely be motivated and excited if they get a chance to learn through video games. It is not our intention to replace "traditional" teaching with video games, but rather to give our contribution to video games as a supplementary method, which can contribute to a varied teaching situation. One example could be if the teacher wants the students to analyze characters within a narrative. If the students have already analyzed some narrative elements in a book, the teacher could use a video game the second time as a variation.

There are many beneficial connections between video games and English language learning. Sundqvist and Vikström (2015, p. 66) discuss the concept of *extramural English activities*. This is a term for activities the pupils do out of school where they learn English through the activity. An example of such an activity is playing video games. As Sundqvist and Vikström continue, they discuss that extramural English activities are connected to language learning and connect this to the term *incidental language learning*. Incidental language learning is defined as learning without the intent to learn, for example learning vocabulary when the focus is to learn about storytelling in a video game. The vocabulary acquisition would happen unconsciously regardless of the purpose of playing the video game (Sundqvist & Vikström, 2015, p. 66). According to Sundqvist and Sylvén (2014, p. 6), students report that they feel less anxious about speaking English if they participate in extramural English activities.

The background that has been presented has inspired us to write a master's thesis about video games. We are what Brevik (2019) would identify as *gamers* as we play video games for multiple hours almost every day. During our time as teacher-students, we have gained a pedagogical mind, and we realized the learning potential within video games. The process of finding video games that we think would work well in an educational situation about narratives was more challenging than we thought. This process helped us to develop our research questions.

1.2 Aim of study and research questions

The research of Turley (2018) and Ostenson (2013) discusses different video games that could be used in education and the experiences of using these specific video games. None of them explained if there were any criteria when picking a suitable video game or the process of picking a suitable video game. However, they discuss positive and negative features and possible learning outcomes from these specific video games. This study aims to test two video games and see if they are suitable for education. We anticipate that one of them is suitable for teaching about narrative perspectives and the other for teaching about character archetypes; flat, round, static, and dynamic characters. Additionally, we were intrigued by the lack of explanation in Turley (2018) and Ostenson (2013) on how to find video games that could be used in education, which inspired us to have a research question on how to find video games for education. We chose to focus on learning narratives through video games in a 9th and 10th joint grade class. After researching possible video games to use for educational purposes, we selected two different video games: *What Remains of Edith Finch* and *Thomas Was Alone*. We will go further into detail as to why we selected these video games later in the study. As we selected these video games, the following research questions were developed.

1. To what extent is *What Remains of Edith Finch* a suitable video game for teaching about narrative perspectives in the English subject?
2. To what extent is *Thomas Was Alone* a suitable video game for teaching about character archetypes in the English subject?

When we worked with the theoretical framework, studies such as Turley (2018) showed that game mechanics was a hindrance in the progression of education in the specific video game they played (*Undertale* (2015)). This led us to formulate the following research question.

3. How does the game mechanics in *What Remains of Edith Finch* and *Thomas Was Alone* influence the students' gaming experience when learning about narratives in the English subject?

Last, as there is a lack of information about how to find video games for education in the studies of Turley (2018) and Ostenson (2013), we created a research question that highlighted the process of finding video games for narrative topics:

4. How can video games suitable for teaching about narrative topics in the English subject be found?

We chose to use the video game *What Remains of Edith Finch* because of the vast number of literary elements that it contains and because we believe this video game is excellent for learning about different narrative perspectives. We also chose the video game *Thomas Was Alone* because this video game contains other literary elements, and we believe that it is suitable to learn about different types of characters through this video game. *Thomas Was Alone* also has more difficult *game mechanics*, and we want to see if that impacts the student's engagement or progress in the video game and the learning situation.

1.3 Outline

We have now presented the background of the study, the aim of the study, and the research questions. The second chapter will consist of a theoretical framework as a foundation for the study. In chapter 3, we present the video games. Chapter 4 presents the methods we used to answer the research question. The methods for data collection will be presented, along with how we chose to analyze our data. We will present the informants involved in our study and present concerns regarding validity, reliability, and ethics. Continuing in chapter 5, we will present the main findings from our data collection, and we will analyze the data. In chapter 6, we will discuss the findings connected to relevant literature. Lastly, chapter 7 will present a summary and contributions to the field and some suggestions for future research.

2 Theoretical framework

This chapter presents the theoretical framework for the study. We will explain terms such as *text* and how it is connected to video games, *narrative* in video games, *game mechanics*, and *flow theory* and *immersion*.

2.1 Video games as literary texts

As this study explores the use of video games as a variation to traditional literary texts in the English subject, a definition of literary text is in order. In the Norwegian school curriculum, text is described as a concept that has many features. A text can be spoken and written, printed and digital, graphic and artistic, formal and informal, fictional and factual, contemporary and historical. Texts can contain writing, pictures, audio, drawings, graphs, numbers, and other forms of expression that are combined to enhance and present a message (Ministry of Education, 2020, p. 3). Through *this* description of the concept of text, the usage of video games as text becomes much clearer as video games become a multimodal text using audio, pictures, etc., to communicate a narrative to its reader.

A problem in defining video games as literary text is that video games are relatively new as a media in contrast to other literary texts such as books. Much of what is studied today as literature has faced resistance before being acknowledged as literature. Medias such as movies, television, and comic books have all faced resistance in being acknowledged as literature before finding their place as literature (Turley, 2018, p. 22). Furthermore, acknowledging video games as either literature or non-literature in education is based on what the teacher thinks is good or not good enough literature. Usually, video games are placed within the non-literature category, mainly because of the limited understanding of the genre (Turley, 2018, p. 55). In Aarseth (1997), the term *cybertext* is broadly explored as it was at that time a new way of seeing texts that are not written in a standard textual form but rather takes the multimodal form. Cybertext is a perspective on all text forms that include media as literature that may not be perceived as literature. This perspective sees the wide range of textual possibilities within different media as literary communication systems.

Furthermore, cybertext requires that the reader is an active participant in the text (Aarseth, 1997, p. 22). Cybertext has many similarities with *ergodic literature*. Ergodic literature is when the player needs to do more than just read to maneuver through the text. In a video

game, the player needs to use more tactility than when using traditional literature (Aarseth, 1997, p. 1). Video games can be seen as multimodal texts where the player needs to actively participate in the narrative in the story to progress in the video game, making them both, by definition, a cybertext, and ergodic literature.

2.2 Narrative

Abbot's (2008) definition of narrative will be used in this study. Abbot (2008, p. 13) defines that "narrative is the representation of an event or a series of events." This definition is broad; however, that is precisely what a narrative is, an umbrella concept that entails many different kinds of narratives. Examples of narratives may be fictional stories written by authors for recreational purposes or events that happen throughout everyday life, and even news articles have a narration to them.

2.2.1 Narrative exploration

A narrator is the one who tells the story within a narrative and should not be confused with the author. According to Abbott (2008, p. 68), a narrator is a tool or an instrument used by the author to convey the narrative of the story. Most times, when a narrative has a narrator, the reliability of the narrator becomes a topic of dispute. There are three topics within narration that impact the reliability of the narrator. These topics are mainly *distance* and *voice* but also *focalization* to some degree.

Distance is the level of involvement the narrator has in the story, and the distance determines how the reader evaluates the information that is given (Abbott, 2008, p. 74). Suppose the narrator is a teenage boy who is narrating a story as it is progressing where he is involved and has his own biased opinions. In that case, it is hard to believe everything he narrates because of his close proximity to the story. On the other hand, if the narrator is a grown man who is mature and reflected, and narrates his mistakes in his upbringing, then it is easy to believe him. The latter example has more distance to the story, which tends to make him a more reliable narrator.

The term *voice* in narration is a question of who is telling the story. Abbott (2008, p. 70) explains three kinds of voices within narratives. These are first-person ("**I** went to bed with a pounding headache"), second-person ("**You** went to bed with a pounding headache"), and

third-person ("**He** went to bed with a pounding headache"). The most common way of narrating is in the first-person and third person. There are examples of second-person narration in "traditional" literature, but it is relatively rare. However, the second-person narration is more common in video game narratives such as *Skyrim* (2011), where the player is the hero of the story. Abbott (2008, p. 70) argues that second-person narration is uncommon because it seems strange to tell a story from the second-person perspective. Most people grow up telling stories from either the first- or third-person perspective. The element of the narrative voice plays a part in the creation of the story, and it is important to figure out what kind of person the narrator is. To determine if the reader finds the narrator reliable, the reader should consider if the narrator has limitations, needs, or desires within the narrative (Abbott, 2008, p. 72). For instance, if the narrator is an *omniscient* third-person narrator, the narrator is all-knowing (Abbot, 2008, p. 73), making the narrator more reliable than a first- and second-person narrator. In a first- and second-person narration, the narrators' thoughts and interpretations of the events that happen in the story may impact the story and thus the reliability of the narrator.

The last topic in narration that impacts the reliability of the narrator is *focalization*. Focalization is the eyes or characters we experience events through within the narrative. The most common focalizer in a narrative is the narrator, but this is not always the case (Abbott 2008, p 73). In *What Remains of Edith Finch,* the narrator is *Edith Finch*, but when we play through the death scenes of her family members, we experience the event through her family members. The focalizer then shifts over from *Edith* to the specific family member we are playing as, and it shifts back to *Edith* after the event is over. Having several focalizers can impact the thoughts and feelings of the person experiencing (reading or playing) the narrative.

Distance, voice, and focalization impact the narrator's reliability, and many narratives have a narrator that could be considered unreliable. The reliability of the narrator makes the narrative engaging and open to interpretation, which makes such narratives great for group discussions in a teaching situation. Discussing literature can increase students' critical thinking (Alsup, 2015, p. 57). When students engage in an open discussion about literature, they become better at making sound arguments and accepting that others may interpret literature differently. The different interpretations of literature may lead to a disagreement or change the students' understanding of the specific literature that has been discussed (Eeds & Wells, 1989; Raphael et al., 1992; Rogers, 1991). Thus, by having a discussion about a video game, the students

may understand that others may interpret the video game differently and thereby might change their understanding accordingly. Additionally, open discussions filled with opinions and responses often lead to a deeper understanding of the literature being discussed, even if the discussion itself may be unorganized (Alsup, 2015, p. 59). Thereby, open discussion is a good way for the students to gain a deeper understanding of literary texts in general, such as the narrative in a video game or a book.

2.2.2 Flat, round, static and dynamic characters

There are four types of characters that are common to see within a narrative. These types of characters are flat, round, dynamic, and static characters. Flat characters have a restricted number of characteristics and traits. Flat characters can have a varying degree of flatness, but a flat character's personality, identity, or purpose can often be described in one sentence. It is common for flat characters to lack complexity and not have much depth, which makes them easy to recognize by the person experiencing the narrative. Furthermore, flat characters often seem artificial, and it can be difficult for the reader to acknowledge flat characters as real human beings due to their limited qualities (Ribó, 2019, p. 54). *Edith's* father, *Sanjay,* is an example of a flat character from *What Remains of Edith Finch*. *Sanjay* is rarely mentioned in the story, and not much is known about him, making him a flat character.

The term round character is explained by Ribó (2019, p. 55) as "characters which possess a variety of traits or characteristics." A round character that is well made in terms of characterization can seem as complex as a real human being, and the main character or protagonist in a story is often a round character (Ribó, 2019, p. 55). In *Thomas Was Alone,* the main protagonist, *Thomas,* is a round character. The narrative focuses a lot on *Thomas* and his characteristics, such as him being insightful, naive, rash, and good-spirited, which makes him seem like an actual human.

All flat characters are static, but round characters can also be static. Static characters do not experience personal evolution or massive change during the narrative. Static characters have the same personality, characteristics, and identity throughout the narrative (Ribó, 2019, p. 56). An example of a flat and static character in *Thomas Was Alone* is *The Pixel Cloud,* which is the main antagonist of the video game. The Pixel Cloud is described as a cloud that eats the other characters and does not change throughout the story. An example of a round and static

character in *Thomas Was Alone* is *Thomas* because his personality does not change throughout the story.

The last type of character is the dynamic character. Dynamic characters go through significant changes throughout the narrative, showing some degree of personal growth, which makes them somewhat different towards the end of the narrative compared to the start of the narrative. Furthermore, the changes the characters go through do not have to be positive changes in order to be categorized as dynamic characters. Round characters are usually the ones that can go through a significant change in the narrative and become dynamic due to their complexity and depth (Ribó, 2019, p. 56). *Christopher* is an example of a round and dynamic character in *Thomas Was Alone.* He is a grumpy little square who dislikes everyone that he meets. However, throughout the story, he falls in love and changes his personality to a more likable character.

2.2.3 Narrative in video games

The narrative in a video game contains aspects of the video game's story and setting, namely characters and their attributes, dialogues, events, and plot (Elson, Breuer, Ivory & Quandt, 2014, p. 525). In other words, the narrative in a video game contains all narrative elements that are commonly used to tell the story. Jenkins (2004) explores different narratives in video games and gives four preconditions for a narrative to be experienced as captivating. A story must contain features from at least one of the following narratives but may contain features from more (Jenkins, 2004, p. 6). Three of these preconditions are relevant for this study, *enacted narratives, embedded narratives,* and *emergent narratives,* which are further explored. Enacted narratives are explained as narratives where the story is structured around a character's movement through space where the features of the environment either slow down or accelerate the trajectory of the plot (Jenkins, 2004, p.14). Thereby the enacted narratives are reliant upon the environment being tangible enough for the player to be able to capture the plot. An example of a feature to accelerate the plot is a *micronarrative*, which could be a cut scene or another game mechanical feature that can impact the narration. Micronarratives are used in most video games that have narratives (Jenkins, 2004, p. 8). In *What Remains of Edith Finch,* a micronarrative can be seen in the story of *Barbara,* where the feature of walking slowly is a game mechanical feature that impacts the narration to make the story seem scarier than it would without the game mechanical feature.

On the other hand, embedded narratives are primarily used in stories that have either a detective or conspiracy nature. By finding information and clues the player is expected to find the narrative embedded into the video game. The story is hidden behind the player's interaction with the video game and will slowly reveal itself based on what information and clues that are found (Jenkins, 2004, p. 10). *What Remains of Edith Finch* has an embedded narrative, where the narrative of the video game is uncovered as the player progresses by finding clues about what happened to *Edith's* family. When a player plays a video game that has an embedded narrative, the player might gain narrative comprehension. Narrative comprehension is an active process where the player uses cues and clues from the story to make a hypothesis about how the narrative will develop (Jenkins, 2004, p. 10). In *What Remains of Edith Finch,* there are subtle cues that foreshadow how a character might die. In *Molly's* story, the cues and clues are starvation and eating poisonous berries, which foreshadows that she might die from either starvation or poison. Additionally, in *Gus'* story, the cues and clues are being out in a storm. Furthermore, he is rebellious and will not go to safety whenever there is danger outside, which foreshadows that he might die from the storm.

The most played video games among students, e.g., *Fifa* (1993), *Fortnite* (2017), and *Minecraft* (2009) (The Norwegian Media Authority, 2020), have *emergent narratives*. Emergent narratives are made up by the player as they play the video game. This means that the game space is designed to have narrative potential. However, this narrative has to be created by the player as they play the video game. An example of an emergent narrative can be seen in *Minecraft,* where there is a big world to explore, and the player chooses their own path, creating a narrative along the way. Even though emergent narratives are popular, they seem harder to use in education because the teacher has no control over what narrative the player is experiencing. This is the reason why we did not choose to use video games with emergent narratives for teaching about narrative topics.

2.3 Game mechanics

Gameplay is when a video game is experienced through active participation where the player chooses their own actions. The consequences of the player's actions or choices and the range of options the player has within the video game are determined by rules that form the *game mechanics*. Most video games can be defined as rule systems, and the systems and rules are different based on what video game the player is playing, and the game mechanics could work

in different ways (Domsch, 2013, p. 15). Furthermore, the game mechanics can be explained by looking at how the rules work through a board game that most people are familiar with. In the board game chess, the chessboard and pieces can have different sizes and shapes. The number of pieces, their starting position, the way the pieces can move, and the fact that a piece can eliminate another by moving to the same place are predetermined by the game's rules and game mechanics (Domsch, 2013, p. 15). In a similar fashion, in *Thomas Was Alone,* the characters have similar restrictions to a chess piece, in the sense that they can only do specific actions constricted by the game mechanics. Furthermore, if the player places a character at the wrong place on the playing field, the character is eliminated, and the level must be restarted. This means that in order to progress in *Thomas Was Alone*, the player needs to master the game mechanics.

2.3.1 Game mechanics and narrative

There is an ongoing debate about the relation between video games and narrative, and there are two main perspectives on the matter (Aarseth, 1997; Domsch, 2013; Jenkins, 2004; Turley, 2018). The *narratologists* believe that video games are meaningful because of their narrative structures, whereas the *ludologists* believe that the rules and mechanics are the essences of a video game. In addition, the ludologists believe that gameplay causes the excitement the player can feel when playing video games. In contrast, narratologists believe that the pleasure the players will experience when playing video games comes from the narrative (Domsch, 2013, p. 13). Furthermore, the ludologists do not want to categorize video games as just another form of narrative, and an even stricter ludologistic view is that narratives in video games are not necessary. However, the trend in the video game industry is favoring video games with a narrative. Most video games contain narratives, especially the newer video games, and the narratives are also steadily increasing in complexity (Domsch, 2013, p. 14).

Game mechanics are a defining feature of video games, and it is what separates video games from non-interactable media (Elson et al., 2014, p. 528). The narrative can be an essential element in a video game, although the game mechanics dictate to a great extent if it is fun or not to play the video game. A video game with an enjoyable narrative can be unenjoyable to play if the game mechanics are poorly executed in the video game. The poor game mechanics could cause the player to find the video game frustrating, and eventually, the player will stop playing. Furthermore, for a video game to be playable and enjoyable, there is a minimum

required quality threshold that the game mechanics of a video game must meet. One of the most critical variables in the game mechanics of a video game is the difficulty. The difficulty of the video game is comprised of elements such as the skill of the player, reaction time needed, and hand-eye coordination (Elson et al., 2014, p. 528-529). Difficulty in game mechanics and skill are two essential elements in flow theory, which will be explained next.

2.4 Flow theory and immersion

Flow and *immersion* are two terms that are similar because they both explain the experience the player can have when playing a video game. The concept of flow originated in the 1960s when Csikszentmihalyi observed a painter who ignored hunger, discomfort, and fatigue when the painting was going well and then disregarded the painting upon completion. An individual can work at full capacity if the individual is in a flow state. If the individual is engulfed in an activity, feels motivated, is engaged, and forgets time and place, it could be explained as being in a flow state.
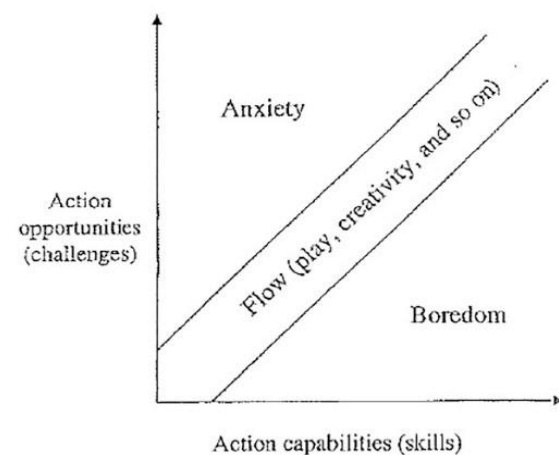
Figure 1, Model of Flow State. (Csikszentmihalyi, 2014, p. 248).

Flow is a subjective state. To enter a flow state, there needs to be a balance between perceived action opportunities and perceived action capacities. Furthermore, this balance is fragile (Csikszentmihalyi, 2014, p. 241). If skill exceeds challenge, the result would be that the individual first relaxes and then becomes bored. Furthermore, if challenge exceeds skill, the result would be that the individual first becomes vigilant, then anxious. Thereby, the skill of the player needs to be in cohesion with the difficulty of the video game for the player to be in the flow state.

When discussing the player's experience, *immersion* is regarded as one of the key components. Furthermore, the term immersion is used to explain the same feeling as *presence*; however, immersion is the appropriate term when discussing this phenomenon when a video game is a virtual reality. Presence is defined as "the subjective experience of being in one place or environment, even when one is physically situated in another." The level of presence that the person interacting with the virtual reality is feeling is a characteristic of the person experiencing it, and it can vary from person to person. If a person experiences immersion while playing a video game, it is more likely that the person wants to keep playing for a longer time. There are three sequential levels of immersion that describe the depth of immersion that a player can experience (Christou, 2014, p. 93). The levels of immersion are *engagement*, *engrossment,* and *total immersion*.

In order to experience *engagement*, the player needs to invest time, attention, and effort. *Preference* is the first barrier to this level of immersion because the player needs to be interested in the style of the specific video game in order to engage with it. Furthermore, *access* is another barrier to engagement. Access is the game controls within the video game. The controls and feedback in the video game need to be good so that the player can improve their skills in the video game. *Investment* is the last barrier for engagement, and it is regarded as the amount of time that the player needs to put into the video game in order to be engaged with it. The amount of time this takes can vary between players and video games (Brown and Cairns, 2004, p. 2). This means that if the player likes the video game, can manage the game mechanics, and get enough playing time; it is possible that the player enters the first level of immersion.

The second stage of immersion is *engrossment*. If the player is engaged and becomes increasingly involved in the video game, the player could become engrossed. The features of construction in a video game can be a barrier for engrossment. These features could be plot (narrative), game mechanics, and visuals (graphics). When the construction and features in the video game are good, the players' emotions can become affected when playing. Furthermore, when a player is engrossed, there is a high degree of emotions connected to the video game due to the time, attention, and effort put into the video game. The player's emotions can be affected by the video game when the player is engrossed (Brown & Cairns, 2004, p. 3). In addition to having the same elements as engagement, engrossment happens when the player becomes emotionally invested in the video game.

Total immersion is the final stage of immersion. Total immersion is presence, and it is achieved when the video game is all that matters, and the players feel like they are cut off from the real world and reality. The barriers to the presence of total immersion are *empathy* and *atmosphere*. Empathy is the growth of attachment as the player can feel attached to a main character or team but not necessarily feel empathy toward their situation. Furthermore, atmosphere is similar to construction, with plot, graphics, and sound as the main features. However, it is relevance that separates atmosphere from construction. The features in the video game must be relevant to the location and actions of the characters. When the player needs to pay attention to sound as well as sight, more effort is needed to be put into the gameplay, and the player will be increasingly immersed the more attention and effort the player invests (Brown and Cairns, 2004, p. 3). With each passing level of immersion, the player becomes more and more situated in the virtual world while losing touch with the real world. The player becomes increasingly attached psychologically and physically to the virtual world within the video game. To progress through the stages of immersion, the player needs to overcome some boundaries through emotional investments. Firstly, the player needs to pick a video game to play. Next, the player needs to understand the video game controls and game mechanics and then become emotionally invested in the video game (Christou, 2014, p. 93). It is not desirable to reach total immersion in a situation when video games are used in an educational setting. If a student reaches total immersion, all the student's focus would be on the video game and not the learning goal.

Figure 2, Game Experience. (Elson et al., 2014, p. 529).

As seen in *Figure 2*, another dimension for a player to reach immersion is the context in which the student plays the video game. The context is mainly the role that another player may have on the player in a gameplay experience. Playing a video game with others may positively affect the player and thereby create enjoyment. An example is how the player's performance improves when playing next to someone else, and thus the students feeling of competence (Elson et al., 2014, p. 529). Thus, students playing in pairs could have a positive effect on the learning outcome.

2.5 Pedagogical theory

This study's teaching schemes were based on sociocultural learning theory (Vygotsky, 1978) and the didactic relation model (Bjørndal & Lieberg, 1978). Sociocultural learning theory emphasizes the importance of learning in a social context. Furthermore, Vygotsky (1978) explains the zone of proximal development.
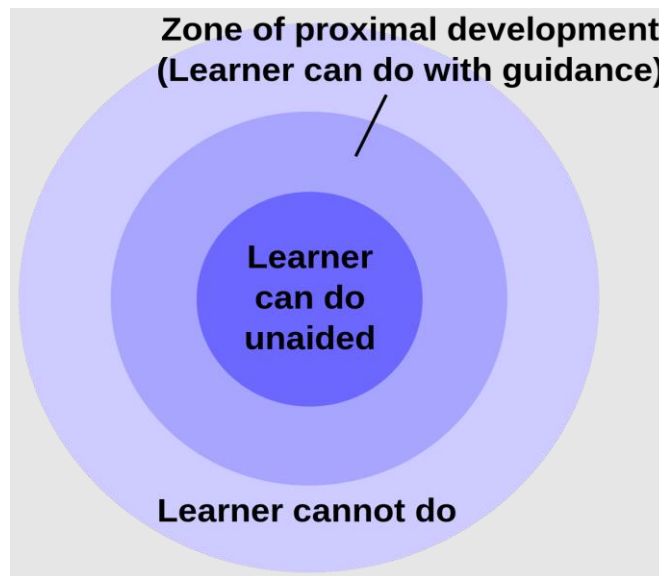
Figure 3, Zone of proximal development. (Vygotsky, 1978)

Figure 3 explains what someone can learn by themselves and what they can learn with the help of others. The help from others is referred to as scaffolding. The didactic relation model is used for creating teaching schemes.
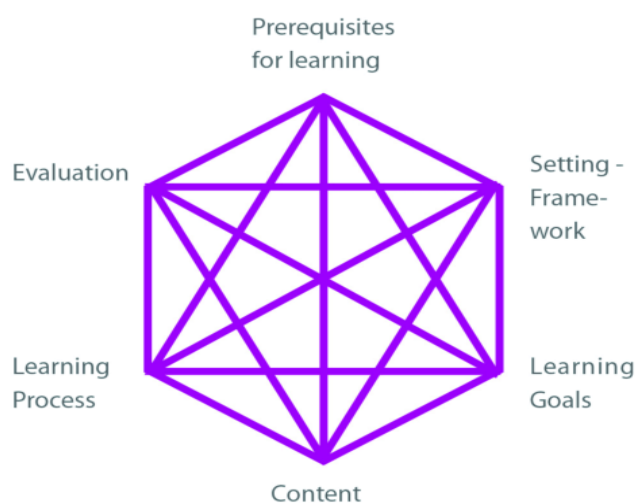
Figure 4, The didactic relation model. (Bjørndal & Lieberg, 1978).

The didactic relation model (*Figure 4*) promotes the importance of looking at all elements for teaching lessons as a whole and can be used to plan, execute, and assess lessons. The teaching schemes in this study were made with the didactic relation model in mind. The context part of the game experience model can be seen in similarity with the setting part of the didactic relation model. Both the game experience model and the didactic relation model concern how

the context influences learning. Furthermore, the zone of proximal development explains how the context of working in pairs can help the learning potential.

When the lessons for the study were prepared, all the elements from the didactic relation model were considered, except for the students' prerequisites and evaluation. The students' prerequisites and evaluation were left for the teacher to decide as the teacher knows the needs of their students best and that one lesson might be too short to give a good enough evaluation of the students' knowledge of the topic. Therefore, the teacher could continue to work on the topic after the study had finished.

3 Presentation of the video games

The following chapter is used to analyze and explain the narrative and didactic aspects of *What Remains of Edith Finch* and *Thomas Was Alone*.

3.1 *What Remains of Edith Finch*

The story begins with the protagonist *Edith Finch* returning to the *Finch* family home after her mother's death. The house is on the Orcas Island off the coast of Washington state, and the family has lived there for more than a century. *Edith*'s great grandparents were originally from Norway, but they migrated to the Orcas Island a long time ago. Furthermore, the story consists of *Edith* exploring the family home and searching for stories that could explain why she is the only family member who is still alive. There is a rumor that the *Finches* have a family curse, which *Edith* believes increasingly in during the story. *Edith* learns dark family secrets while she explores the house, and she finds out how all her family members died. When *Edith* finds a diary, letter, or some personal item belonging to one of her dead family members, there is a short sequence where we take the perspective and play as the family member and learn how he or she died. It is easy to understand how some of the family members died after playing their stories, but some family members' deaths are pretty hard to understand. While playing as *Edith*'s family members, we experience their happiness and sorrows, and different game mechanics are introduced. *What Remains of Edith Finch* is mostly "point and click." However, when we are playing as someone in *Edith*'s family, there

are mechanics such as figuring out how to make the bath toys jump high in *Gregory*'s bathtub scene or multitasking as a fish cannery worker while daydreaming in *Lewis*'s imagination.

Figure 5, "Lewis' imagination", 2017, by Giant Sparrow

3.1.1 Narrative exploration

What Remains of Edith Finch is an exploration video game played in the first-person perspective. This video game has a detective nature to it, as the player must find clues that are embedded in the video game in order to progress. *Edith* explores the family house, and each memory she finds takes us to the last moments of the person she finds a memory about. We play the memory from that character's perspective; however, it is *Edith*'s understanding of the story, making it a third-person perspective. Beautiful graphics and music enhance the story, which can be seen in *Walter*'s story; when he finally dares to venture out, the music emphasizes how beautiful he thinks the outside world is. The music also distracts us from the fact that a train is headed straight at *Walter*. *What Remains of Edith Finch* is a story with elements mainly from embedded narrative. In addition, there are micronarratives in the video game, which is an element of enacted narratives as well.

3.1.2 Didactics

What Remains of Edith Finch is a short story adventure video game created by Giant Sparrow in 2017. It is rated Pan European Game Information 16 (PEGI 16, which is a system for making age ratings for video games), which means that that the person who plays the video

game must be at least 16 years old. This age restriction is only a recommendation and *What Remains of Edith Finch* has this rating due to the topic of death. We believe that this video game should be rated PEGI 12 because the deaths in the video game are not gory or graphic. Before the students who participated in our study played the video game, we informed their parents and requested their consent and the student's consent before they could play.

We wanted to use *What Remains of Edith Finch* in a teaching situation because we thought several elements would make the video game good for an educational purpose. The video game has a unique way of telling its story. When we are experiencing the death of *Edith*'s family members, we experience it through children, adults, a camera, a comic book, and some hallucinations. The introduction to many different and unique characters and experiencing their last moment through their eyes, combined with the diverse game mechanics in their final moment, makes the video game enjoyable to play. Learning about characters was one of the goals of the teaching scheme. The video game has dialog, and some of the dialog is also printed on the screen, and the player can even interact with the text on some occasions. This is an interactive feature that could also be beneficial for students in terms of vocabulary acquisition. It could also help them pay attention to the story when they hear it and see it at the same time. There is much mystery in the video game about why the whole family is dead, the family curse, and the cause of death of some family members. This mystery is a crucial element to keep the player interested.

What Remains of Edith Finch does not have complex game mechanics, and everyone can play it whether the player has any experience when it comes to playing video games or not. We believe that it could be enjoyed by a *gamer* (Brevik, 2019) and by a person that rarely plays video games. For example, in the short story where *Edith* finds out how her great-aunt *Molly* died at the age of 10 years old, there is a sequence where *Molly* turns into a cat and jumps from tree to tree and runs along the branches to catch a bird. The game mechanics in this sequence do not allow the player to fall off the tree, and if the player looks toward the object they are trying to jump to and presses the jump button, the player will make the jump. Furthermore, the only part of the video game that we think could be frustrating could be that the player must follow the correct path to find new clues, as it is a linear story. When the player comes across the clues, they are hard to miss due to the bright interaction light that will appear. Some entrances and pathways could be tricky to find, which may cause the player to spend some time looking for the right way to go.

When we looked for video games that we could use in our study, we searched for short story video games. A playthrough of *What Remains of Edith Finch* only takes about 2,5 hours: this is a suitable length which means that the students could play the entire video game in one day and have time to discuss the video game or do some tasks.

3.2 *Thomas was Alone*

Thomas Was Alone is a 2D-platformer puzzle video game made by Mike Bithell in 2012. In the video game, the player controls twelve different Artificial Intelligences (AI's), shapes with different abilities, through obstacles to get each shape into its specific endpoint. Each shape is given different names and a personality by the voice-over narrator, giving the video game a story. We start with the protagonist *Thomas*, a medium-sized, red rectangle with average jump height. *Thomas* is seen as the wisest shape, finding out what is happening and what needs to be done.
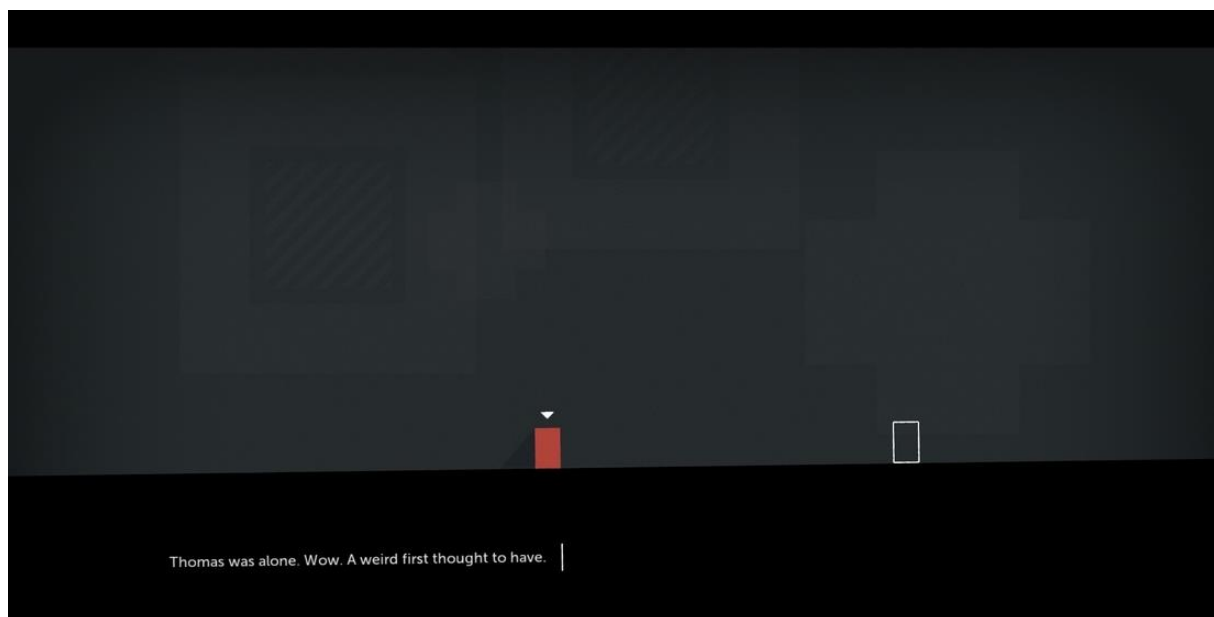
Figure 6, "Level 0.1", 2012, by Mike Bithell.

Towards the end of the story, when Thomas and his friends have escaped, we go to the *New generation* chapter. At this point, the video game is influenced by Thomas' experiences, meaning he fulfilled his mission of leaving the video game for "real life" and altering the state of the video game. All different shapes are now grey but can gain the special abilities from the latter four of the first seven characters had. E.g., double jump, water resistance, upside-down

gravity, and bounciness. The different shapes still have the same goal of escaping the video game and are additionally given different personalities.
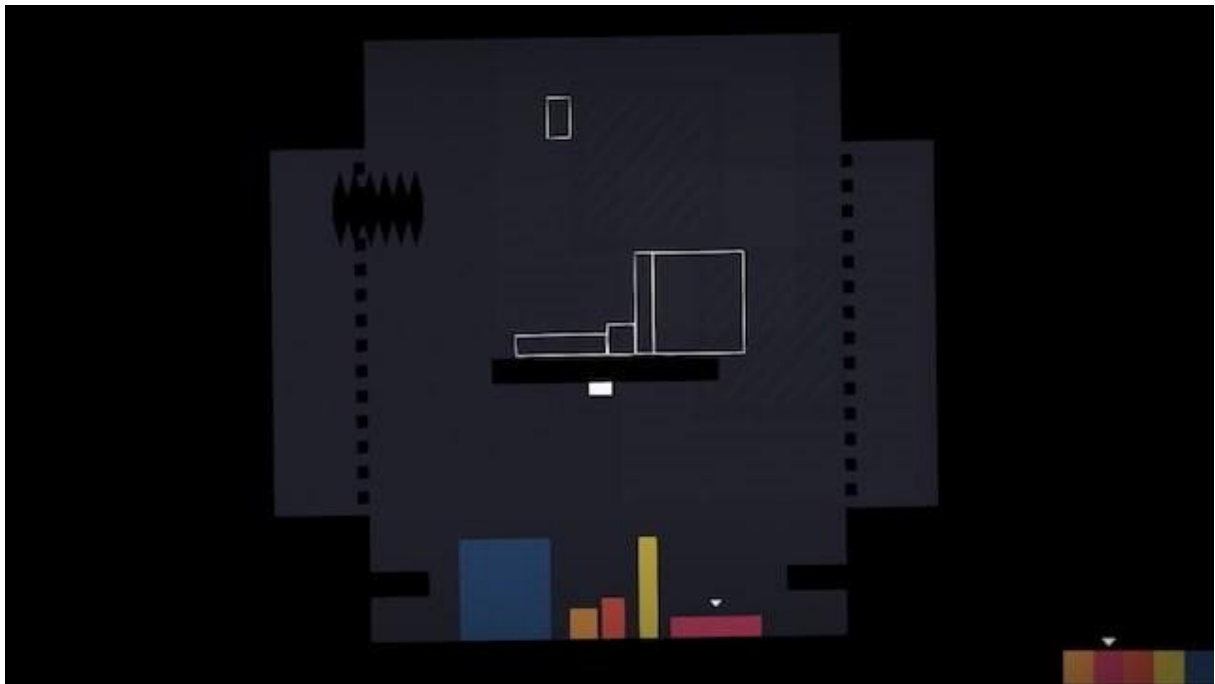
Figure 7, "Level 3.10", 2012, by Mike Bithell.

The goal of the video game is to complete each level by having the correct shape get to their specific final location through an obstacle course. After about every ten levels, new playable characters are introduced, each with new properties, such as being a smaller square with shorter jumps or a big square immune to water damage but with an even smaller jump height. A level is restarted either from the beginning of the level or from a checkpoint whenever a shape is lost to a hazard they are not immune to, e.g., spikes or water. In addition, different obstacles must be solved, such as buttons to be pushed, staircases that must be traversed, and tunnels only a specific block can fit. As the video game progresses, each new level becomes increasingly challenging as the player must discern which shape should go to their exit first and which shapes need to help each other to reach their final destination of the level.

3.2.1 Narrative exploration

Thomas Was Alone is a puzzle video game where the story is told from a third-person perspective. The narrator in *Thomas Was Alone* is omniscient (Abbot, 2008), which means that the player knows all the thoughts and feelings of the characters through the narrator, in addition to setting up why each character wants to help each other at each level. Thus, the

narrator has an essential role in *Thomas Was Alone* because, without the narrator, there would be no story. Continuing, the narrative in the video game could be described as an enacted narrative because the narrative progresses on the premise that the player has enough skill to complete each level. All of the characters in *Thomas Was Alone* are round characters, meaning they are given attributes and personalities that change throughout the story. *Christopher*, for example, is a rude, jealous, and insecure little square that resents *Thomas* with all of his being. Throughout the story, however, he falls in love with *Laura* and becomes nicer and a more lovable character.

3.2.2 Didactics

Thomas Was Alone is rated PEGI 12. This means that we did not require consent from the students' parents for the students to play the video game. The main problem with this video game is the increasing difficulty that comes with understanding the video game's controls (game mechanics). While some students may be able to handle the increasing difficulty, some students may not be able to handle it, which may cause demotivation towards the lesson or video game.

Thomas Was Alone was selected to use in a teaching situation because of the excellent storytelling where the development of characters is highlighted. Additionally, we wanted to see what impact the difficult game mechanics in *Thomas Was Alone* would have on the students' gaming experience. The game controls are simply just using arrow keys to move and jump and "z" and "x" to swap between characters. However, the controls become harder when considering the timing when performing difficult tasks such as jumps or time pleasured obstacles. In addition to learning about characters, the students would also work on problem-solving skills as the students needed to solve puzzles in order to progress.

4 Method

This chapter will explain the methods used to gather data that is suitable to answer the research questions of this study. Firstly, the choice and theory of conducting qualitative research inspired by action research will be presented. Secondly, the data collection methods such as observation, interview, and questionnaire will be explained. After that, there will be a description of the informants. Lastly, reliability and validity, transferability, ethical concerns, and limitations in this study will be discussed.

The study is seen from a social constructivist perspective, which is often used in qualitative studies. This is because the social constructivist perspective researcher relies on the participants of the study to share their views on the study that is being conducted. Additionally, it is common for researchers to use methods where the participants can elaborate on their views, such as interviews and discussions. Furthermore, it is common that the interpretations in studies from a social constructivist perspective are formed by the experiences and backgrounds of the researchers (Creswell, 2014, p. 9). This means the researchers take a subjective look at the results of this study.

4.1 Research Design

In this study, we chose to take a qualitative approach with inspiration from action research. The qualitative approach uses methods that involve going further in-depth. Thus, the researcher is not only looking at the results of the study but also getting an understanding of why the results are the way they are. In addition, a qualitative approach is seen as a flexible method as the researcher is able to change either questions or interactions in responding to the actions of the participant (Christoffersen & Johannesen, 2012, p. 17). In this study, a qualitative methods approach is seen as appropriate as it is flexible, and the methods are in cohesion with the research questions.

Additionally, the study is inspired by action research as it seeks to change or supplement the English subject with a variation in teaching about narratives. Action research is a collective concept for different methods where the researcher wants to have an impact on the area of research. It is customary to follow a research cycle that mainly includes planning, action, observation, and then reflection in action research. It can also include research questions,

process study, result descriptions, analysis, and interpretation before reflection (Christoffersen & Johannessen, 2012, p. 116).

In this study, the participants were included throughout the process, starting with early interactions where both teachers were informed of the aim of the study and what their role would be during the research. It is customary in action research to be inclusive of all participants, as it is expected that both the researchers and the participants will work together to make a change that is achievable in practice (Christoffersen & Johannessen, 2012, p. 116; Cohen, Manion, & Morrison, 2018, p. 442). The role of the teacher would be their regular teaching role, a teacher that would conduct the class in a familiar way to their students.

Throughout further interactions with the teachers, examples of teaching schemes that we created were sent to both teachers. We told the teachers that they could change the teaching schemes in any way for it to be fitting for their students. As both the teaching schemes were made to be executed for a maximum of four hours in one day, one of the teachers wanted to have a lesson to prepare their students for the teaching scheme. In this preparatory lesson, the teacher went through the different narrative perspectives, which could lead to more time playing the video game and more time for discussions. Lastly, after the video game lessons, we had interviews with both teachers where they could express their reflections, opinions, and changes they would have made to make the teaching schemes better. In addition, they could make comments on whether the video games themselves were appropriate and valuable for the educational aims set for the teaching schemes. As action research is based on participants being central in the research, the researchers of this study were transparent to the participants of the study about the choices made. Furthermore, the participants were included throughout the whole process of the study.

4.2 Methods of data collection

For the purpose of this study, we used observation as one of the sources of data collection. Observation allows the researcher to get data from natural situations (Cohen et al., 2018, p. 542). Another method used is interviews. Interview as a method will give an insight into the lives of other people, and it is suitable if the researcher wants to gain an understanding of other people's thoughts and experiences (Gleiss & Sæther, 2021, p. 78). To gather information about the participants, questionnaire was selected as a method to gather data

about the students' previous encounters with video games, video games used for educational purposes, and their thoughts on the teaching scheme and the group discussion.

We opted to use the Norwegian language in the interviews and the questionnaires. We did this to make sure that the conversation during the interview would be fluent and not hindered by using our second language, and so the students answering the questionnaire could fully and effortlessly express themselves. The students opted to use Norwegian when they communicated during the lessons. All answers and quotes from the observations, questionnaires and interviews have been translated into English.

4.2.1 Observation

The observation in this research project is semi-structured and uses an open observation form. Observation is more than just looking; it is when the observer looks systematically and notes events, people, behavior, and settings (Cohen et al., 2018, p. 542). According to Gleiss and Sæther (2021, p. 104), you know what to observe if you do a semi-structured observation. The observer also has an opportunity to have open categories and observe with an open mind. A semi-structured observation is suitable for this research project because we have some categories that we want to observe. The main categories that were observed were:

- Game mechanics: This category was used to categorize whenever the students had a reaction to the game mechanics in the video game.
- Immersion: This category was used to categorize whenever the students expressed signs of immersion within the video game.
- Worksheet: This category was used to categorize whenever the students mentioned something they noticed in the video game that they used to answer a task in the worksheet. Additionally, to what extent the students focused on the worksheet during the lesson.

In addition, we made an additional category called "other," where we put all unpredictable observations such as technical difficulties, distractions, and the students' thoughts about the video game.

In observation, the observer can be a complete participant, a complete observer, or somewhere in the middle of the two. A complete participant tries to be involved in the

environment which is being observed, and a complete observer tries only to observe and does not participate in the activities in the classroom (Gleiss & Sæther, 2021, p.106). Our role was *the observer-as-participant*. This means that the observer is not a member of the group but can participate somewhat in the activities. The research role is clear and overt, and as unobtrusive as possible (Cohen et al., 2018, p. 543). A complete observer was most relevant for this study, and the ideal situation was that the preparations were good, and we put all our focus on the observation. However, if a problem occurred where we had to help, then it was natural that one of us helped while the other continued with the observation. An advantage of being two researchers is that at least one researcher could always observe. Additionally, if no problems occurred, there would have been a better chance of observing all the interesting situations because the researchers divided the class and observed half of the students each.

In this study, it was important that the researchers, students, and teachers knew each other's roles during the observation. In this case, the researchers tried to be *complete observers*, and then the teacher would know that there would not be extra teachers in the classroom. It is crucial that the students understand the role of the researcher (Postholm & Søbstad, 2018, p. 131). At the beginning of each session, the researchers introduced themselves to the students and informed them that they would just be observing and that they would only get involved if some technical issues occurred. The researchers informed the students that there would be a voice recorder on each workstation and one for the group discussion with the whole class. Additionally, the researchers made sure that the students knew that they would not use the voice recorder to figure out more about each student but rather hear what they talked about while playing the video game and in the group discussion. A voice recorder can be used to help the researcher with the observation. The researcher can write field notes while observing and use the voice recordings to get a better understanding of the phenomenon that has been observed (Christoffersen and Johannesen, 2012, p. 72). We used an observation form (*Appendix 1*) and voice recordings in our observation. We decided to use a voice recorder in addition to our field notes to ensure that we would not miss out on relevant findings.

4.2.2 Interview

Interview was a suitable method to use in this study because the goal was to find video games suitable for learning about narrative perspectives and character archetypes in the classroom. It was interesting to gain an insight into what the teachers thought of the video games and their

reflections on using them in a teaching situation. This study used a semi-structured interview. A semi-structured interview is a type of interview where the researcher formulates questions before the interview. However, the order and wording of the questions may slightly change during the interview. If there are some interesting answers or topics in the interview, the researcher can ask more questions to gain a better understanding. The combination of this structure and transparency will help the interview be relevant and have a possibility to gain unexpected information (Gleiss & Sæther, 2021, p. 80). This was relevant to the study because whenever the teacher mentioned something interesting and valuable for the study, the researchers had the possibility to ask the teacher to elaborate on the matter.

Power dynamics are an important part of the interview. The interview is a social and often a political situation and not just a method for data collection. Power can be seen in the interviewee as the information and experience the researcher wants to gain access to. On the other hand, the interviewer has power in the sense that they dictate the topics and the course of the interview (Cohen et al., 2018, p. 274.) As researchers, we aimed to equal the power dynamics in these interviews. This was done when the teachers shared their experiences and information, and the interviewers were transparent and shared their knowledge of the field of study. It is essential that the researcher finds a balance between a friendly tone and professional relation with the informant. With this balance, the informant could open up, and the researcher could gain access to extensive data material (Gleiss & Sæther, 2021, p. 94). The use of a semi-structured interview aided the balance between a friendly tone and professional relation. Furthermore, the researchers actively listened, which means that the researcher showed interest in what the informant was saying and acknowledged what was being said (Bjørndal, 2017, p. 111). Thereby the power dynamic was taken into account in both interviews.

In order to get the data needed for this study, there were two interviews with two teachers. According to Bjørndal (2017, p. 114), it is not sufficient to rely on your memory in a longer interview, and the researcher should take field notes or a voice recorder to ensure that the findings are not lost. Furthermore, taking field notes could disrupt the flow of the interview, and it is hard to write down everything in complete sentences. A voice recorder is reliable even though it takes a lot of time to transcribe the interview. The researchers opted to record the interview with a voice recorder to make sure that they did not miss any information and to make sure that they were present in the conversation. The voice recorder will be guarded with

care so only the researchers can access it. Permission to use the voice recorder was applied to and granted by Norwegian center for research data (NSD) (*Appendix 6*).

4.2.3 Interview guide

When an interview is used as a method, it is common to prepare for the conversation by creating an interview guide. An interview guide is an overview of the questions the researcher wants to ask the informants, and the questions are often sorted thematically. Furthermore, in a semi-structured interview, there is more of a conversation between the researcher and the informant, and the interview guide is used to help the researcher to remember the themes that should be discussed (Gleiss and Sæther, 2021, p. 82). According to Christoffersen and Johannesen (2012, p. 80), the interview should start with simple questions to make the informant feel comfortable. We therefore started our interviews with simple questions. Furthermore, the central part of the interview consists of asking key questions to which the informant can give detailed answers. The purpose of key questions is to give the researcher the necessary information needed to answer the research question and the aim of the study. In addition to the key questions, we also used follow-up questions when we wanted the informant to elaborate more on a specific topic or to ask about other interesting topics that came up during the interview.

During the interview, our goal was to get detailed answers without influencing the answers of the informant. We had three different main topics that we divided the questions into. These topics were questions about the teaching scheme, video games, and their students' reactions to the video games and the teaching scheme. The interview guide can be seen in *Appendix 2*.

4.2.4 Questionnaire

A questionnaire (*Appendix 3*) was used in this study to gather information about the background of the students regarding their use of video games in their free time and in school. Additionally, it was used by students as an evaluation of their learning. It is common that the researchers are not present when the participants answer the questionnaire. This means that it is important that the researchers make a questionnaire that is easy to understand and that all the participants understand the questions and the possible options they can answer and pick as similarly as possible. Furthermore, it is crucial to formulate the questions in a way that gives the researcher relevant answers (Gleiss and Sæther, 2021, p. 143). The researchers need to

figure out what kind of questions should be in the questionnaire. Mainly on whether it should be open questions or closed questions.

The most common questions in a questionnaire are closed questions. This means that the researcher has predetermined some options that the participant can answer. Closed questions take a while to formulate, but they are better suited if the researcher wants to compare the answers from the participants. However, closed questions can be leading, meaning all the possible answers are predetermined. Closed questions can be dichotomous (yes or no questions), multiple-choice, rank-ordering, rating scales, ratio data, or matrix questions (Cohen et al., 2018, p. 477-487). Gleiss and Sæther (2021, p. 151) discuss another option which is to use open questions where the participants write their answers to the question. These types of questions could give the researcher additional information that would not be present if closed questions were used and if the researcher did not ask for that specific information. However, answers from a questionnaire with open questions could be harder to compare. The researcher has to compare the pros and cons of the different types of questions, and some questionnaires combine open and closed questions.

Our questionnaire includes closed questions such as easy to answer dichotomous questions and multiple-choice questions to clarify what kind of answers are being asked for and limit different answer quantities for easier data analysis. In addition, there will be some open questions to let the participants have the opportunity to elaborate further when needed. The questionnaire was anonymous and only answered by the students who participated in the research project. To get the most honest answers from the students, we made sure all the students knew that only we would see their answers by informing them ahead of the class, at the beginning of the class and before the questionnaire took place.

4.2.5 Educational design research

To answer the last research question about how video games suitable for teaching about narrative topics in the English subject can be found, educational design research was used as a method. This method is defined as "a series of approaches, with the intent of producing new theories, artifacts, and practices that account for and potentially impact learning and teaching in naturalistic setting" (Akker, Gravmeijer, McKenney & Nieveen, 2006, p. 5). We already mentioned action research at the beginning of this chapter. Educational design research shares

some traits with action research, such as the goal to change something in the practice of the area of study; additionally, the study process is similar in nature.

The educational design research method is based on five characteristics: *interventionist*, *iterative*, *process-oriented*, *utility-oriented*, and *theory-oriented*. The first characteristic is that the research is interventionist, which means that the aim of the research is to change the current practice. That the research has an iterative characteristic means that there is a cycling approach where the researcher tests the design and evaluates and revises the design. Furthermore, the method is process-oriented, which means that the aim of the research is to understand a phenomenon and improve the intervention that affects the phenomenon. Utility-oriented is the following characteristic, which means that the research needs to be usable in practice after the research is completed. The last characteristic is that the research is somewhat theory-oriented. This means that the research is somewhat based on theory and may further develop the theory within the field (Akker et al., 2006, p. 5). The process used to find suitable video games for teaching about narrative texts in the English subject is inspired by educational design research:

1. The process is interventionist because the video games that were found through the process were tested in two different classes.
2. The process is iterative as it promotes evaluation and revision in future studies.
3. The method is process-oriented, where the phenomenon is the video game that is found through a process, which is an intervention. The video game found through the process will improve the process itself.
4. The process may not be utility-oriented because of the limitation of video game availability in schools. However, as the process is further developed, the process will become utility-oriented.
5. Finally, the process is based on previous theories and will contribute theory to the field.

The perspective that is used in this study to utilize educational design research is the curriculum domain perspective. In this perspective, the researcher looks at elements regarding the students' needs and interests, the challenges in society, and academic and cultural heritage, which is essential for learning and future development (McKenney, Nieveen & Akker, 2006, p. 68). There are three main outputs from the usage of educational design research with a curriculum domain perspective. The three outputs are *design principles*,

societal contributions, and *professional development*. Design principle is the knowledge that is gained through educational design research. Furthermore, societal contributions are curricular products, in this case, the process, which is valuable to others in education. The final output is the professional development of the participants, which is both researchers and participants of the process. This professional development could happen by using methods that promote reflection, such as interviews and discussions (McKenney et al., 2006, s.74). By using this method as an inspiration for the process of finding video games suitable for teaching about narrative texts in the English subject, the process could help teachers by adding video games as a tool to work with literary texts. As video games are a teaching tool that the students find interesting (The Norwegian Media Authority, 2020), it would be an excellent addition to the curricula work. Additionally, the process will help to solve a challenge in society, which is how video games can be used in the English subject. Lastly, the process will help develop both the participants' knowledge about how to find video games and how to use video games as a variation in the lessons.

4.3 The informants

This part of the chapter will clarify the process of contacting and selecting informants for the study. The goal of a qualitative research project is that the researcher can extract as much data as possible from a limited sample size (Christoffersen & Johannesen, 2012, p. 49). In this study, the informants were chosen with volunteer sampling. In cases where access is difficult, the researcher may have to rely on volunteers, such as personal friends, participants who reply to a newspaper advertisement, or those who happen to be interested in a particular school (Cohen et al., 2018, p. 222). When we were looking for informants, we sent e-mails to a few different schools where we explained the research. Two teachers from two different schools said that they were interested, which was the exact amount we wanted. The teachers said that they wanted to be involved in the research because they thought it was interesting, and they wanted to improve their competence in using video games in the English classroom.

The sampling in this study could also be referred to as non-probability samples, as the teachers had an interest in improving at using video games in their lessons. Furthermore, the selectivity which is built into a non-probability sample derives from the researcher targeting a particular group, in the full knowledge that it does not represent the wider population (Cohen et al., 2018, p. 217). Since we only had two teachers and their students participating in our

study, and the two groups of students were different mainly because of age, it is hard to generalize our findings, and we do not intend to generalize our findings.

School A had one teacher, two teacher-students, and five students, and they played *What Remains of Edith Finch* during the lesson. The two teacher-students were on their practice period and were not involved in the research. Furthermore, the teacher involved in the research had never used video games in a teaching situation previously but was eager to learn how to use video games in order to "get more varied English sessions and because the students like video games" (from the interview). The students were a mix of 9th and 10th graders.

School B had two teachers and six students, and they played *Thomas Was Alone* during the lesson. One of the teachers was not involved in the research and was present because the students' regular school day overlapped with the subject that the teacher typically teaches (Norwegian). The teacher involved in the research was interested in video games and uses video games in a teaching situation approximately two times per month (from the interview). All the students were 7th graders.

4.4 Method for data analysis

The analysis is an essential part of any study and must therefore be defined. Analysis can be explained as an active process where the researcher creates meaning by grouping elements with similar characteristics. These groupings are referred to as categories (Gleiss & Sæther, 2021, s. 170). Coding and categorizing the data material is an important part of the qualitative analysis process. Open coding is the part of the analysis where the researcher names or codes the phenomena and utterances with a thorough review of the data material that has been gathered. After this process, the researcher has many codes and needs to group the codes into categories (Nilssen, 2012, p. 79; Cohen et al., 2018, p. 718). In this study, open coding was used to code the data material, and categories were made to gather the codes in groups. An abductive method is used to analyze the data in this study. The abductive method is a combination of an inductive method, where the categories are gathered from the data material, and a deductive method, where the categories are grounded in theory in advance of the data gathering (Gleiss & Sæther, 2021, p. 171). In this study, the observation and the interview had a combination of categories which were inductive and deductive. The observation had *immersion* and *game mechanics* as deductive categories and *worksheet* and *other* as inductive

categories. Furthermore, the interview had *teaching scheme*, *video games*, and *student reactions* as deductive categories and *process of finding video games* as an inductive category. Using an abductive method for analysis proved to be important as both the deductive and inductive categories gave interesting findings to analyze and further increased the scope of the study.

4.5 Reliability and validity

In terms of assessing the quality of the study, reliability and validity are two important terms. Reliability is assessing the quality of the process during research, mainly focusing on how the research data is affected by the collection methods and whether the results of the study are reproducible by other researchers (Gleiss & Sæther, 2021, p. 202). Qualitative studies are hard to reproduce, and consequently, use the term dependability instead. Dependability is that the data material is connected to the context in which the study was conducted and to the individual participants of the study (Nilssen, 2012, p. 141; Cohen et al., 2018, p. 271). This means that in order to replicate a qualitative study, the researcher would have to do the same actions and be in the same mindset. This also applies to the participants of the study, making it nearly impossible to reproduce. Limitations and practical implications and how they may have affected the results will be discussed later in the study.

Validity is the other assessment of the study which is necessary. The term validity is used to explain when the researcher evaluates the quality of the data. In addition, validity is used to explain the researchers' interpretations and conclusions in the study (Gleiss & Sæther, 2021, p. 201). Another important part of the validity of a qualitative study is for the researchers to have a high level of transparency. Transparency is when the researcher is truthful and open about the process of the study (Cohen et al., 2018, p. 248). For the study to be valid, we are transparent in our process; additionally, we are sharing the observation form in *Appendix 1*, the interview guide in *Appendix 2*, the questionnaire in *Appendix 3*, and both teaching schemes, *Appendix 4* and *Appendix 5*. These teaching schemes include a guide for how the game mechanics work in the video game, in addition to worksheets that the students used. Lastly, we use thick descriptions to ensure the readers of this study understand the processes and interpretations made.

4.5.1 Transferability (External validity)

The following paragraph will discuss to what extent the findings of this qualitative study are transferable to address its external validity. Qualitative studies are usually not generalizable as they have small samples of informants in a specific setting. In order to make the study transferable, the researchers have to provide thick descriptions when sharing data (Cohen et al., 2018, p. 255). This study had a small sample size. The number of students that participated in each lesson is fewer than in an average class. In addition, the lesson in this study took place in an unnatural setting. However, even though the students' experiences and the location of the study are not transferable, the findings from the video games are transferable as the video games do not change. In addition, the experiences with the teaching schemes in this study can be transferable to the process of making new teaching schemes and testing out new video games.

4.6 Ethical concerns

It is essential that the study is ethical throughout the whole project. Gleiss and Sæther (2021, p. 43) discuss three essential ethical principles, which were taken into account when conducting the study. The first and most crucial principle is *informed consent*. This means that participation in the research is voluntary, documented, and informed. The participants must know what is being researched, the methods that will be used, who has access to the information, and how long personal information is stored. The potential participants should also be able to not participate in the first place and quit at any time during the research without it having any form of negative consequences (Gleiss & Sæther, 2021, p. 44). There was a dialog with the teacher about the planning of the teaching scheme. We started by sending general information about the study to the teacher. Next, we met the teacher and explained the study in more detail. In this meeting, we also discussed the form for giving consent that was made for the teacher and the students who took part in the study. We did it in this specific order to not scare the participants away from the study by giving them too much information at once.

The second ethical principle is *confidentiality* and *anonymity*. Research findings will be a part of the master's thesis and will be published. Therefore, it is not possible to achieve full confidentiality and anonymity (Gleiss & Sæther, 2021, p. 45). All the data in this study is anonymized, and there was no personal data required in this study, which means that

confidentiality was not a significant concern. Additionally, the data collected in this study was only available to the researchers.

The third ethical principle is that *no informant should be harmed* by participating in the study. Therefore, the researcher must consider whether there are any negative consequences of participating in the study that may harm the participants (Gleiss & Sæther, 2021, p. 45). This study did not try to find any weaknesses in the practice of the teachers or the students. Furthermore, the recommended age restriction in *What Remains of Edith Finch* was carefully discussed, in addition to parental consent being a requirement to participate in the study, all with the intent not to harm the students.

4.7 Limitations

In this study, a research laboratory was used in which four computers were available. The study was conducted in an unnatural setting where the students came to a research laboratory to complete the teaching scheme instead of in a natural classroom setting. This means that the results from this study could have been different if it had been conducted in a natural setting. Furthermore, we wanted the students to play the video games in pairs or trios on these four computers. This means that the maximum number of students that we could have in the research laboratory was 12 because of computer accessibility. In order to have a discussion in the lesson, we wanted a minimum of four students. A standard student group in Norway is around 16 students, including smaller rural schools (Stensig, 2021) and a group size of up to 30 is not uncommon, meaning this study is based on smaller-sized student groups. Therefore, using the teaching schemes with a larger group of students would be demanding. We believe, however, that the results from our study may be of value in planning for such a scenario.

5 Findings and analysis

This chapter will first present the findings from the observations, and secondly, the findings from the interviews. After each new finding, an analysis of the findings will be presented, and the two schools and teachers will be presented together. They will be separated into "School A" and "Teacher A" for *What Remains of Edith Finch*, and "School B" and "Teacher B" for *Thomas Was Alone*.

5.1 Observation findings

Since the aim of this study is to test two video games and see if one of them is suitable for teaching about narrative perspectives and the other for teaching about character archetypes, categories were made in order to observe relevant data that could answer our research questions. The three categories made were: game mechanics, worksheet, and immersion. For the game mechanic category, it was observed whether the students had positive or negative reactions regarding the game mechanics of the video games, whether it was about the difficulty of the video game and if the game mechanics were motivating or demotivating the students to continue playing. In addition to whether the game mechanics were encouraging or obstructing the learning goal of the teaching schemes. The worksheet category was made to observe the effects of the worksheet during the teaching scheme, mainly looking at if the worksheet was able to focus the attention of the students towards their learning goals and help them out of the immersion of the game. Finally, the immersion category was made to observe the level of immersion the students had while playing the video game.

5.1.1 Findings: Game mechanics

5.1.1.1 Finding 1: Approaches to game mechanics

What Remains of Edith Finch and *Thomas Was Alone* have different approaches to game mechanics, which affects whether the students focused on the narrative part of the video game or the game mechanic part of the video game. *What Remains of Edith Finch's* game mechanics are varied, meaning as the players are introduced to new characters, new ways of playing the video game emerge. These varied game mechanics vary in difficulty as well. In the first story of *Molly*, one student in group 2 said the following: "It is really difficult to control the shark." In this part of *Molly*'s story, the player had to control the shark and be

accurate as to when to attack the seal. In addition, the sensitivity of the mouse changed, making it difficult to look around. Additionally, it was observed that this student made more attempts to complete this part of the story, in contrast to others who had no issues with this game mechanic.

Another example of students struggling with specific game mechanics was when group 3 struggled with the ending of *Sam*'s story, where the following was said between the two students: Student 1: "Go there quickly, quickly, quickly!" Student 2: "Yeah, but…" Student 1: "There, now you have to go up, quickly!". In this part of the video game, the students had to walk *Sam* up a cliff to take a picture with a camera that was on a timer. Ahead of this, the students would only control the camera and not the characters themselves, which was not understood by one of the students. This led to the student playing, having to make multiple attempts, in addition to getting help from the other student in the group. These examples show that the students had different experiences with the game mechanics of the video game, where one group struggled, another group had no problems, and vice versa. However, the struggles that would occur did not appear to be so extreme that they discouraged the students.

Thomas Was Alone also has varying game mechanics. However, in this video game, the player has to remember and accumulate the previous game mechanics that are encountered along the way. This means whenever a new character is introduced, the players have to get to know the abilities of the new character in addition to the characters they already have met. In addition to this, the difficulty also increases as the video game progresses. The players have to be more accurate when executing actions and creative when thinking about character interactions and how these interactions may help when trying to complete a level. Two quotes will be presented from our observation of group 2 in School B to demonstrate the increasing difficulty in the video game. The first quote is from the beginning of the video game, and the second quote is from the later stages of the video game. Quote 1: "This was an easy video game, even though you have the responsibility for many kids." Quote 2: "What, this level is insanely difficult." The first quote demonstrates that when the game mechanics were "easy," the students could focus on narrative aspects of the video game. However, in the second quote, the narrative focus is gone. This was also observed in all the groups during the later stages of the video game. In addition to the difficulty of the video game, the following is an example from group 1 where one reason for the students' focus shifting is highlighted: Student 1: "I am not paying attention." Student 2: "That is because you have to play the video

game." This showcases that the difficulty in *Thomas Was Alone* was a barrier for the students' progression in the video game. The barrier had the effect of removing the focus of the narrative and the students' focus shifted towards being able to do the difficult game mechanics. However, since the students struggled to progress, the students' sense of achievement became even more significant when completing a level.

5.1.1.2 Finding 2: Pace of the video game

The students' reaction to the pace of the video game is an issue that was observed with both video games. In *What Remains of Edith Finch*, all students mentioned that there was no ability to run at the beginning of the gameplay. However, this did not discourage the students from continuing to play the video game and paying attention to the story. On the other hand, in *Thomas Was Alone*, only group 1 mentioned the pace of the video game negatively. The students said the following: Student 1: "We have not even played for one hour." Student 2: "Have we not? It feels like we have played the whole day." This could indicate that the video games the students usually play have a faster pace compared to the video games they tried in this project. Furthermore, since the students felt that the video game was slow, the pace of the video game could be an important factor in selecting video games for an educational purpose.

5.1.1.3 Finding 3: Game mechanics and a sense of achievement

Due to the manageable game mechanics in *What Remains of Edith Finch*, there was only one scenario where the game mechanics gave a sense of achievement upon completion. The following quote was from group 3 when they played through the story of *Gregory*: Student 1: "Jump on top of the whale." Student 2: Jump on top of the ball?" Student 1: "The whale up there." Student 2: "Oh, the whale, ok." Student 1: "Press space and hold it, and then let go, oooo." The story of *Gregory* had one of the more challenging game mechanics where the students had to jump on top of a whale to progress in the story. This group was the only group that could do this level without any external help. The interaction between the students happened after they had been stuck on the level for a minute, and when they completed the level, the "oooo" was a verbal indication of their sense of achievement.

Even though the game mechanics of *Thomas Was Alone* were more difficult and may have distracted the students from the narrative, the students gained a sense of achievement when a difficult level was completed. This sense of achievement was observed in all three groups.

Here is one example from each of the groups, even though it happened multiple times: Group 1: "I am so good." Group 2: "Finally! That level was so hard". Group 3: "I am so smart, I am so smart." The difference in these quotes is when it happened, the quote of the first group happened during the first levels of the video game, the quote of the third group in the middle levels of the video game, while the quote of the second group in the later levels of the video game. This shows the varied skill level that the students had and demonstrates the different thresholds for when the game mechanics became too difficult for the students.

5.1.2 Findings: Worksheet on narrative aspects

Another finding made during the observation was the worksheets' ability to help the students focus on the tasks and the specific literary traits that were to be learned. In *What Remains of Edith Finch*, where the literary trait to be learned was narrative perspectives, the worksheet tasks were to explain the characters by their personality, how they died, and their relation to *Edith Finch*. Additionally, the last two tasks in the worksheet were about who the narrator in the story was and what perspective the narrator had. To demonstrate how the worksheet helped the students to focus on narrative perspectives, some quotes from the different groups will be showcased: Group 1: Student 2: "Write down that she was murdered, she was eaten by a monster." Group 2: Student 1: "I think that *Edith* is the narrator and that there are many different narrators like *Molly*." Group 3: Student 1: "*Sven*, ah *Sven*, hold up (not translated)." Group 1 and group 3 did the worksheet tasks while playing the video game. On the other hand, group 2 waited until they were finished with the video game before working with the worksheet. In addition to working with the worksheet during and after the gameplay, the students also used the worksheet to make notes to support them during the group discussion. Even though they had varied ways of utilizing the worksheet during gameplay, all students managed to finish the worksheet and participate in the discussion on equal terms.

In *Thomas Was Alone*, the worksheet usage was similar in all the groups. Their primary focus was to describe the new characters that were introduced and then figure out their special power. The following quotes showcase how the groups worked with the worksheets. Group 1: Student 1: "*Claire*'s special power is that she can be in water." Group 2: Student 1: "Let me know when a new character is introduced. For our notes." Group 3: Student 1: "Write rubbish at jumping and slow." All the groups actively tried to find information that was useful to do the tasks in the worksheet during the gameplay. Finally, this lesson did not include a

discussion at the end of the lesson. Therefore, the usage of the worksheet in a discussion could not be observed.

5.1.3 Findings: Immersion

While observing immersion, we noticed two different kinds of engagement while they were playing the video games. These were what we will call *narrative immersion* and *game mechanical immersion*. In *What Remains of Edith Finch*, both narrative- and game mechanical immersion were observed. The example of narrative immersion comes from Group 3: Student 1: "Wow, look at that, being king of all of that, imagine how interesting that would be […] If I had this video game, I would play it over and over again. Find more stuff and maybe do easter eggs. This video game is very mysterious, mystery mystery." This comment was made during *Lewis*' story, where the player can see inside *Lewis*' imagination. In this imagination, the player can see the kingdom *Lewis* had created inside his head. The players seemed to be impressed by the narrative and graphical parts of the story. Furthermore, the student expressed their fondness of the video game and its mysterious nature, which indicates that the student enjoyed the embedded narrative. Secondly, there were two quotes that could be a combination of both narrative and game mechanical immersion. In Group 2, the student said the following: Student 1: "I am hungry, we have to go to …" and 10 minutes later, when the students were notified to stop playing because it was lunchtime, he said: Student 1: "We have to finish this chapter." The student was playing the chapter of *Gus*, where the student had to maneuver a kite around the sky to continue the narrative. It is not clear whether the student was immersed in either the narrative, game mechanics, or both. However, the student wanted to keep playing despite being hungry, which could indicate that the student was immersed in the video game. Another quote was in group 1: Student 2: "Hell no, this is scary." This quote happened during *Barbara*'s story, where the graphics and music become scarier to complement the Halloween story that was being told. Additionally, the game mechanical change where the walking speed of *Barbara* slowed to make the narrative more tense for the player. This is an example of a combination where the game mechanics of the story possibly served to strengthen the narrative immersion.

In *Thomas Was Alone*, on the other hand, the students only showed immersion towards game mechanical parts of the video game. The following examples demonstrate that the game mechanical parts of the video game overshadowed the narrative parts of the video game in such a capacity that narrative immersion was not possible. The first quote is being reused

because it is an excellent example of game mechanics overshadowing the narrative. Group 2: Student 1: "Let me know when a new character is introduced, for our notes." Group 3: Student 1: "This is exciting." Student 2: "What is this? Yeah, this is exciting." There were no quotes indicating narrative immersion. However, these quotes indicate that the game mechanical immersion became the students' primary attention because of their lack of interest towards the narrative. Additionally, there was an observation that one student wanted to keep playing after the lesson ended. Due to the lack of narrative interest, this could indicate that the student was immersed in the video game because of the game mechanics.

5.2 Interview findings: Video games as tools of learning

Two interviews were conducted to gain relevant data for this study and to see if the teachers agreed with the observations from the lessons. This is a form of *member checking* to see if the observations made were observed in a similar way by the teachers. Additionally, the interviews were used to gain an understanding of the teachers' thoughts on their respective teaching schemes and their respective video games. When presenting the findings of the interviews, only the questions relevant to answering the research questions will be used. The categories that were made for the interview were *assessment of the video game and the lesson* and *possible changes* and *process of finding video games*. Furthermore, the goal of the categories for the interview was to learn what the teachers thought of the video games and whether the video games were suitable to use when learning about the narrative voice or character archetypes. Additionally, the goal of the categories was to learn possible changes that the teachers would make to the teaching scheme and their thoughts on the process of finding video games suitable for teaching about narrative perspectives and character archetypes.

5.2.1 Findings: Assessment of the video games and the lessons

Questions were asked for the teachers to share their experiences and thoughts regarding the suitability of the video games to understand what ways the different video games were suitable for their respective narrative topics. First, the following question was asked: *How did you experience working with What Remains of Edith Finch/Thomas Was Alone in your lesson?* Teacher A said that "I think it was really interesting. […]It was important for my students and me to have been through this teaching experience. It was good that it captivated the students." In a similar fashion, Teacher B answered the following:

It was really good. I have to admit that I was skeptical in the beginning before looking through the teaching scheme. Will this fit this specific group of students because this student group may be challenging at times. […] Will the students be able to see the learning goal of the teaching scheme? […] However, when I prepared for the teaching scheme, I thought: Wow, this might work well. In the end, the lesson was better than expected.

Both teachers indicated that they were satisfied with the teaching schemes and the video games. Additionally, Teacher B said they were skeptical at the beginning towards the teaching scheme with the usage of video games before looking at it, which may indicate hesitation towards using new video games as tools of learning in lessons.

In addition to the teacher's experience, a question was asked to see whether the teacher observed any differences between the engagement of the student playing the video game and the student taking notes on the worksheet on the side. Teacher A answered

It was important that all the students were prepared in advance and knew what to look for while playing the video game. […] I walked around to all stations, and all students were engaged in the lesson. However, this might not have happened if we did not have the preparation ahead of the lesson. […]

Teacher B said the following: "Difficult to say. […] I was surprised that the students thought this video game was fun, not because of amazing graphics, but because of the increasing difficulty and storytelling. […]." Neither of the teachers saw any differences in engagement. However, Teacher A brought up that the preparation ahead of the teaching scheme might have been a key factor in its success. This shows that the teaching scheme might not have been as successful if School A did not have a preparational lesson in advance. Teacher B said the students were having fun, an indication of them being engaged in the teaching scheme. Additionally, Teacher B brought up that this fun did not occur because of amazing graphics but because of the challenging game mechanics and the narrative. This may indicate the previous notion of the teacher that graphics may be an important part to be able to capture the attention of the students.

The next question was *How did you experience the discussion parts of the teaching scheme regarding the terminology used and which themes they talked about* (examples of themes given: game mechanics, narration, perspective, characters). Teacher A said:

> I thought it was nice, and it was important to have the summary [final discussion] and the discussion in the middle. […] Additionally, the students that normally do not talk did talk. Which I thought was nice, this they could do [Talk about perspectives and characters]. [...] They mainly focused on the characters […] It was a nice collaborative task. However, when they talked about perspective, some [students] were unsure, and some were sure if it was first- or third-person perspective. […] In the end, I thought it was a nice conversation around the table.

On the other hand, Teacher B replied, "It was mostly about the characters." Both teachers agreed that the characters were the topic that was most talked about in both discussions. Teacher A also noted that the teaching scheme was great for the students to collaborate and that they discussed characters and perspectives that were used in the video game. Additionally, it was mentioned by Teacher A that the students that were normally silent talked in the discussion part of the lessons. This indicates that the students were comfortable talking about happenings in the video game. Teacher B mentioned that the students talked about characters in the discussion. This may indicate that either the narrative of Thomas Was Alone might not have been interesting enough or that there was not enough time to fully explore the video game's narrative. Another possibility is that the game mechanics overshadowed the narrative.

When asked *Do you think this video game works for the competence aims set?* Both teachers agreed that their respective aims were fitting for the video games without elaborating further. Continuing, the following question was asked: *Do you see any other competence aims or themes this video game can be used for?* Which gave intriguing answers. Teacher A said:

> There is probably an ocean of possibilities. […] I understand that they are addicted to gaming, not in a negative way but that you can actually learn a lot from it. When we summed up the day and were about to leave the university, one of the students, who is usually very quiet, said: "It is like reading a book, you follow the story, and there is excitement." which hit me [made an impact on them]. "Like reading a book." Because

we [teachers] want them [students] to read books, but it is difficult for many to read books. I imagine that you can do a lot of things with gaming.

This answer gives an indication of perceptions around video games and their negative exposure in media. Additionally, the student's answer gives a nuanced reflection of narratives within video games. Teacher B stated: "Absolutely in the subject religion and ethics […] so not only English but other subjects as well". Teacher A gives an overarching look on gaming in education, while teacher B elaborates on other possible subjects. However, neither of them mentioned any specific competence aims or themes.

5.2.2 Findings: Possible changes and process of finding video games

The next question was asked to understand how to improve the teaching scheme. *If you could have this lesson again, what would you change?* Teacher A said:

> This time we only had five students. So more computers would be needed if the whole group was going to participate. If any of them would have to wait, their interest would be gone. Important that they do not have to wait. [...] I would not mind using it again, and I might have more confidence to do this without teacher-students.

After the interview had finished, Teacher B mentioned that they would have had a shorter lesson for the students to remain focused and consider the difficulty of the video game, as some students finished levels at a slower rate.

Both teachers mentioned minor changes they would make to the teaching schemes for the teaching schemes to be more suitable for their student groups, regarding lesson length and computer availability, which is a common issue because of how expensive gaming equipment can be. In addition, Teacher A mentioned that they had gained more confidence to do this teaching scheme independently without any help. Furthermore, Teacher B emphasized the importance of considering the difficulty of the video game and how the students might handle the difficulty.

The following question was asked to clarify the teachers' thoughts about using video games in their future lessons: *What are your thoughts about using video games in your own English lessons?* Teacher A responded:

I think that it is something I want to be good at, […] it will freshen up the lessons. […] And now I feel like I have come further along, and I have stopped saying, "I cannot do this, I do not dare to do this" I dare. […] the students think that the teaching becomes more varied. […] The students need varied lessons that capture their interests. […]

Teacher B answered:

[…] It is a different kind of work compared to other school projects. Especially preparations take a lot longer time than "normal" projects. However, it depends on how you use it. You cannot think, "I am going to use video games, and they will like it and learn from it." You have to think thoroughly through how to use video games so that the students learn something from them. But I think that using video games in education will become standardized.

Teacher A wanted to become good at using video games in their own English lessons, mainly because the teacher acknowledges that video games are a media that their students find interesting. Additionally, it would freshen up the lessons, giving variety to their regular lessons. On the other hand, Teacher B shares their thoughts about the process of assessing video games for educational uses and how the usage of video games differs from the usage of other media in different school projects. Additionally, Teacher B brought up the standardization of video games in education. This is a valid point considering the increasing popularity of blogs and podcasts such as *Spillpedagogene*, which promote the usage of video games in education.

Another question was asked to see if the exposure of using *What Remains of Edith Finch* / *Thomas Was Alone* could encourage the teachers to implement video games more frequently in their future lessons. *Is this* [the lesson] *something that could help you to use video games in your own lessons?* Teacher A: "Yes, I think so. I dare to do this on my own. […] it is more positive to play video games. You can use the language, and you can use the themes." Teacher B: "Yes, absolutely, it has given me a push towards a new video game and a new teaching scheme. As mentioned earlier, I plan to reuse it." In addition, a comment was made by the interviewer that gave an interesting response from teacher B. Interviewer: "Yeah, it would be nice to have a big collection of teaching schemes for different video games" Teacher B:

Yeah, and that is what makes *Minecraft Education* simple to use because of the many different pre-made teaching schemes. Of course, the first time will be more time-consuming [making teaching schemes with new video games]. So that if you do the preparations and documentation [assessment of the teaching scheme] properly, it will become easier for each continual session. Additionally, projects like these often take a lot of time, so the time used will be an investment in the future. Before starting a video game project, you need to have a lot of time and energy to prepare the project.

Both teachers seemed encouraged by their respective lessons to continue using video games in their future lessons. Additionally, Teacher B mentions that using new video games in the classroom takes a lot of time and effort regarding the preparation and documentation of the teaching schemes. *Minecraft Education* is mentioned as a frequently used video game because of the pre-made teaching schemes, normally for the subjects of math and science, making it more appealing to use. However, *Minecraft Education* is an interdisciplinary video game because it can be used in many if not all subjects depending on the teacher's familiarity with the video game.

5.3 Questionnaire findings

The questionnaire that was used in this study was mainly used to gather information about the background of the students. However, there was also a part in the questionnaire where the students evaluated their own learning in the lessons. The students from School A answered that they learned how to progress in the video game and how the narrator affects the story in the video game. Additionally, the students from School A answered that they contributed to the discussion by talking about how to progress in the video game, how the narrator affects the story and the causes of death of the characters.

The students from School B answered that they learned how to progress in the video game and about characters and how they developed during the story. Additionally, the students answered that they contributed to discussions. However, as there were no discussions, the answers are seen as contributions when they roamed around the classroom and spoke with each other. Here they contributed with how to progress in the video game and how characters did or did not change during the story.

6 Discussion

In this chapter, the findings and empirical data will be discussed, and the discussion will be centered around the categories from the previous chapter. The findings from *What Remains of Edith Finch* and *Thomas Was Alone* will be discussed simultaneously and compared to highlight the differences between their suitability and their usage. First, an assessment of the video games and lessons will be conducted to discuss the thoughts of the teachers along with our reflections. Next, there will be a discussion about what effect the worksheet had on the students in the lessons. Second to last, the game mechanics of the video games and the different approaches the video games have to game mechanics will be discussed. Last, we will discuss the process of finding video games suitable for the specific topics within storytelling in the English subject in order to highlight the strengths and weaknesses of this process.

The aim of this discussion is to find answers to the following research questions:

1. To what extent is *What Remains of Edith Finch* a suitable video game for teaching about narrative perspectives in the English subject?
2. To what extent is *Thomas Was Alone* a suitable video game for teaching about character archetypes in the English subject?
3. How does the game mechanics in *What Remains of Edith Finch* and *Thomas Was Alone* influence the students' gaming experience when learning about narratives in the English subject?
4. How can video games suitable for teaching about narrative topics in the English subject be found?

6.1 Video games as tools for learning

6.1.1 Assessment and revisions of the lessons

It is clear from the lessons and the interviews with the teachers that video games are beginning to enter education as a teaching tool. Both teachers found the lessons to be a good experience for their students and themselves. Teacher A, who has not used video games before, was enthusiastic about trying out video games in the classroom. Additionally, Teacher A mentioned in the interview that the students rely on predictability to have a good lesson. This could be the reason why teacher A chose to have a lesson beforehand in preparation for

this lesson. Teacher B was initially skeptical towards the teaching scheme. However, Teacher B was pleasantly surprised when they read through the teaching scheme.

Neither of the teachers observed any engagement differences between the students who played the video game and the students who took notes on the worksheet during the lesson. On the contrary, the teachers observed that the students were engaged while playing the video game. A possible reason for this engagement is that the students played the video game in pairs. As seen in Elson et al. (2014), the students may have been affected by playing with another student to increase their enjoyment of the video game and improve their skill level. This theory regarding how the students might have been positively affected by playing in pairs is similar to the zone of proximal development (Vygotsky, 1978). The students could learn more when working in a social setting than what the student could learn alone. The student that is helping, in addition to the worksheet, are both scaffolds for the student that is playing the video game. Furthermore, the student who is helping can be encouraging and positively affect the skill of the student playing the video game. On the other hand, the worksheet scaffold as it helps the student to focus on the learning potential within the video game.

In order to improve upon the lessons, changes can be made in both adding and removing elements from the lessons, making the process iterative (Akker et al., 2006). Firstly, the teaching schemes had an introduction that was meant to be a preparation where the students would learn the basic movement in the video games and direct their attention toward the learning goal of the specific lesson. The introductory part of both sessions did not develop the way we thought it would and was too brief. It seemed that both teachers thought that we, as researchers, would take charge of this part of the session, which we had not prepared for as we were going to be complete observers during the lessons. This happened because we were not clear enough to the teachers that they were going to be in charge of the lesson. The confusion may have led to the teachers not being prepared to have an independent introduction to the lesson. This underprepared introduction may have led to the students lacking the knowledge needed to be able to understand the purpose of the lesson. However, it could seem that the lesson that School A had in preparation for this lesson was important and a crucial part of the success of the teaching scheme. Initially, we did not think a preparational lesson was necessary as long as the teacher knew the teaching scheme and was familiar with the video game. However, the teachers themselves know their students' needs and

prerequisites better than us, which is why we said that they could make changes to the lesson if they wanted to. The teaching scheme made for School B was initially made for students in 8th through 10th grade, meaning the contents and examples made in the introduction of the teaching scheme may not have resonated with the 7th grade students, causing them to lack the introductory knowledge needed to achieve the learning goals of the teaching scheme.

Teacher B mentioned in the interview that a change that could make the lesson better for their students would be to divide the lesson into several shorter lessons because this could help them maintain their focus. This could be done by dividing the chapters in the video game into lessons of around 60 minutes. Some students will finish the chapters faster than others, but this would not be an issue if the students have designated tasks to do while waiting, such as working with the worksheet or discussing with other students who have also completed the chapters.

A change that could make the lesson better is to have additional group discussions during the lesson. In our teaching scheme, we planned to have group discussions almost every 30 minutes for the students to compare their worksheets and emphasize the focus of the learning goal. School A had a few discussions. During those discussions, the students shared their different experiences with each other, talking about which perspectives were present in the narrative and thereby learned from discussing each other's experiences (Alsup, 2015). Furthermore, School A had a structured discussion with a teacher-student leading the discussion, which worked well. School B did not have a discussion, but all the students sat together and worked on the worksheet on one occasion. This was mainly because of the limited time allocated towards the teaching scheme, which was initially meant to last four hours (this lesson lasted two and a half hours). Both teaching schemes were planned to last for approximately 4 hours, which in retrospect is too long for the students to be able to focus, as screen time for a more extended period of time might be tiring. A possible solution that could prevent the students from getting tired could be to have additional breaks or activities where the students do short exercises to recover from their tiredness.

Furthermore, it is natural to work with these topics over a more extended period with more lessons to learn about narrative perspectives or character archetypes. These lessons can use other methods or other teaching tools to consolidate the students' learning. Further work with these topics could eventually give products, such as texts or presentations, where the teacher can assess the student's products. In this study, we did not include a form of post test to see

what the students learned from these lessons. However, the observations of the lessons and the questionnaires, gave us an indication of what the students learned. A way that the teacher could assess the students' learning was through the discussions that took place in the lessons of this study. It is important to note that the video games are used as a teaching tool in a similar fashion as a literary text would be used.

6.1.2 Worksheet

The purpose of the worksheets was to direct the focus of the students toward the learning goals of the sessions. The students from School A wrote significantly more on their worksheets compared to the students from School B. Based on the findings, a reason for this could be the difficulty of the tasks on the worksheet, which would only be more significant due to the age difference of the students from School A and School B. Additionally, the students from School A had a lesson that lasted for one more hour than School B, which could have been used for a better introduction and discussions. Another possible reason could be the fact that the students from School B did not enjoy and pay attention to the narrative as the lesson progressed. In this case, it is not ideal because the worksheet was mainly based on narrative events within the video game.

In retrospect of the lessons, there are some changes that could be made to improve the worksheets. The worksheet for *What Remains of Edith Finch* could have put more emphasis on the task about who the narrator within the video game is, and on the perspective of the narrator. This task was the main goal of the lesson and did not get the attention that was attended to it. Solving this problem could have been done by putting "Narrator's perspective:_____" in the worksheet by each character so that the students would look more actively for the narrator's perspective in all the short stories they encountered. The flaw in placing the task about narrator and narrator perspective last in the worksheet could have had a worse outcome on the students not reaching the competence aim of the lesson. Even though the task about narrator and narrator perspective did not appear until the end of the worksheet, the students still managed to explain in the discussion who the narrator was and the different narrative perspectives in the video game. This may be owed to the lesson that the student had in preparation.

Just as important, the worksheet for *Thomas Was Alone* would have included better examples of character archetypes that would resonate with the students' ages. In addition, more room

for notes and explanations of character archetypes where students would have the ability to write how the characters started if they changed and possible reasons for those changes.

6.1.3 Assessment of the video games

As the main objective of this study is to see if the selected video games are suitable for their respective topics, assessments of these video games as teaching materials for teaching about narrative topics are necessary. For these assessments, we are looking at the positive and negative elements of the video games and how they impacted the students and the lessons. Furthermore, we use the insight the teachers provided us during the interviews to aid the reflections.

First and foremost, Teacher A liked *What Remains of Edith Finch* because of how it captivated their students, in addition to how it included the usually silent students in the discussions. The video game was fitting for the competence aim set in addition to being a nice variation to the students' usual lessons. One of the key outputs of this study is to see video games as a variation to a literary text that can be analyzed. As one of the students from School A said: "It is like reading a book, you follow the story, and there is excitement." Indicating that there is an understanding of using the narrative within video games to teach about narrative topics.

Teacher B exclaimed that they were surprised that their students enjoyed the video game as much as they did. This surprise came because the video game did not have "amazing" graphics but was relatively simple in nature. This demonstrates that the teacher may have a conception that video games might need good graphics for them to interest their students, which by this lesson proves otherwise. In addition, Teacher B found the "reflection" part of the competence aim to be fitting because of how the video game inspired the students to reflect on the narrative topics within it. Furthermore, the teacher explained that the reason for the students enjoying the video game was because of the narrative and the "difficulty" of the video game. However, our observations indicate that in this lesson, the interest was mainly there because of the game mechanics and, secondly, if at all, a low interest in the narrative. We believe that the difficulty of the game mechanics in this video game overshadowed the narrative that is in it. A reason for this belief is that the observations made throughout the lesson showed that there was little to no interest in the narrative. This is similar to the lesson in Turley (2018), where the challenge in game mechanics was a hindrance to the progression

of the video game. Thereby, the teacher had to share playthroughs of the video game for the students to be able to continue with the lesson and complete the learning goal of the lesson. This was possible for the teachers in this study to do as well, as playthroughs of the video games were shared with the teachers in the teacher guides. School A opted to use the playthrough in the preparation lesson as a method to familiarize and prepare the students for the lesson.

We describe *What Remains of Edith Finch* as a narrative with elements mainly from embedded narratives with elements such as micronarratives from enacted narratives (Jenkins, 2004). We describe *Thomas Was Alone* as a narrative with elements mainly from enacted narratives (Jenkins, 2004). It is possible that the narrative types may have impacted the students' interest in the narrative. As seen in *What Remains of Edith Finch*, some students expressed their fascination with the mysterious nature of the video game, which can be found in embedded narratives. Furthermore, as there was no indication of the students enjoying the narrative parts of *Thomas Was Alone*, the fault may lie in it being a narrative dependent on the elements from the enacted narrative, which may be a less appealing narrative for the students. Therefore, it seems that video games that have elements from embedded narratives, such as their mysterious nature, may be more suitable for teaching about narrative topics as these captivate the students.

6.1.3.1 Varying game mechanics contra increased difficulty game mechanics

The research that has been conducted in this study shows that the game mechanics differ from *What Remains of Edith Finch* and *Thomas Was Alone*, which demonstrates how the game mechanics (Domsch, 2013) can affect the flow (Csikszentmihalyi, 2014) that the students experience. All the students from School A had the skill required to play *What Remains of Edith Finch*, and the varied game mechanics were frequently introduced with the introduction of new stories. The students often had to learn how the new game mechanics worked. Since this frequently happened throughout the video game, this could indicate that the students experienced the video game as being challenging enough to keep them within the flow state.

The students found different stories to be challenging in regard to their game mechanics. The challenge that the students faced while playing *What Remains of Edith* Finch did not last for a long time, and it did not seem to discourage the students. There were no signs of the students being bored while playing the video game, which demonstrates that the varied game

mechanics and the difficulty the students faced occasionally provided the right amount of challenge for the students to be in a flow state.

On the other hand, in *Thomas Was Alone*, the game mechanics increased in difficulty as the player progressed through the video game. In the early parts of the video game, the challenge the students faced was manageable, and the required skill correlated with the challenge, which may suggest that the student was in a flow state. However, the challenge increased in the middle and latter part of the session. The skill of the students did not increase, which meant they did not correlate, which led to the students becoming frustrated with the video game and losing interest in its narrative. These claims regarding the flow state of the students are supported by the observations that were made where the students had more focus on the narrative at the start of the session compared to the middle and latter parts of the session. The students also began to roam around the classroom towards the middle and later parts of the session, which could indicate that they were not in a flow state and became anxious (Csikszentmihalyi, 2014).

Even though the challenge posted by the video game became too difficult for the students and they did not have the skill required to thrive in the middle and latter parts of the session, there were signs that the students briefly entered a flow state occasionally. When the students managed to complete a challenging level, they often had outbursts of joy which could indicate that the sense of achievement that they experienced made them briefly enter a flow state. However, they did not remain long in the flow state because when they started on the next level, the challenge increased further, and they did not have the skill required to advance, which made them anxious again.

6.1.3.2 Pace of the video game

Regarding the pace of the video game, students in both lessons made comments to indicate the "slow" pace that both video games had. In *What Remains of Edith Finch* for School A, this was mainly at the beginning of the video game where the students tried to run with their character but to no use. The main issue with the pace of the video game in *Thomas Was Alone* was that for some of the students, the video game felt "slow," or in other words, the students felt like they had played for longer than they actually had. There might be two reasons for this feeling of sluggishness in these video games. Firstly, the expectations of the students when they play video games may have been affected by their previous experience with video games

in their own time. Students ages 12-15 usually play video games that have a more action-fronted or fast-paced style rather than a video game where the player is following a narrative (The Norwegian Media Authority, 2020). These types of video games are usually emergent narratives where the players create their own narratives through a video game that does not have a focus on the narrative (Jenkins, 2004). The other reason for the feeling of the video game being slow is that the initial preparations and introductions were not good enough for the students to become invested in the narrative of the video game, especially in *Thomas Was Alone*. This is not a "big" discovery by any means. However, it may help teachers in finding new video games in addition to considering whether the pace of the specific video game could cause problems in the lesson.

6.1.3.3 Immersion

All of the students from School A showed signs that they were engaged with the video game, which is the first level of immersion (Brown & Cairns, 2004). The students expressed that they liked the video game, which is the first barrier to entering immersion. Furthermore, they expressed a desire to keep playing the video game when it was time for a break. They handled the game mechanics well, and the video game provided a form of feedback by showing the players where to search in the house with shining interactable objects. The students did not need much time invested in the video game in order to become engaged, which could have happened because of their interest in the video game. Some students from School A showed their emotions while playing the video game, which could indicate that they reached the second level of immersion, engrossment (Brown & Cairns, 2004). The features within the video game that caused this were the narrative, the visuals, the audio, and the game mechanics in the video game. In *Barbara*'s story, a change in graphics, music, and game mechanics happened, which some of the students thought made this part of the story scary. Another example where students showed emotion was during *Lewis*'s story, where a student was intrigued and expressed their amazement at the narrative and graphics when they saw the kingdom *Lewis* had created in their imagination in the story.

The students in School B had a varied degree of immersion. Some of the requirements for entering engagement (Brown & Cairns, 2004) were present at the beginning of the session, and the students expressed that they enjoyed the video game. Furthermore, the difficulty of the game mechanics in *Thomas Was Alone* increases as the player progresses through the video game. At the start of the video game, the students handled the game mechanics well.

This might have been because the video game provides feedback at the start, where the narrator gives hints about what the players need to do with a character in order to get past an obstacle. However, as the lesson progressed, the game mechanics became too difficult, and the feedback provided by the video game did not help the students anymore. As a result, the student's attention, effort, and investment in the video game decreased, causing the students to lose their immersion in the video game. A possible solution for the students to not lose their immersion because of the difficulty of the video game could be that the introduction of the lesson could include a brief explanation that the video game promotes exploration and problem solving as a key element to succeed in the video game. The students in School B did not explore the levels before trying to solve the puzzles, which may have made it difficult for them to solve levels as they did not have suitable working methods for solving levels. This was because the students from School B tried finishing the levels without exploring possible solutions, which caused them to have issues and fail in the later levels of the video game, making them frustrated, which is an indication of not being immersed (Brown & Cairns, 2004) and furthermore not being in a flow state (Csikszentmihalyi, 2014).

The levels in *Thomas Was Alone* are structured in a way where the students can run past the part of the level that contains the narrative without listening to most of it. In *What Remains of Edith Finch*, the player can do the same thing, but if the player tries to complete the video game as fast as possible, they will still hear most of the narrative and only miss out on a few sentences. The main focus of the students in School B was to manage the game mechanics, and therefore they ignored the narrative and ran past it. However, the students in School A listened to the narrative and found it to be interesting. The narrative and game mechanics that the students in School A were exposed to had better synergy, and it was not possible to skip the narrative altogether. Since the students in School B skipped the narrative part of the level, the student that focused on the worksheet did not have anything to pay attention to other than how well the player managed the game mechanics, which made it fun for the player to master (Elson et al., 2014), but not very interesting for the partner to watch. As a result of the absence of interest in the narrative, the student that did not play the video game started to wander around the classroom. This made it so the students may not have reached the competence aims of the lesson, making the video game not suitable for the narrative topic of the lesson.

Game mechanics can both help and hurt narrative immersion within a video game. The game mechanics in a video game may hurt the narrative and become the main focus of the player. This happens when the player does not care for the narrative anymore, leading them to become immersed within the game mechanics of the video game instead of the narrative. In *What Remains of Edith Finch*, the game mechanics of the video game help the narrative with elements such as the micronarrative (Jenkins, 2004) present in *Barbara*'s story where the player is constrained to walking slowly in a scary part of the video game which amplifies the scariness of the narrative. Since the game mechanics in *Thomas Was Alone* overshadowed the narrative, there was no possibility for narrative immersion. However, interestingly the students became immersed in the game mechanics of the video game in a similar fashion to how the game mechanics affected the students' flow (Csikszentmihalyi, 2014). Flow and immersion are similar in that both can explain the experience of the player when playing a video game. Since the game mechanics became the primary focus for the students in School B, it was natural that the premise for immersion and flow was the game mechanics.

It was not desirable that the students would reach the final level of immersion, which is fully immersed. We wanted the students to focus on the learning goal of the lesson while playing the video game, which would be difficult if they were fully immersed because one of the traits of being fully immersed is that the player feels cut off from the real world and the video game is all that matters. Usually, it takes a while to reach this level of immersion, but the time needed to reach the final level of immersion varies from player to player (Brown & Cairns, 2004). As a precaution to prevent the students from being fully immersed in the video game, we arranged that the students would play in pairs, in addition to focusing on the worksheet. This helped divide the student's attention to the video game, worksheet, and collaboration. Another reason for the students to play in pairs was the feeling of competence that the student may have felt, which would also create enjoyment when playing the video game, which could have enhanced the learning outcome (Elson et al., 2014). Furthermore, the playing in pairs aspect can be seen in two different ways as it may enhance the feeling of competence both positively and negatively. This may happen when the player plays the video game; the player may feel less competent when struggling with a level and, on the other hand, feel more competent when completing a challenging level. The feeling might be enhanced if the student sitting next to the player gives compliments on their achievement.

6.2 Process of finding video games suitable for education

Based on the interviews and our own experience, the time needed for preparing and making a teaching scheme with video games as a teaching tool may be too overwhelming for it to be justified for its usage. Therefore, it is important to create a well-functioning process that can help teachers to find video games suitable for teaching about narrative topics, which in return, will make the process easier and less time-consuming for the teacher.

As seen in the findings of this study, Teacher B said that it takes a lot of time to prepare and make a teaching scheme with video games as teaching tools. This may be because of how unfamiliar teachers are with either finding suitable video games for education or just that they do not play video games themselves, leading to them not having any knowledge of how to use them in education. However, there is some truth to the time needed to go through the process of finding video games and making a teaching scheme with them. In *Minecraft Education*, teachers are lucky enough to have completed teaching schemes ready for usage, which makes it more appealing for the teacher to use in their lessons. There are also websites or blogs such as *Spillpedagogene* that post teaching schemes with the usage of different video games. However, the variety of the video games used is few and limited to how many video games these teachers have the capacity to test; in addition to this, the teaching schemes have a fee, making them less appealing. Therefore, there is a need for a process all teachers can use, which has different tools that make the process easier and lower the threshold of teachers using video games in their lessons. Furthermore, as this study has been through the process of finding video games and using different tools to find these video games, it would only be appropriate to share the process used. The process should be used as an example of how video games may be found and should be revised whenever others use it. Additionally, we will mention tools such as teacher blogs and people sharing their experiences with video games either in an educational setting or for their own pleasure, which were helpful when finding video games for this study. Furthermore, we suggest that whenever the process is being used, and video games are tested, the video games and their teaching schemes are shared among teachers so that video games can become a standardized tool used for education. If teachers have a place where they can find good video games and teaching schemes, then video games may be used more often in education. *Minecraft Education* is an excellent example of how a video game can become popular in education if teaching schemes are shared and easily accessible.

The process of finding video games suitable for teaching about narrative topics is inspired by educational design research (Akker et al., 2006). The goal of the process is to try to change how video games are used in education by providing a process that makes it less time-consuming to find good video games and teaching schemes for video games. Next, the process is not used multiple times in this study for it to be considered iterative. However, it is possible for teachers to use and improve the process through evaluation and revision. Furthermore, the process is made to understand the phenomena of video games and how to find good video games. By doing this process and evaluating and revising, the process will become gradually better, making it easier for teachers to find video games. Continuing, the process is based on theory that explains what makes video games suitable to use in education, such as the importance of game mechanics and the narrative, how the game mechanics and the narrative in the video game might affect the players' immersion and flow, and ultimately their gameplay experience.

6.2.1 Finding and selecting a video game

In order to use video games in teaching lessons, the first step is to find a video game that is suitable for that purpose. Some teachers might not know how to find video games to use in education because they are not familiar with the medium. A reason for their unfamiliarity with using video games might be because of the low accessibility of gaming computers in schools. The video games selected in this study are connected to a video game launcher named *Steam*, which requires a login from a user that the IT department of the school cannot control. Another part is the code of conduct that *Steam* has in place, which says that only the owner of the account is allowed to play on that account. This means that by the code of conduct, sharing accounts is not allowed between students, making it very expensive to buy all the video games necessary for there to be a lesson at all.

This part of the study will describe the process used in this study to find video games suitable for learning about narrative topics. In a similar fashion to finding a suitable book, the first thing to do is to research if there are any video games that have been tested before by anybody else. This is possible to do by looking at blogs made by teachers who have used video games in their lessons, such as *Spillpedagogene*, blogs reviewing video games, such as *IGN.com*, or look for videos by people who have reviewed narratives in video games, such as *Games As Literature* (name of YouTube channel). In this part of the process, it is important to look at the age rating of the video game to see if the video game is suitable for the students in the

class. Age restriction can be applied for many reasons, be it violence, mature content, or even themes. If the video game has an age rating above the age of the students, it is important to give good reasons as to why the video game is selected for usage to the parents. In this part of the process, *https://www.commonsensemedia.org* was used to see what parents and players thought the age rating of the video game should be and their reasons why. Most of the reviews on *What Remains of Edith Finch* agreed that the current age rating of the video game was too high. After playing the video game, we had a similar view to the age rating.

After we found *What Remains of Edith Finch* and *Thomas Was Alone*, among other video games, some criteria had to be implemented to see if the video game were suitable to use in a lesson. We wanted to see how long it would take to complete the video games because we wanted video games that could be completed within four hours. This was a premise because that was the time allocated for the planned teaching schemes. Additionally, we as teachers had to play through the video games and did not want it to take too much time. Another option that could have been done, instead of playing through the video game, is to watch a playthrough of the video games on YouTube, where it is possible to edit the speed of the video in order to use less time. However, not playing through the video game as a teacher will make it harder to judge the game mechanics and how they might affect the students' experience of the video game. Furthermore, not all video games have to be completed for their topics to be learned. In essence, if a video game has a chapter or part of a story sufficiently conveying a message or theme, it might not be needed to complete the whole video game. An example of this is *What Remains of Edith Finch* when after the first completion of the video game, all "short stories" are unlocked as chapters for individual play. Thereby, it could be possible to play through a few pre-selected short stories of *What Remains of Edith Finch to* learn about a topic. However, when teaching about narrative perspective as a topic, it was better to play the whole video game as the narrative between these short stories was necessary for the teaching scheme.

The next step in the process is to look at the possible topics in the video game which can be used to make teaching schemes. In this step, it is important to look at the curriculum for possible topics, themes, or competence aims where using a video game will be a good solution. It was important for the video games in this study to have good narratives as the learning aims were based on learning about narrative perspective and character archetypes. We chose video games with different types of narratives, namely enacted narrative (*Thomas Was Alone*) and embedded narrative (*What Remains of Edith Finch*). We found that the

mysterious nature of the embedded narrative was most successful in our teaching schemes. The enacted narrative in *Thomas Was Alone* did seem to have the same captivating effect as the embedded narrative in *What Remains of Edith Finch*, which may indicate that embedded narratives are better suited for teaching schemes with narrative topics. However, as the game mechanics in *Thomas Was Alone* overshadowed the enacted narrative, it is hard to say if the students would have enjoyed the narrative if the game mechanics did not overshadow the narrative.

Many video games are interdisciplinary, which gives the teacher the possibility to work with other subjects. Both teaching schemes were planned to last four hours, which may have been a problem as they would overlap with other subjects than English. Teacher A had no problems justifying the time to the other teachers in the other subjects. However, Teacher B wanted us to find competence aims from other subjects to justify the "stolen" time from other subjects which lost time. As there were many competence aims found in other subjects, the colleagues of Teacher B accepted the "stolen" time as the video game was interdisciplinary in nature. The following competence aim was used to connect the video game to the Norwegian subject: "use appropriate terminology and argue in a reasoned way in discussions, conversations, oral presentations, and written texts on interdisciplinary and subject-related topics" (Ministry of Education, 2020, p. 10).

Lastly, as discussed in this study, the degree of challenge within the video game or rather the game mechanics is important for the teacher to consider. Furthermore, it is vital that the video game is neither too easy nor too challenging for the students as they will lose interest in the video game, making them not being immersed in the narrative and not enter a flow state, which could affect if the students reach the learning aim of the lesson or not. To ensure that the game mechanics will not be a problem, it is important for the teacher to play through the video game.

6.2.2 Making the teaching scheme

The next part of the process is to make a teaching scheme for the selected video game using the didactic relation model. When the teacher makes the teaching scheme, it is important to make it based on the competence aim and the selected topic from the video game. In this study, we saw the positive effects of students having a worksheet with tasks to direct their focus toward what we wanted them to learn from the video game and to keep them away from

reaching total immersion. Therefore, it would be beneficial to have either a worksheet or something similar that the students can work with while playing the video game. Additionally, working in pairs helped the students in this study to enjoy the video game, which in return increased the chance of reaching the learning aim of the lesson. Furthermore, one of the reasons for the students working in pairs was the limited number of computers available. However, when the students focused on the worksheet while playing the video game, it felt natural for the students to work in pairs so that they could focus on the worksheet while playing the video game. Thus, even if there are enough computers available for the students to have one each and play alone, having them play in pairs is more beneficial because of the students' improved gameplay experience and the chances of reaching the learning aim. Finally, having a group discussion was also beneficial for the students in this study. The students shared their thoughts and opinions of the video game and got a better understanding of the narrative topics. Thus, having a group discussion or another type of discussion during the lesson and at the end of the lesson would be valuable.

6.2.3 Assessment and revision of the teaching scheme and video game

In this process, as in any other process of making a teaching scheme, it is important to assess the teaching scheme itself in addition to the teaching material. Essentially, what worked well in the lesson, what worked well in the video game, and what did not work in either of them. If there are any flaws in the teaching scheme, it can be improved before trying it again. However, if the video game does not work, the teacher can either try to find a new video game or use another teaching tool if video games are not suitable for the competence aim. As one of the goals of the teacher should be to improve their teaching schemes, it is important to revise the teaching scheme after the assessment has been completed. This revision should consider if the video game is at all suitable for education. If the video game is suitable and revisions have been made to improve the teaching scheme, then the teaching scheme is ready to be used another time. However, the part of the process where the teacher finds a suitable video game is not necessary.

It is important to note that the video games in these teaching schemes are used as teaching tools to help reach competence aims. Video games are not the singular source of learning, and students would most likely not see the potential of learning within the video game if they played by themselves. However, when a video game is used as a teaching tool in a teaching scheme, the learning potential within the video game can become apparent to the students.

7 Concluding remarks

This study has provided insight into using video games as a teaching tool to teach about narrative topics. Specifically, to what extent *What Remains of Edith Finch* is a suitable video game for teaching about narrative perspectives in the English subject, and to what extent *Thomas Was Alone* is a suitable video game for teaching about character archetypes in the English subject. In addition, the study has provided insight into how game mechanics affect the students' gaming experience in an educational setting. Specifically, how the game mechanics in *What Remains of Edith Finch* and *Thomas Was Alone* influenced the students' gaming experience when learning about narrative topics in the English subject. Finally, this study has provided an example of a process that can be used and further developed to find video games suitable for teaching about narrative topics in the English subject. It is important to note that the video games are seen in combination with a teaching scheme and would not necessarily fare well on their own. The students would not necessarily learn anything from simply playing *What Remains of Edith Finch* or *Thomas Was Alone*. It is important for the teacher to direct the focus of the students toward the learning potential that is present in the video game. This can be done by using different teaching tools such as worksheets, presentations, or books. In this study, we used worksheets and discussion breaks as teaching tools to direct the focus of the students towards the learning goal of the lessons, which proved to be helpful for the students. Additionally, we want to emphasize that the video game is used in the same way as a book would be used. Similar to a book, the video game may not facilitate learning on its own but should be used as a teaching tool to facilitate learning. The rest of the chapter will go in-depth to answer the study's research questions and identify the practical implications of the study and recommendations for future research.

7.1 *What Remains of Edith Finch*

What Remains of Edith Finch mainly has elements from embedded narrative. However, there are elements from an enacted narrative, such as micronarratives (Jenkins, 2004). This means that the students were playing through a detective story and discovering the story as they progressed through the video game. The students enjoyed this type of gameplay as they were captivated by the mysterious narrative. Furthermore, the narrative and game mechanics in *What Remains of Edith Finch* complemented each other. The narrative often tried to create a certain mood for the player, such as in *Gregory*'s bathtub scene, where the narrative

emphasized how innocent and creative *Gregory* was and how much fun he had. Additionally, the visuals and audio were changed to fit the character's personality. The music was jolly, and the colors were bright. Additionally, the game mechanics were fun and could be seen as imitating a child's imagination. This helped to maintain the students' interest in the stories of the video game. The students from School A experienced immersion while playing *What Remains of Edith Finch*. All of the students reached the first level of immersion, which is engagement (Brown & Cairns, 2004), and some of the students reached the second level of immersion, engrossment.

Throughout the video game, the player is exposed to different narrative perspectives. When the player explores the family house as *Edith Finch*, the narrative perspective is in the first person. During the short stories, when the player experiences the final moments of *Edith*'s family members, the narrative perspective is in the third person. *What Remains of Edith Finch* is a mysterious video game, and it is suitable for discussions. There is no omniscient narrator, and it could be discussed whether *Edith* is a reliable narrator. When the player experiences the final moments of *Edith*'s family members, the story is made up in *Edith*'s head when she is reading their diary or a personal note. Many different interpretations of what actually happened with *Edith*'s family members could occur, which makes it suitable for reflection and discussion. Reflection is a big part of the competence aim that was chosen for this lesson. Based on the arguments in this paragraph, it may seem that *What Remains of Edith Finch* is a suitable video game for teaching about narrative perspectives in the English subject. However, there is one aspect of the video game that could make it unsuitable.

One objection that could be made is that *What Remains of Edith Finch* is not a suitable video game for teaching about narrative perspectives in the English subject because of the recommended age restriction the video game has. The recommended age restriction is 16+, which means that students aged 16 and over can play the video game. This age restriction is high because death is one of the most prominent topics in the video game. It is important to notify the students and their parents about the recommended age limit and justify why you as a teacher believe that the students can play *What Remains of Edith Finch* if you plan to use it in an educational setting.

Through these arguments, we can see that *What Remains of Edith Finch* can be a suitable video game for teaching about narrative perspectives in the English subject. However, this is based on the condition that the students' parents consent to the use of the video game due to

the recommended age restriction. In addition, it is important to consider the students' prerequisites as every student may react differently to the video game.

7.2 *Thomas Was Alone*

The narrative in *Thomas Was Alone* is an enacted narrative, which means that the story progresses on the condition that the player is skilled enough to maneuver through the game world. Therefore, the students' ability to master the game mechanics of the video game is more crucial in video games with enacted narratives compared to other types of narratives.

Initially, *Thomas Was Alone* may have seemed suitable for teaching about character archetypes in the English subject. At the beginning of the video game, all the students had the first step of immersion, engagement (Brown & Cairns, 2004), indicating that the video game was immersive to them. Additionally, the game mechanics intrigued some of the students to be immersed in the video game until the end of the lesson. However, as the video game progressed and the game mechanics became increasingly difficult, the students' immersion in the video game decreased. Additionally, the video game was immersive because of the game mechanics and not the narrative, meaning the competence aim of the lesson could not be reached as the students had little to no interest in the narrative in the later parts of the video game. The interest that was shown towards the narrative was whenever new characters were introduced, meaning the students had an initial understanding of the characters; however, they did not see if the characters changed.

The lesson in this study which used *Thomas Was Alone* was initially prepared for lower secondary school. On short notice, we were informed that students from 7th grade would participate, and we did not have sufficient time to adjust the teaching scheme in order for it to be more suitable for 7th graders. Our first impression of *Thomas Was Alone* was that it would be suitable for learning about character archetypes. However, we did not get the chance to test the video game on the age group that we wanted to test it on. This makes it difficult to answer whether it is a suitable video game to teach about character archetypes or not. *Thomas Was Alone* has great potential but needs more time to be tested and possibly paired with a different teaching scheme before a decisive answer is given.

7.3 Game mechanic influence

The game mechanics in *What Remains of Edith Finch* are varied because new game mechanics are introduced when playing as one of *Edith*'s family members. The students in School A found some of the new game mechanics challenging, but not for a long time to the point where they would get discouraged from playing the video game. In addition, the students had enough skill to play *What Remains of Edith Finch*, and due to the varied game mechanics, the students thrived and were in a flow state while playing the video game. These arguments, in addition to the fact that the game mechanics and the narrative strengthened each other, indicate that the game mechanics in *What Remains of Edith Finch* influenced the students' gaming experience in a positive manner.

The game mechanics in *Thomas Was Alone* eventually became too difficult for the students as the lesson progressed, in addition to the game mechanics giving the students the choice to run past the narrative and ignore it. This caused the students to ignore the narrative and put all their attention on completing the level that they were currently on. Even though the students did not pay attention to the narrative, they did get a sense of achievement and briefly entered a flow state when completing a difficult level. This means that the difficulty of the game mechanics in *Thomas Was Alone* influenced the students to have all their focus on the game mechanics, which made them ignore the narrative.

This study was influenced by the case study from Turley (2018), which showed that the game mechanics in the video game that was tested had a negative impact on the students' experience with the video game. Therefore, we wanted to test this theory about how the game mechanics influence the students' gaming experience. We chose one video game with manageable game mechanics and one with more challenging game mechanics. The result from *Thomas Was Alone* was similar to what Turley experienced in that the challenge of the game mechanics made it too hard for the students to complete the aims set for the lessons. After testing these two video games, the result indicates that it is essential to evaluate the game mechanics of a video game before using it in the classroom.

In *What Remains of Edith Finch*, we saw that the narrative and game mechanics complemented each other and made the gaming experience better for the students. The narratologists' view of video games is that video games are meaningful because of their narrative structures. In contrast, the ludologists' view is that the rules and game mechanics are

the essences of a video game (Domsch, 2013). We believe that the narrative and the game mechanics of a video game are equally important and should be considered equals. As seen in this study, when the narrative and game mechanics complement each other, the player's experience is elevated. However, when one overshadows the other, the player might become anxious or bored, which affects their flow (Csikszentmihalyi, 2014), and immersion (Elson et al., 2014) and thereby the player's experience of the video game.

7.4 Process of finding video games

Based on the interviews in this study and the lack of previous research regarding how to find video games suitable for an educational purpose, we can see that it is necessary to have a process in mind that can guide teachers in finding suitable video games. A process like this would mainly decrease the amount of time needed to find suitable video games, which in return would lower the threshold for using video games in education in general. Furthermore, suppose teachers who use this process share their experiences with the video games they have tested, and the teaching schemes used with the video games on a common platform or blog, then video games could be used more often in education. The process that has been presented in this study is merely an example and should be criticized, revised, and retested so that the process can become increasingly effective.

7.5 Practical Implications

There are some practical implications that may challenge this study. Firstly, the accessibility of video games in education is low. However, there are some ways around this accessibility.

Firstly, video games can be played by the class as a whole on one screen, where the teacher can connect their computer to a screen and play in front of the class, where the class decides what the teacher should do every step of the way. This solution also removes the game mechanical aspects of the video game if the teacher is familiar with playing video games. However, this may also remove the immersion and flow of the students, which is an important factor in the students having an interest in the teaching goal of the video game. On the other hand, many video game developers have been known to give keys to schools for educational purposes, thereby giving consent for the video games to be shared among students. This means if the teacher wants to use a specific video game for educational purposes, they should

contact the developers of the video game, as the developers can provide the consent needed for it to be shared among students.

Secondly, the accessibility of computers or consoles that can handle video games in a good capacity might be expensive for some schools. This could make the use of video games in any capacity a fiction that may never be reality. However, there are some solutions that might help in getting video games into the classroom. Firstly, there is no need to buy a gaming laptop for every student, which would be terribly expensive. Instead, buying enough computers so that a class can share their computers or consoles in pairs is a good solution. This is a portable solution where let us say in a school where the average class has 30 students, 15 computers or consoles would be enough to cover the whole school. The laptops might be connected to a library or administration where the teachers have to schedule when they are going to use these computers so that they may be shared among all teachers and classes. The second solution to computer or console accessibility might be to talk to nearby schools and make an external room with enough computers or consoles for the whole class or half the class to use. This solution requires nearby schools to find a system where the schools can schedule a visit to the external room and have a lesson there. Additionally, schools could cooperate in making teaching schemes and testing video games that could be used by others afterward.

The final practical implication is the setting in which this study was conducted and how it may have interfered with the results. This study was conducted in a laboratory classroom which required the students to leave their schools to be a part of the study. Thereby, the results of this study may have been impacted by the students' unfamiliarity with this classroom, which had equipment that may have led to distractions. If this study had been done over again, a standardized classroom would have been appropriate. However, because of the lack of accessibility to computers or consoles that could handle the selected video games, using the laboratory classroom was the best solution.

7.6 Recommendations for future research

Accessibility of using video games in education.

Our first recommendation for future research is to find viable solutions to increase the accessibility of video games in education. This is an important step for video games to be used in increased capacity. If schools have the required equipment to use video games as a

teaching tool, it would be more natural for teachers to use video games in education. With the current lack of computers available in schools, teachers who want to use video games must go out of their way to use video games as a teaching tool, which can be demotivating and increase the threshold for using video games.

Test out more video games that might be suitable for education

As this study only looks at *What Remains of Edith Finch* and *Thomas Was Alone*, studies that test out other video games, either for the English subject or other subjects in education, are necessary. This is necessary because many teachers and teacher-students do not know how to use or find video games suitable for educational purposes. As more video games are tested and shared, the threshold for using video games will be lowered. This means that video games as teaching tools could become increasingly used to vary the teaching for students.

Continue developing the process

As this thesis ends with a suggestion of a process to find suitable video games for educational purposes, this process must be further developed to be viable to use for all teachers and teacher-students. We believe that a process that all teachers can use could be valuable for video games to become standardized as teaching tools within education.

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Appendix 1 – Observation form

Observasjonsskjema:

Forskningsspørsmål:

1. To what extent is *What Remains of Edith Finch* a suitable video game for teaching about narrative perspectives in the English subject?

2. To what extent is *Thomas Was Alone* a suitable video game for teaching about character archetypes in the English subject?

3. How does the game mechanics in *What Remains of Edith Finch* and *Thomas Was Alone* influence the students' gaming experience when learning about narratives in the English subject?

4. How can video games suitable for teaching about narrative topics in the English subject be found?

Hva skal observeres?

- Se på utføring av undervisning – se om man finner andre påvirkninger til datamaterialet som utformes (ikke hvordan læreren lærer bort?)
- Hvordan er kroppsspråket til elevene?
  - o Virker elevene «motiverte» eller «umotiverte» av deler av spillet? (prøv å se hvilken del av spillet dette skjer i, kan kobles opp mot vanskelighetsgrad, lengde på spill osv)
- Hvordan samhandler elevene gjennom undervisningen?
  - o Kommuniserer de på engelsk?
  - o Blir elevene tatt ut av «immersion» av spillet når man har oppgaver ved siden av?
  - o Blir elevene mer «immersed» av å gjøre oppgaver, ser nøyere etter detaljer og lignende?
  - o Er det bedre å ha oppgaver etter spillet er gjennomført?
  - o Eventuelt skal man ha intervensjoner der man har felles oppgaveløsning ut fra hvor langt elevene er kommet i spillet?
  - o Hvor mange faglige diskusjoner oppstår det?
    - ▪ Hva prater de om?

o   Hvor ofte prater elevene om spillmekanikk?
-   Hvordan løser læreren det når det oppstår tekniske problemer?
-   Hvilke intervensjoner har vi som observatører, gjøres det noe annet også?

Tid	Observasjon / Beskrivelse	Notat / Tolkning	Kategori

Appendix 2 – Interview guide

Spørsmål:

1. Har du brukt videospill i engelskundervisning før?

Oppfølgning hvis ja: hvor ofte bruker du dataspill i undervisningen?

2. Hvordan var det å jobbe med «WROEF» i undervisningen?

Oppfølging:

3. Hvordan var det å jobbe med «TWA» i undervisningen?

Oppfølging:

4. Merket du en forskjell på engasjementet til eleven som aktivt spilte og eleven som aktivt jobbet med oppgavene?

Oppfølging:

5. Føler du at elevene sitter igjen med et læringsutbytte etter denne økta?

6. Om du skulle hatt denna økta på nytt, er det noe du ville endret på?

Oppfølging: Hvis din klasse skal jobbe med temaet som vi har hatt i denne økta, tror du denne økta i dag vil passe best som en introduksjon til temaet, en avslutning til temaet eller en plass i midten?

7. Hvordan opplevde du diskusjonsdelen, i forhold til terminologien elevene brukte rundt diskusjonen og hvilke temaer de valgte å prate om? (var det mer om spillmekanikk eller om fortellingen/karakterene?)

8. Synes du dette spillet fungerer til kompetansemålet som ble satt?

Kompetansemål (LK20):

- read, interpret, and reflect on English-language fiction, including young people's literature

Oppfølging: Hvorfor/Hvorfor ikke?

Oppfølging: Ser du andre mål eller temaer dette spillet kan brukes til?

9. Hva tenker du om å bruke videospill selv i egen undervisning i Engelsk?

Oppfølging: Er det noe som kunne hjulpet med steget for å ta i bruk videospill i undervisningen?

Appendix 3 – Questionnaire

Videospill: Spill som spilles på noe med skjerm, for eksempel: Playstation, Nintendo, Mobil (iPhone, Android osv), Datamaskin eller lignende.

Spørsmål om spillvaner:

1. Spiller du videospill i fritiden? (Sett ring rundt svaret)

       Ja   Nei

2. Ut fra de to siste ukene, hvor mye tid bruker du ca. på videospill om dagen? (Sett ring rundt svaret)

0 timer, spiller ikke   0 – 2 timer om dagen 3 – 5 timer om dagen 5 timer eller mer om dagen

Spørsmål om spill:

What Remains of Edith Finch

3. I hvilken grad likte du å spille What Remians of Edith Finch? (sett ring rundt svaret)

 Svært dårlig   Litt dårlig   Vet ikke   Litt godt   Svært godt

4. Var det noe du likte spesielt eller noe du ikke likte med spillet?

5. Har du opplevd videospill i undervisning det siste skoleåret? (sett ring rundt svaret)

Aldri   1-2 ganger   3-5 ganger   5 eller flere ganger

6. Hvis du har opplevd dette, hvilket videospill og i hvilket fag ble det brukt?

Thomas Was Alone

1. I hvilken grad likte du å spille Thomas Was Alone? (sett ring rundt svaret)

Svært dårlig   Litt dårlig   Vet ikke   Litt godt   Svært godt

2. Var det noe du likte spesielt eller noe du ikke likte med spillet?

3. Har du opplevd videospill i undervisning det siste skoleåret? (sett ring rundt svaret)

Aldri   1-2 ganger   3-5 ganger   5 eller flere ganger

4. Hvis du har opplevd dette, hvilket videospill og i hvilket fag ble det brukt?

Spørsmål om undervisningen:

5. Oppgaveheftet hjalp meg med å fokusere på hva jeg kan lære fra spillet (Kryss av på det som stemmer for deg)

Svært uenig   Litt uenig   Vet ikke   Litt enig   Svært enig

6. Dette lærte jeg fra gruppediskusjonen. (kryss av om det stemmer for deg)

Jeg lærte hvordan jeg kom meg videre i spillet   [ ] (Begge)

Jeg lærte om ulike karaktertyper   [ ] (TWA)

Jeg lærte meg hvordan ulike karakterer utviklet seg   [ ] (TWA)

Jeg lærte meg hvordan fortellerstemmen påvirket fortellingen   [ ] (WROEF)

Jeg lærte ingenting fra gruppediskusjonen   [ ] (Begge)

7. Dette bidro jeg med i gruppediskusjonen: (kryss av om det stemmer for deg)

Jeg fortalte hvordan man kom seg videre i spillet   [ ] (Begge)

Jeg fortalte hvordan en eller flere karakterer endret seg   [ ] (TWA)

Jeg fortalte hvordan en eller flere karakterer ikke endret seg   [ ] (TWA)

Jeg fortalte hvordan forteller stemmen påvirket fortellingen   [ ] (WROEF)

Jeg fortalte den reelle dødsårsaken til noen av karakterene   [ ] (WROEF)

Jeg fortalte ikke om noe i gruppediskusjonen   [ ] (Begge)

Appendix 4 – *What Remains of Edith Finch* teaching scheme

Undervisningsforslag: *What Remains of Edith Finch*

(4 timer undervisning + matpause 30 min)

Kompetansemål:

- Read, interpret and reflect on English-language fiction, including young people's literature.

Læremål: Lære om første, andre og tredje perspektiv.

Lærerressurser:

- Youtube – Walkthrough av spill
  https://www.youtube.com/watch?v=q-fj8PhdWeI&ab_channel=Father
- Youtube- kort om hvert dødsfall
  https://www.youtube.com/watch?v=LPNePzc9shg&t=1156s&ab_channel=PodcastNow
- Første, andre og tredje perspektiv
  https://www.youtube.com/watch?v=B5vEfuLS2Qc&ab_channel=TED-Ed

Undervisningsoppplegg

Tid	Hva	Hvordan	Hvorfor
Oppstart 10 min	Introdusere spillet, snake om fortellerstemmen og første andre og tredje perspektiv.	Læreren sier tittelen til spillet og elevene får 1 min til å tenke på hva spillet kan handle om. Elevene deler sin mening i	For å få elevene interessert og spent på å spille. For å forberede elevene på

	forklare oppgavehefte og nevne hva great uncle betyr. (Grandonkel, bror av besteforeldre)	plenum. Lærer forklarer fortellerstemmen og perspektiv slik at elevene kan tenke gjennom det mens de spiller og forberede seg til en diskusjon etter de har spilt.	oppgavene til spillet og diskusjonen etter spillingen. Great uncle/aunt er det eneste relevante begrepet på familiemedlemmer som kan være ukjent for elevene.
Hoveddel 3 timer?	Elevene spiller gjennom WRoEF	Elevene spiller I par der en noterer og den andre spiller. Rullering hvert 30 min. før hver rullering blir det en gruppediskusjon der elevene kan dele hva de har funnet ut om karakterene de har møtt så langt i spillet. Så får elevene en liten pause før de begynner å spille igjen	Kan være lurt å rullere slik at elevene får litt variasjon. Gruppediskusjonen kan hjelpe gruppene dersom det var noe de ikke tenkte på eller ikke fikk med seg i spillet.
Avslutning	Gruppediskusjon om spillet	Elevene forklarer hva de har funnet ut om karakterene. Vi har laget et ferdig utfylt oppgaveark som lærer kan bruke som en «fasit»	For å få en avrunding på undervisningen og drøfte årsaker til hvordan de døde.

		dersom det er noe elevene har oversett. Få en diskusjon der elevene forstår at siden historien blir fortalt i første perspektiv på er historien påvirket av Edith sine tolkninger. Kan sammenlignes med en sekundærkilde for å hjelpe elevene med å forstå.	Elevene kan få en åpenbaring om at historien kanskje hadde vært veldig annerledes om den hadde vært fortalt i tredje person med an allvitende forteller.

Oppgavehefte løsningsforslag:

Narrator's point of view:

1ˢᵗ person → In first person narration, the narrator is a person in the story which tells the story from their own perspective.

Example for "The Hunger Games"

When I wake up, the other side of the bed is cold. My fingers stretch out, seeking Prim's warmth but finding only the rough canvas cover of the mattress. She must have had bad dreams and climbed in with our mother. Of course, she did. This is the day of the reaping.

2ⁿᵈ person → In second person narration, the narrator tells a story about you.

Example from "Bright Lights, Big City"

You are not the kind of guy who would be at a place like this at this time of the morning. How did you get here? It was your friend Tad Allagash. Your brain is rushing with Brazilian marching powder. You are talking to a girl with a shaved head. You want to meet the kind of girl who isn't going to be here. You want to read the kind of fiction this isn't. You give the girl some powder. She still doesn't want you. Things were fine once. Then you got married.

There are also examples of a genre called "Choose your own adventure books" where the books are in second person.

3rd person → In third person narration, the narrator tells a story about other people.

Example from "Harry Potter and the Chamber of Secrets"

The Dursleys hadn't even remembered that today happened to be Harry's twelfth birthday. Of course, his hopes hadn't been high; they'd never given him a real present, let alone a cake - but to ignore it completely…

Tasks:

Portrait:	Name: Molly Finch
(Feks tegne noe spessielt med karakteren. Feks et stort skjegg eller en astronauthjelm). Elevene vil få inspirasjon fra Ediths familietre.	Personality: Molly was a little girl that liked the color pink and her pets. Connection to Edith: Edith's great aunt. Cause of death: She was sent to bed without dinner and started to eat different non- edibles which caused her death.

Portrait:	Name: Calvin
	Personality: Calvin was an adventurous boy that was very interested in the universe. He was also reckless.
	Connection to Edith: Edith's great uncle
	Cause of death: Calvin died while he was swinging and he got so much momentum that he spun around and was launched off a cliff.
Portrait:	Name: Barbara
	Personality: Barbara was an actor, and she was considered a child star. Her room was decorated with Hollywood stuff.
	Connection to Edith: Edith's great aunt
	Cause of death: It is not easy to know what her cause of death was. It could have been murder.
Portrait:	Name: Walter

	Personality: He was traumatized as a child by the death of his sister, Barbara. He had a fear of the family curse and spent 30 years hiding in a bunker under the house. Connection to Edith: Edith's great uncle Cause of death: After hiding for 30 years Walter decided to face his fears and venture out. Walter walks on some train tracks and get to distracted by the beautiful scenery. In his distraction he gets hit by a train.
Portrait:	Name: Sam Personality: He was an adventurous man that liked to hunt with his daughter Dawn. Connection to Edith: Edith's grandfather Cause of death: He died in a hunting accident. His daughter, Dawn shot a deer and as they pose for a picture the deer knocked him off a cliff.
Portrait:	Name: Gregory

	Personality: In a letter that Sam wrote to Kay said that Gregory used to laugh when he was alone and that he had an imagination that made him very happy. Connection to Edith: He was Edith's uncle Cause of death: Gregory died in a bathtub just before turning 2 years old.
Portrait:	Name: Gus Personality: He was a rebellious child that did not like the fact that his farther was remarrying and replacing his mother. Connection to Edith: Edith's uncle Cause of death: In his father's wedding a storm caused a totem pole to hit Gus and kill him.
Portrait:	Name: Milton Personality: Very gifted painter. His room looks like a castle with lots of paintings. Connection to Edith: Edith's older brother

Portrait:	Cause of death: It is not certain that he is dead. We only know that he is missing.
Portrait:	Name: Lewis Personality: Lewis was a nice person that cared for his family. He had some mental problems and had a tedious job as a fish cannery worker. Connection to Edith: Edith's older brother Cause of death: It seems like Lewis killed himself at the fish cannery.
Portrait:	Name: Edith Personality: Edith is a mature girl that is very curious and want answers as to what happened to her family. Cause of death: Edith died in childbirth.

Who is the narrator in What Remains of Edith Finch?

Edith Finch

What perspective does the narrator have in What Remains of Edith Finch?

1st person (Discuss with the pupils how this affects the story. We are only told what Edith believes and her interpretations of how her family members died. This could be compared to a secondary source as a secondary source has the same theme but could have other interpretations) is Edith reliable?. With a 3rd person omniscient perspective, you would know exactly what happened.

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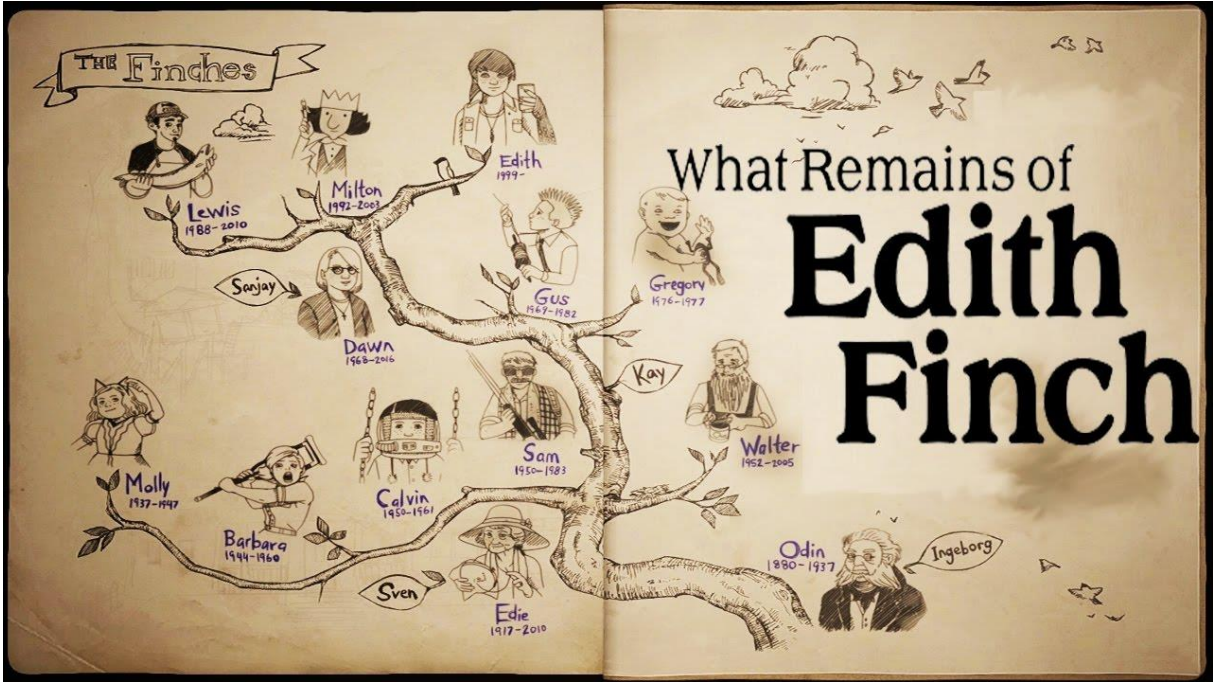
Appendix 5 – *Thomas Was Alone* teaching scheme

Undervisningsforslag *Thomas Was Alone*

(4 timer undervisning + matpause 30 min)

Kompetansemål (LK20):

- read, discuss and present content from various types of texts, including self-chosen texts
- read, interpret and reflect on English-language fiction, including young people's literature
- ask questions and follow up input when talking about various topics adapted to different purposes, recipients and situations

Læremål: Lære om ulike karaktertrekk og hvordan disse påvirker fortellingen.

Lærerressurser:

- YouTube - Gjennomgang av spill:
  https://www.youtube.com/watch?v=LKa75JB0PoE&t=2549s
- Manuskript av spill - https://thomas-was-alone.fandom.com/wiki/Story_Narrative
- Karakterer (de er også beskrevet i løsningsforslaget):
  https://thomas-was-alone.fandom.com/wiki/Category:Characters

Kontroller

- Piltastene brukes til å flytte karakterene høyre og venstre
- Mellomromstasten brukes for å hoppe
- Q og E brukes for å bytte hvilken karakter man styrer

Den hvite pilen viser hvilken karakter man styrer

Det skal spilles/gjøres oppgaver i 30 min. intervaller, man bytter hvem som spiller og hvem som tar notater for oppgavene.

Karaktertyper:

Flat→ A Character lacking depth or a real personality.

Round→ A deep and layered character that is often interesting and feel like real people

Dynamic→ A character that changes throughout a story.

Static → A character that stays the same throughout a story.

Characters can be:

Flat and dynamic – Not possible, as one would have to know a persons personality and motivations for them to change.

Flat and static – Example: Mater (Cars) (TaueBill, Biler) – Mater is a good example of a flat and static character, as he stays the same over all movies and also has a very general/unchangeable personality.

Round and dynamic – Example: Iron Man – Personality and background changes throughout stories. Iron Man or Tony Stark begins his journey as a selfish weapon manufacturer playboy, millionaire… and so on, until he is captured by terrorist while showcasing their weapons. It is not until he is faced with his own weapons, betrayed by «his people» that he changes his goals, and view on life itself. In other words, he changes through his stories.

Round and static – Example: Batman – Batman has a deep and layered background where you can see reasons for his personality traits. However, he never changes. He always has same goals and view upon the world, a character that spends their time preparing for the worst, and is ready when the worst happens. He has depth in his character, but never changes his outlook on life.

Underivsningsopplegg:

Tid	Hva	Hvordan	Hvorfor
Oppstart (20 min)	Introduksjon av ulike karaktertyper med eksempler	Forskjellige karakterer: - Round - Flat - Dynamic - Static	Forskjellige karaktertyper blir introdusert for å gi elevene en forkunnskap de kan benytte seg av når de spiller gjennom

	Forberedelser til dataspilling og utdeling av oppgavehefte.	Opplyser om at det skal spilles/gjøres oppgaver i 30 min intervaller, man bytter hvem som spiller og hvem som tar notater for oppgavene.	spillet og gjør oppgavene. Eleven for også en struktur de skal følge i løpet av dagen.
Hoveddel (3 timer og 20 min) Matpause?	1. Elevene (to på hver datamaskin, en spiller og en tar notater) spiller gjennom spillet og gjør oppgaver underveis. 2. Etter ca. 30 min møter elevene til kort diskusjon (10 min). Kort pause (5 min). 3. Elevene bytter på hvem som spiller og hvem som tar notater, og fortsetter å spille og å gjøre oppgaver.	1. Dataspillet brukes som en tekst fra en bok ville vært brukt. Spillet varer fra kapittel 0.1 – 9.10. Oppgavene handler om å følge med på hva fortelleren sier for å gi liv i formene, og dermed lære om karakteristikker (hvordan er karakteren i starten, utvikler karakteren seg, mål for karakteren) 2. I diskusjonen vil elevene si hvor langt de har kommet, diskutere (og skrive ned) om karakterene de har møtt, og gi tips til hverandre om	Dagen er delt inn i flere økter slik at elevene skal få pause gjennom den intensive spillingen de kommer til å gjennomgå. Matpause er også inkludert. Dataspillet brukes som litteratur for at elevene skal få en annen ressurs for å jobbe med karaktertyper innenfor fortellinger.

	(Dette skjer 4 ganger)	hvordan man kommer seg videre i spillet.	Diskusjonen brukes for at elevene skal kunne diskutere og reflektere underveis, hjelpe hverandre med karaktertype begrepet, men også gi hverandre tips på hvordan man kan løse ulike oppgaver i spillet.
	4. Elevene bruker 20 minutter på å ferdigstille oppgavene sine. (mulig at denne må sløyfes pga. tid)		
Avslutning (20 min)	Elevene møter for å snakke om oppgavene de har gjort.	Elevene diskuterer hvor langt dem kom i spillet, hvilke karakterer de har møtt på og hvordan disse karakterene er.	Her brukes avslutningsdelen til å få en refleksjon over læringsmålet de har jobbet med for å få et læringsutbytte.
	Oppsummering av lærer	Lærer leder diskusjonen med bakgrunn i arbeidsheftet.	
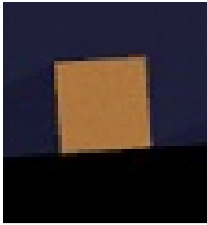
Oppgavehefte løsningsforslag:

Flat→ A Character lacking depth or a real personality.
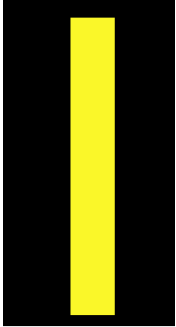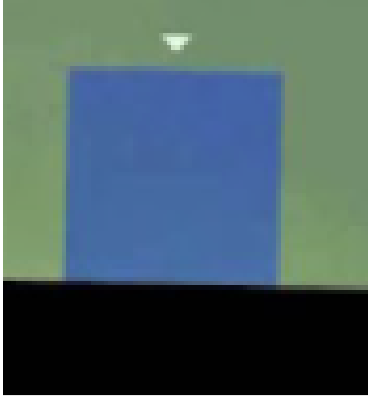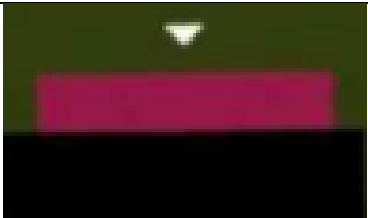
Round→ A deep and layered character that is often interesting and feel like real people

Dynamic→ A character that changes throughout a story.

Static → A character that stays the same throughout a story.

Tasks:

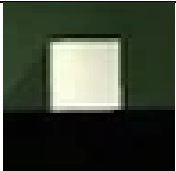| Portrait:	Name: Thomas (Protagonist)
	Personality: Curiosity is what drives Thomas
	Special power: No special power
	Character type: Round and static
	Name: Christopher (Chris)
	Personality: Chris is initially perceived as a grumpy little square who dislikes everyone who meets (jealous?). He eventually softens up, and when he meets Laura, he falls in love and softens up even more.
	Special power: Short and can fit through small spaces
	Character type: Round and dynamic

	Name: John Personality: John can be seen as an egotistical athlete. He knows he is better but acts as he doesn't know. He is humbled by Sarah, because of her double jump. His motive then changed to make every other shape feel as amazing as he had done. Special power: Is very tall and can jump the highest. Character type: Round and dynamic
	Name: Claire Personality: Nerdy, begins with thinking she is not worth anything before finding out she is water-resistant. She becomes "Super-Claire", a caring and brave square. Special power: Floats in toxic water. Character type: Round and dynamic
	Name: Laura Personality: Started as a depressive character with low self-esteem. Mostly because the Pixel Cloud eats everyone she meets. Then she meets Chris and falls in love, making her a less nervous shape. Special power: Can slide through tiny gaps and can be used as a trampoline for others.

	<u>Character type:</u> Round and dynamic
	<u>Name:</u> James <u>Personality:</u> Started as an insecure shape as he felt weird being green and his inverted gravity. He had previously been bullied for this. Has a nervous laugh. James becomes more comfortable around shapes after being with them for a while. <u>Special power:</u> Has reversed gravity, meaning he walks on the roof. He stays at the same level if there is someone on top of him. <u>Character type:</u> Round and dynamic
	<u>Name:</u> Sarah <u>Personality:</u> Sarah thinks very highly of herself and less of people beneath her. <u>Special power:</u> She has a double jump (meaning she jumps higher than John). <u>Character type:</u> Round and dynamic

Second Generation

(Om det blir tid igjen kan man spille gjennom denne delen)

	<u>Name:</u> Grey <u>Personality:</u> <u>Special power:</u> <u>Character type:</u>
	<u>Name:</u> Sam <u>Personality:</u> <u>Special power:</u> <u>Character type:</u>

	Name: Jo (normally grey) Personality: s Special power: Character type:
	Name: Paul Personality: Special power: Character type:
	Name: Team Jump Personality: Special power: Character type:

Appendix 6 – Permission from NSD

Meldeskjema / Forskning om dataspill i engelskundervisning / Vurdering

Vurdering

Referansenummer
470504

Prosjekttittel
Forskning om dataspill i engelskundervisning

Behandlingsansvarlig institusjon
UiT Norges Arktiske Universitet / Fakultet for humaniora, samfunnsvitenskap og lærerutdanning / Institutt for lærerutdanning og pedagogikk

Prosjektperiode
01.02.2022 - 15.05.2022

Meldeskjema

Dato	**Type**
13.01.2022	Standard

Kommentar
Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet 13.01.2022 med vedlegg. Behandlingen kan starte.

TYPE OPPLYSNINGER OG VARIGHET
Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 15.05.2022

LOVLIG GRUNNLAG FOR UTVALG 1
Prosjektet vil innhente samtykke fra foresatte til behandlingen av personopplysninger om barna. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte/foresatte kan trekke tilbake.

Lovlig grunnlag for behandlingen vil dermed være foresattes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

LOVLIG GRUNNLAG FOR UTVALG 2
Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Vi forstår det slik at de registrerte kan bestemme over seg selv om de ønsker å delta i forskningsprosjektet eller ikke. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER
NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

• lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at foresatte får tilfredsstillende informasjon om og samtykker til behandlingen
• formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål
• dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
• lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lenger enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER
NSD vurderer at informasjonen om behandlingen som de registrerte og deres foresatte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18) og dataportabilitet (art. 20).

Vi minner om at hvis en registrert/foresatt tar kontakt om sine/barnets rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

Page 107 of 109

FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og eventuelt rådføre dere med behandlingsansvarlig institusjon.

MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde: https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-for-personopplysninger/melde-endringer-i-meldeskjema. Du må vente på svar fra NSD før endringen gjennomføres.

OPPFØLGING AV PROSJEKTET

NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Kontaktperson hos NSD: Olav Rosness, rådgiver.

Lykke til med prosjektet!