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An Analysis of Gamification and Game-Based Learning as Strategies for Anti-Oppressive Education

by

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Submitted to Wilfrid Laurier University

in partial fulfillment of the requirements for the degree of

Master of Arts in Social Justice and Community Engagement

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ABSTRACT:

Educational institutions have historically been environments where oppression takes place in the forms of racism, sexism, ableism, homophobia, transphobia, and classism among others (Kumashiro, 2000; Chen-Hayes, 2001; Dedotsi & Paraskevopoulou-Kollia, 2019). Anti-oppressive education is the active rejection of or refusal to participate in forms of oppression that take place in schools, and in turn facilitating strategies for education that works against oppression (Kumashiro, 2000). There are existing theories for how to promote and engage this anti-oppressive education, such as introducing narratives and education about marginalized communities that counter and challenge educators' preconceived biases about students (Warren, 2023; Kumashiro, 2000), transforming schools into safe and welcoming spaces that provide students with support, advocacy, and resources specific to their identities, and through acknowledgement and embracing of their complex and unique identities (Kumashiro, 2000). Gamification and game-based learning are emerging as new teaching practices in classrooms and have benefits in several areas such as lesson engagement, learning outcomes, classroom environment, accessibility practices, collaboration in the classroom, teaching delivery, learning effectiveness, exploration and risk-taking in a safe environment, and the student's sense of control, agency, and ownership over their learning process. However, there is a gap in the educational research literature on the use of gamification and game-based learning as potential strategies for combating the various forms of oppression that take place in schools. They have not yet been thoroughly explored for their potential to be beneficial for anti-oppressive education. This study explores how gamification and game-based learning can be tools to promote education that supports students in classrooms, creates excitement around learning, and

contributes to an anti-oppressive learning environment through providing education about and for marginalized groups, counter-narratives that combat some educators' prejudiced beliefs about equity-deserving students, and providing education that has the power to change society through challenging both implicit and explicit social and cultural biases as well as building empathy and a deeper understanding of some of the lived experiences of marginalized communities. This analysis is driven by close readings of two digital games— Lucas Pope's *Papers, Please* and McKinney's *SPENT*—, an in-depth discussion of theories of oppression and anti-oppression, and an analysis of publicly available policy documents from eleven of Ontario's public school boards, universities, and colleges, including: Waterloo Region District School Board, Toronto District School Board, York District School Board, Thames Valley District School Board, Wilfrid Laurier University, University of Guelph, University of Waterloo, Toronto Metropolitan University, Conestoga College, Mohawk College, and Fanshawe College.

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Chapter 1: Introduction

1.1 What is this research about?

Anti-oppressive education is education that actively works against forms of oppression such as racism, sexism, ableism, classism, transphobia, and homophobia that take place in educational spaces (Kumashiro, 2000; Chen-Hayes, 2001; Dedotsi & Paraskevopoulou-Kollia, 2019). These forms of oppression affect students who belong to marginalized communities including students who are racialized, students who are disabled, students who identify as belonging to the 2SLGBTQ+ community, students whose first language is not English, students and their families who are experiencing economic disadvantages such as poverty, homelessness, and employment insecurity, and students who come from non-Christian religious backgrounds (Johansson & Theodorsson, 2013; Kumashiro, 2000; Chen-Hayes, 2001; Thiem & Dasgupta, 2022). Oppression in schools takes place in many different forms, and can come from educators, other students, and educational institutions themselves (Kumashiro, 2000; Johansson & Theodorsson, 2013). Different theories for anti-oppressive education describe methods that can be used to combat these forms of oppression, including implementing education for and about marginalized groups (Kumashiro, 2000), introducing media with counter-narratives to combat educators' deficit thinking about marginalized students due to implicit social and cultural biases (Warren, 2023), and providing empowering spaces for marginalized students to receive support, advocacy, and resources that are specific to their needs and identities (Kumashiro, 2000).

Gamification and game-based learning are two gaming practices in education that may benefit students in different ways including increasing student motivation and participation with the lesson (Davis et al., 2018; Plass et al., 2015), providing them with opportunities to take risks in a safer environment (Plass et al., 2015), and making the classroom itself a more comfortable

learning environment (Nwogu, 2019). Additionally, these practices provide much-needed representation through diverse characters and narratives (Eng, 2020).

This research seeks to create a connection between gamification and game-based learning and anti-oppressive education and examines how gamification and game-based learning have the potential to become effective methods that transform the educational landscape and are additional to pre-existing methods for anti-oppressive education.

1.2 Research Questions

Gamification and game-based learning are two separate and distinct practices under the general umbrella of gaming in education, and each requires its own focus and analysis. Further warranting the need to keep both practices separate in this analysis since each practice is beneficial for different reasons and in different ways. Depending on the context of the lesson/classroom/student group, one practice may be more appropriate than the other. In order to keep these two practices separate in my analysis, it was necessary to explore two research questions rather than combine them into one. The two research questions I am seeking to answer in this paper are: (1) how can gamification contribute to anti-oppressive education?, and (2) how can game-based learning contribute to anti-oppressive education?

Although studies have been done to measure the effectiveness of gamification and game-based learning in areas such as motivation, classroom engagement, and effect on learning, among other examples, there is a gap in the educational research literature demonstrating if and how gamification and game-based learning can play a productive role in anti-oppressive education. This gap has given me an opportunity to determine whether gamification and game-based learning are practices that do in fact contribute to anti-oppressive efforts in schools. My

speculation is that the motivational benefits of both practices (Plass et al., 2015), the ability to increase student comfort in a classroom environment (Nwogu, 2019), the ability to provide students with representations of different and unique identities (Eng, 2020) among other benefits elaborated on in sections 4.1.2, 4.2.2, and 5.1 give games and gamified activities the ability to act as effective methods for anti-oppressive education.

1.3 Research Objectives

I have three main objectives for this research: Firstly, I will be analyzing existing research on gamification and game-based learning in classrooms at both secondary and post-secondary levels. Secondly, I will explore theories of anti-oppressive education and analyze policy documents detailing existing anti-oppressive measures in a selection of some of Ontario's secondary schools, including the Waterloo Region District School Board, the Toronto District School Board, the York District School Board, and the Thames Valley District School Board, as well as universities and colleges such as Wilfrid Laurier University, the University of Guelph, the University of Waterloo, Toronto Metropolitan University, Mohawk College, Conestoga College, and Fanshawe College. Lastly, my final objective is to discuss how gamification and game-based learning are beneficial to classroom engagement, learning outcomes, classroom environment, accessibility practices, and collaboration in the classroom (each of these assists in fostering and maintaining anti-oppressive education).

1.4 Research Contributions

Through the various analyses in the following section, I am providing a conceptual roadmap for moving forward with anti-oppressive education through gamification and game-based learning. This research is, importantly, a steppingstone: I theorize that both game-driven

practices have the potential to be effective methods for providing students with alternative methods of learning that can act as vehicles to advance anti-oppression in schools. Ultimately, this research contributes to the field of education and encourages further studies and the development of frameworks and guidelines for gamification and game-based learning as anti-oppressive practices.

1.5 Methods

The methods I am using to support my theorization include close readings of Lucas Pope's *Papers, Please* and McKinney's *SPENT* (two digital games), in-depth analyses of academic literature that outlines what anti-oppressive education should look like, examples of research in which different gamification and game-based learning methods are used within educational settings, and a brief content analysis of twenty publicly available policies from a small selection of Ontario's public school boards, universities and colleges. Additional to these methods, I am including a detailed discussion chapter in which I delve further into tying gamification and game-based learning to anti-oppressive education. In this discussion section I discuss some of the benefits of games in the classroom including representation and ability to tackle challenging learning topics, as well as considerations for game designers to make when developing games with anti-oppression in mind, and examples of other games both digital and analog that I would argue to be beneficial learning tools for anti-oppressive education, including my own game, *Obstacles* (2022).

The selection of research literature referenced in this study informs my understanding of oppression, anti-oppressive education, gamification, and game-based learning. Through my interpretation, I make connections between gamification, game-based learning, and anti-oppressive education. It is important to explain that my understanding of gamification and game-

based learning are also informed by my experience in my undergraduate program as a game design and development student, and my understandings do not strictly come from the selected educational literatures on this topic. From the year 2018 to the year 2022, I was a student of Wilfrid Laurier University's Game Design and Development program, and through this program I gained experience in both analog and digital game design with a personal focus on educational and meaningful games. Over the course of this program, I gained valuable experience in not only designing and developing games, but also in analyzing and interpreting the messages and meanings of games. This part of my learning experience greatly influenced the methods I used to play and analyze both *Papers Please* and *SPENT*.

After analyzing selected literature to better understand how gamification and game-based learning apply to anti-oppressive education, I perform close readings of two digital games: (1) *Papers, Please* (2013) by Lucas Pope, and (2) *SPENT* (2011) by McKinney. This involved multiple sessions in which I played each game several times and took detailed notes until I felt I had an in-depth understanding of both games, their narratives, objectives, and how they worked on the mechanics level. It was important for me to know each game inside and out to confidently discuss unique characteristics of each game and their potential benefits as game-based learning activities in different settings. For this study, I spent 7.7 hours playing *Papers, Please* (2013) and taking detailed notes on three separate playthroughs in the game's story mode to gain a much more solid understanding of the progression of the story, the core gameplay, and some of the best potential learning goals and outcomes. Since *SPENT* (2011) is a much shorter game, I played through the game a total of three times. These games serve as a springboard for theorizing the promise of gamification and game-based learning as effective strategies for anti-oppressive education.

1.6 Methodological lens

My methodological approach for this paper follows both the interpretivist and critical research paradigms. My justification for following the interpretivist paradigm is that one person may derive different meaning than the next when interacting with the world. James Scotland describes interpretivism as stemming from the ontological position of relativism, which means that reality is considered subjective and is interpreted differently by each person (Scotland, 2012). Feminist standpoint epistemology (Collins, 1999; Haraway, 1988; Harding, 2008) informs my use of the critical paradigm in centering the perspectives or standpoints of marginalized and disempowered members of society. This epistemological approach is rooted in feminism and has historically focused on highlighting the lived experiences of women and, in particular, women of colour. I believe that because my research involves a focus on anti-oppressive education it is necessary for my research to take this approach a step further and ensure that I am centering the needs of not only women and racialized people, but also other historically marginalized groups as well, including people with disabilities both mental and/or physical, people who identify as part of the 2SLGBTQ+ community, people who are part of lower or impoverished socioeconomic classes, women, and people who are of a non-Christian religious background. Alongside centering the needs of marginalized groups, I am also using an intersectional (Crenshaw, 1989) lens in my methodological approach. The term intersectionality was coined by Kimberlé Crenshaw in 1989 to describe ways in which different identities can overlap and intersect with one another. This overlap in identities can result in different experiences of oppression (Crenshaw, 1989). For example, someone who is racialized and disabled would experience oppression differently than someone who is just racialized, or just disabled. This

hypothetical individual who is both racialized and disabled would likely experience oppression relative to their race *and* their disability. Because I am looking closely at forms of oppression in education across a spectrum of identities, it is important to me to interpret and analyze the educational literature with an intersectional lens.

Following an interpretivist research paradigm is also necessary in the context of both gamification and game-based learning for this study on the basis that if reality can be considered subjective, one person may have an entirely different experience than the next when participating in a gamified or game-based learning activity, and participant responses to these activities from prior research may vary.

My reasoning for following a critical research paradigm is that it is important to acknowledge that human interpretations of the world around them are frequently shaped and influenced by cultural and social biases. It is also paramount to recognize that these biases arise from dominant social groups and they lack the perspectives and experiences of groups that have historically been marginalized and disempowered. Social bias can be defined as prejudiced beliefs and attitudes towards people or groups of people based on traits such as race, gender, ethnicity, sexuality, and ability, and many people are often unaware that they hold these biases (Stevens, 2017). If an individual is unaware that they hold these biases, these biases are then commonly referred to as implicit biases (Staats, 2015-2016). One definition of cultural bias is “a tendency to interpret a word or action according to culturally derived meaning assigned to it” (Haddad & Purtilo, 2019). In simpler terms, people interpret and judge the actions and words of other people by the standards of their own culture. In the context of education, cultural bias can show up in different ways, such as expectations educators may have for their students which may lead to gaps in their academic achievement (Copur-Gencturk et al., 2020). Yingst defines cultural bias as

involving prejudice in one's viewpoint that suggests they prefer one culture over another, or that one group's behaviour is valued as higher than another group, and explains that cultural bias groupings can include those with differing levels of socio-economic status, religion, race, ethnicity, language, and sexuality (Yingst, 2011). Recognizing that many people hold both implicit and explicit social and cultural biases is necessary in my analyses and in my discussion of the selected literature. There is a significant amount of research that has been done that has excluded and/or misrepresented the experiences of non-white individuals, 2SLGBTQ+ individuals, and disabled individuals, (including individuals who are on the autism spectrum and/or have ADHD) (Hinshaw et al, 2021; Marshall et al., 2022; El-Galaly et al., 2023; Redwood & Gill, 2013) and to continue that trend when researching anti-oppressive education would be perpetuating further marginalization and harm towards oppressed groups. Hinshaw et al. report in their review of research on ADHD in women and girls that "until recently, almost all research on ADHD has been focused on boys and men, with female presentations having been largely overlooked in both clinical and research settings" (Hinshaw et al., 2021, p.3), and this is only one example of underrepresentation/exclusion of equity-deserving groups in research. Another example focuses on misrepresentation of transgender and non-binary (common umbrella term for an individual whose gender identity does not align with either the male or female gender binaries) experiences in research through data manipulation (Marshall et al., 2022). Lastly, multiple papers have been published on a lack of diversity in clinical research (health and medical sciences) specifically regarding racialized people that result in negative impacts on their medical care (El-Galaly et al., 2023; Redwood & Gill, 2013). Taking all of this into consideration, it is crucial for me to remain reflexive when analyzing previous research and to

remain aware of social biases that may influence my interpretation of the literature informing my research.

Finally, I offer a comparative study, as I am theorizing how gamification and game-based learning can positively contribute to and advance anti-oppressive education in comparison to existing tools used in anti-oppressive education. As previously stated, what will inform my understanding of what anti-oppressive policies are in place is a selection of policy documents from various public school boards, universities and colleges in Ontario that are publicly available online.

Chapter 2: *Papers, Please & SPENT*

In this chapter I conduct close readings of two digital games: *Papers, Please* (2013) and *SPENT* (2011). Each of these games tackles challenging topics and simulates different forms of oppression that are experienced by real people. Both games offer opportunities for educators to introduce these topics to students and can act as a springboard for meaningful classroom discussions about oppression. *Papers, Please* (2013) is discussed as a game-based learning activity for students in post-secondary school (colleges and universities), and *SPENT* (2011) is discussed as a game-based learning activity for students in secondary school (high-schools).

My decision to conduct close readings on *Papers, Please* (2013) and *SPENT* (2011) (rather than some of the other games I discuss in chapter 5) stems directly from the education I received in my undergraduate degree in game design and development. Each of these games (among many others) are games that my classmates and I played and discussed both in class and for homework, and I remember them being very impactful to my learning process. In a way, experiencing both games as game-based learning activities influenced me in the sense that they helped me to choose the route I wanted to take as a game designer, and now as a researcher. They were some of my first and most impactful experiences with serious, educational games that are meant to teach about oppression, and because of this, they were at the forefront of my mind when I made the decision to do close readings as methods for this research. My hope for these close readings is that readers are inspired similarly to the way I was when first introduced to these games, and that reading about my play experiences and my interpretations that stem from them will encourage them to give each of these games (and many others they may not have considered playing before) a try themselves.

Lastly, prior to delving into these close readings, I would like to answer the potential question of "what if students have lived experiences with the forms of oppression portrayed in these games?" It is very likely that some students will have some lived experience with some of the forms of oppression portrayed in these two games, and essentially, their experience playing these games will be different from students who have not had these experiences. For students without this experience, these two games can be an opportunity for learning and understanding how oppression can work and how different forms of oppression have the potential to negatively affect people. For students who have experience with these forms of oppression, the opportunity arises to analyze and critique these games and their accuracy in representation of these experiences. Students who have lived through these experiences should not feel pressure to share their experiences if they do not feel comfortable doing so, however, if they are willing to share these critiques, these students have the opportunity to introduce excellent points of discussion in post-play. Additionally, students who have lived experience with the forms of oppression represented in *Papers, Please* (2013) and *SPENT* (2011) may be triggered by the content and should not be forced to participate in these activities if they feel uncomfortable doing so. This means that educators should be responsible for providing a content warning to all students before play sessions and should plan accordingly for students who choose to opt-out.

2.1 *Papers, Please*

2.1.1 Playing *Papers, Please*

"Congratulations. The October labor lottery is complete. Your name was pulled. For immediate placement, report to the Ministry of Admission at Grestin Border Checkpoint. An apartment will be provided for you and your family in East Grestin. Expect a Class-8 dwelling.

Glory to Arstotzka." (Pope, 2013)

Papers, Please (Pope, 2013) is tagged on Steam as a singleplayer, indie, political simulation game in which players are immersed in the life of a border checkpoint officer in the fictional communist state of Arstotzka after winning the labor lottery (Pope, 2013). This digital game illustrates day-to-day life of a border control officer who is tasked with either allowing immigrants to enter Arstotzka, detaining them upon suspicion, or turning them away. Even the smallest of mistakes can result in penalties, disciplinary criticism from supervisors, and even terrorist attacks. Each level in *Papers, Please* (2013) takes place over the course of a single day in the year 1982 and consists of working at a checkpoint booth where your job is to inspect the documents of people attempting to cross the border and either approve or deny their entry for various reasons (Gwaltney, 2013). Each person processed before the end of the workday is worth five credits, and citations over the allotted two per day end up costing a penalty of five credits each (Pope, 2013). At the end of each day, you are shown your finances and given the opportunity to put credits towards heat, food, medicine, and desk upgrades. Credits are automatically applied to pay for rent as well. Often, players must choose between necessary resources due to lack of credits (Pope, 2013).

As the game progresses, border control measures become stricter, and gameplay becomes much more complicated with far more room for error. Immigrants are required to provide more and more documents, creating clutter on the desk space, and creating ample opportunities to miss small details. Slowly, as the border checkpoint officer, you gain the ability to fingerprint, detain, and search immigrants as you find discrepancies and interrogate them (Pope, 2013). These procedures take time, and it is difficult at times to process a high number of people. All the while, as your job becomes more complicated, your base pay per processed person does not

increase. However, there are opportunities to gain more credits such as through bribery, detaining higher numbers of people, giving out business cards, following the directions of a secret order, and later on, tranquilizing terrorists for a bonus (Pope, 2013).

There is also an element of choice that a player has in *Papers, Please* (2013). How the narrative progresses through each individual playthrough is heavily influenced by player decisions when confronted with these choices (Pope, 2013), and in my case, a majority of these decisions required me to reflect on my own morals and values and go against them in order to keep my job and provide food, medicine, heat, and a home for my dependents. On each of my three playthroughs, I took detailed notes on the difficult choices I was required to make, and how they affected the game and narratives moving forward. To experience more outcomes and more potential narratives, I would opt for the opposite decision in my second and third playthroughs than I did in my first. Sometimes, this would lead to a more positive outcome and sometimes it would lead to a more negative outcome. This decision-making mechanic allows players to be able to experience 20 different endings to their game, making the game very re-playable.

Overall, *Papers, Please* (2013) is a challenging, yet thought-provoking game that requires players to really immerse themselves within the rules and boundaries of the fictional Arstotzka and forces them to reflect on their own personal morals and values, as well as allowing them to make connections to real-world events (Gwaltney refers to Arstotzka as “Pope’s version of Cold War-era Berlin” (Gwaltney, 2013)). This game has the potential to be a beneficial game-based learning activity that contributes to anti-oppressive education.

2.1.2 Why is *Papers, Please* a good example of game-based learning?

Papers, Please (2013) has multiple layers of potential learning outcomes, and could be used to teach about all of them at once, or just a select one or two in particular. For example, an educator could choose this game to act as a learning activity to teach about values (Flanagan & Nissenbaum, 2016). *Papers, Please* (2013) requires players to make difficult decisions, and in my case, I found myself making decisions that did not reflect my own personal values in order to provide for my family, and these decisions did not sit well with me. Educators could use this game as an opportunity to discuss how we determine our personal values, and why we feel uncomfortable when we make decisions that do not align with our moral beliefs. I contend that this type of discussion could allow for recognition of implicit biases through examining *why* people hold the personal values that they do (i.e., one could ask themselves "are my personal values shaped by biases that I may hold and not be aware of?"). I consider the acknowledgement and awareness of biases whether they be implicit or explicit to be an important step towards anti-oppressive education. How are we to confront our own biases and understand how they can be harmful to others if we are not given the opportunity to discuss and unpack them? Another learning outcome this game is capable of producing is having a better understanding of oppression itself, and how some forms of systemic oppression may affect people through different political systems. Some representations of systemic oppression in *Papers, Please* include state control and power as well as xenophobia, which is prejudice or a dislike towards people from foreign countries. This particular learning outcome is elaborated on in more detail in the following section. Lastly, *Papers, Please* (2013) is primarily representative of immigration, and can be used to provide insight on how strict, discriminatory immigration processes affect immigrants in some countries, and could allow students to put themselves in the shoes of people

who are in the process of immigrating who may face difficulties, hardships, hostility, and discrimination through the already harrowing process. There is a possibility that students may have immigrated or may be refugees, and may have experienced trauma related to their immigration process. I would suggest that educators allow students who have these lived experiences to opt-out of play-sessions and post-play discussion if they so choose to avoid triggers that may stem from their trauma, and instead provide an alternative assignment on matters of oppression pertaining to oppressive immigration and border-control practices. The opt-out process should involve approaching or writing to the educator privately with their concerns regarding the content of *Papers, Please*.

Aside from the game's content being suitable for a game-based learning activity, the game's controls and environment are important to address. *Papers, Please* (2013) does not require any controls other than the left-click button on the mouse, making for gameplay where memorizing different controls and key-bindings is not necessary. This control feature allows for greater focus on the story and content of the game and less worrying about character movement, fumbling, and mis-pressing the wrong keys. This feature could make for a more enjoyable playing experience for students who may not have a lot of experience playing digital games. The game's main environment is easy to navigate as well. In the border control booth, players can customize the layout of their desk to display all the necessary information for their job as a border control officer, and both the inside of the booth and an outside view of the Grestin border checkpoint are visible (Pope, 2013). From my experience playing, I found that the visuals of the border checkpoint with the armed guards, barricades, and a very long line of potential immigrants made me feel more immersed and engaged with the story than I would have been otherwise if I were to only be able to see the inside of the booth, one immigrant at a time, and the desk layout. When

detaining people, I could even see the guards remove them from the border control booth and walk them off the screen, and when I would slip up and let someone in who was smuggling weapons, I could see the direct consequences of my actions when they would attack and the guards would be killed (Pope, 2013). I strongly believe that the design choices made by Pope allow for high levels of immersion and engagement with the game that would result in beneficial game-based learning opportunities.

2.1.3 How can *Papers, Please* be used as a tool for anti-oppressive teaching?

My main argument for *Papers, Please* (2013) as a tool for anti-oppressive teaching lies heavily within the game's content and story. This game teaches its players about forms of systemic oppression, which is described by the National Equity Project (2020) as oppression that takes place at the institutional and structural levels of society and is rooted in racism, sexism, ableism, colonialism, xenophobia, homophobia, and transphobia (these are just a handful of examples). Systemic oppression involves the intentional disadvantaging of members of marginalized groups and the advantaging of members of the dominant social group. While the specific context of *Papers, Please* (2013) may not really correlate with oppression in schools, it is a representation of the effects of an oppressive government on its citizens and on immigrants in the process of entering a country (Pope, 2013). Playing as a border control officer, you are both oppressed and an oppressor in the sense that you are oppressed by your own government as a worker and a citizen with no say in what your job is or where you live, and you do not always get paid enough to be able to pay for basic needs for your family – daily payment is determined by how many immigrants you processed or denied entry to, and as the game progresses it becomes more and more difficult to process enough people to make the same amount of credits as you would in the early stages of the game. In turn, you are forced to oppress others to survive

by denying them refuge, strip searching them, denying only certain foreigners based on nationality alone, splitting up families, detaining people, tranquilizing people, etcetera because your government orders you to do so and you do not have much of a choice if you and your family wish to survive (Pope, 2013). This game does not explicitly state that what you are forced to do as a border control officer is contributing to oppression, nor does it directly contend that you as a citizen and border control officer of Arstotzka are also being oppressed – this is my interpretation through my play experience. I do think though, however, that this is likely a common interpretation amongst other players. I would recommend that educators set this context for students prior to a play-session or encourage discussion of this interpretation in post-play.

In my experience, the first step of understanding how to be anti-oppressive (both within schools and outside of schools) is to learn about oppression and to understand how it works, why it exists, what forms it can come in, and who experiences it. While *Papers, Please* does not provide an all-encompassing lesson on all of the above, it certainly does highlight what oppression can look like in the context of immigration and corrupt political systems. Prior to my experience playing this game, my knowledge of some of the challenges of immigration was limited. I was aware that it could be a complicated process but had no idea exactly how difficult it could be, especially when trying to leave an oppressive country or state with a goal of seeking refuge only to end up in another country or state under an oppressive government.

As previously mentioned, I believe that to better understand anti-oppression and how to behave in a way that is anti-oppressive both in and outside of school environments, it is important to learn what oppression is, what forms it takes, and examples of what oppression can look like. Through both the game and educator-facilitated post-play discussion, there are opportunities to discuss and critique oppressive systems that are represented in *Papers, Please*

(2013) and to brainstorm and talk through potential solutions to these oppressions. I do not believe that playing *Papers, Please* (2013) as a game-based learning activity in an educational setting should be the be-all and end-all of teaching about oppression by any means, however, it is a valuable tool to be used as a supplementary activity to teach about the topic of oppression and some of the forms in which it manifests, and has every potential to go hand-in-hand with and act as a springboard for classroom discussion where students feel engaged with their learning content.

Aside from educating students about forms of oppression *as* part of anti-oppressive learning, *Papers, Please* (2013) also has the potential to provide some of the benefits of game-based learning to students, which can contribute to anti-oppressive education. For example, when playing this game in a classroom setting, students may feel more motivated to learn and engage with the lesson, there may be more effectiveness in learning, students have the opportunity to take risks and explore different choices within the game, which is a safe environment to do so (Plass et al., 2015), and introducing a game to the classroom can make the learning environment much more comfortable for students to engage with the lesson (Nwogu, 2019).

2.1.4 Who is the target audience for *Papers, Please* as an educational tool?

When an educator is selecting a game for a game-based learning activity, it is important to pay attention to the intended audience to determine whether it is an appropriate choice for their student/class. *Papers, Please* (2013) contains instances of profane language, nudity[1], death,

[1] nudity can be toggled on/off within the settings of this game, however toggling off only applies undergarments in place of full-frontal nudity. I would advise educators that it may not be an appropriate selection for students whose religious beliefs and/or requirements prohibits them from viewing members of the opposite sex unclothed.

violence, references to drugs and sex work, and other mature themes. *Papers, Please* (2013) is rated for an audience of 17+ on the Apple App store which points to its inappropriateness for players under the age of 18. This game would be more suitable for a more mature audience such as post-secondary institutions. Post-secondary schools also often offer courses where learning content is far more focused, and many more subjects areas are covered in which *Papers, Please* (2013) and similar games could be applied as beneficial game-based learning activities. Courses that teach political history, political science, immigration, the histories of oppression and liberation, and courses that serve as introductions to ethics and values come to mind as ones where *Papers, Please* (2013) would be a fit in terms of learning content.

Another reason why post-secondary students are a far more appropriate audience for *Papers, Please* (2013) is the difficulty of the gameplay. As the game progresses, it can become quite challenging. Players are required to work quickly if they want to be able to keep up with their bills, and working too quickly can sometimes result in making mistakes and receiving citations (Pope, 2013). They must also have good reading skills and the ability to pay attention to small details. Not only is the content not suitable for high-school-age students, but I believe that the level of difficulty could outweigh the focus on some of the other messages and intended learning outcomes in the game if a player did not have a higher level of reading competency, which would defeat the purpose of a game-based learning activity and just leave students feeling frustrated.

Finally, *Papers, Please* (2013) is not limited to those for whom English is their first language. The game is available to play in fifteen different languages, so it is suitable for some students who are more comfortable reading in their primary language than they are in English. Other notable settings that could be considered accessibility features include the ability to adjust the volume of both the game’s music and sounds, as well as the ability to play in easy mode. I

would consider the in-game transcript sheet to be an accessibility feature as well, as it allows players to refer back to any dialogue rather than relying on memory and possibly missing or forgetting important information.

2.1.5 Facilitating post-play discussions about *Papers, Please*

Post-play discussions, I would argue, are an incredibly important part of game-based learning and I would even lean towards saying that they are necessary—especially for games like *Papers, Please* (2013). My reasoning for this argument is that there is a lot to unpack after a play session of this game. From my own playing experience, this game had an effect on my emotions as well as my understanding of potential struggles of going through the immigration process and belonging to a country that is oppressing its' citizens. I can only imagine that my experience with this game could have been much richer if I had been able to sit down and have a conversation with other people who had played the game and heard their thoughts and experiences with it.

One of the most important points of discussion that I would suggest specifically regarding *Papers, Please* (2013) is the potential to enforce dominant narratives. I would like to refer back to my own play session in which there were instances where my making a mistake resulted in terrorist attacks on multiple occasions. When reflecting on these game events, I could see how this could have potential to reinforce the perceptions of some students that immigrants are dangerous. I suggest that in order to combat this possible reproduction of dominant narratives and xenophobic beliefs, in-depth post-play discussion about these perceptions of game events is necessary, and educators should inform students how this element of *Papers, Please* (2013) has the potential to be detrimental to the learning outcome in the sense that it reinforces harmful narratives.

Another important aspect of *Papers, Please* (2013) that I would suggest educators include in their post-play discussion is the contradictory aspect of how people in this game appear to be immigrating *into* an oppressive state rather than away from it. There are NPCs (non-playable characters) in *Papers, Please* (2013) who come to the border control office attempting to immigrate to Arstotzka and explain that they are fleeing another state that is oppressive. It is somewhat confusing as to why these people are leaving one oppressive state or country to immigrate to another where they will continue to be oppressed. I would not be surprised if students were slightly confused about this—particularly students who may have experienced immigrating out of an oppressive country. I think that it is important to address this contradiction, no matter how minor it may seem and regardless of whether students bring this up on their own in discussion.

Finally, educators should be checking in with students in post-play discussions regarding their emotions and how the game made them feel. Throughout my play experience I felt several different emotions that were triggered by elements of the game and its' story. I would argue that understanding the emotional impact of learning about a challenging topic such as oppression from an immersive game is highly important and should not be left out of the post-play discussion. If not addressed, students may leave the lesson with unresolved feelings and emotions regarding the game and may not understand why the game left them feeling in such a way. This could tarnish their experience with this game-based learning activity and result in them associating negative emotions with alternative learning activities such as game-based learning. I believe that *Papers, Please* (2013) is designed to invoke these emotions and uncomfortable, but at the same time I think that it is important for players to understand *why*.

In all, there are many avenues for educators to take when facilitating a post-play discussion after a game-based learning activity, and educators could tailor their discussion plan to the experience of their students' experiences while playing the game. However, the discussion points I have selected and discussed above are necessary to include along with any other points the educator feels are appropriate to address.

2.2 *SPENT*

2.2.1 Playing *SPENT*

> "It's just stuff. Until you don't have it." (McKinney, 2011).

This is the first confrontation that players have with *SPENT* (2011) before they even begin to play the game.

> "Urban Ministries of Durham serves over 6,000 people every year. But you'd never need help, right?" (McKinney, 2011).

Below this question is a button with all caps that provokes the player to push it:

> "PROVE IT. ACCEPT THE CHALLENGE…
>
> Over 26 million Americans are unemployed. Now imagine you are one of them. Your savings are gone. You've lost your house. And you're down to your last $1,000. Can you make it through the month?" (McKinney, 2011).

This provocative, uncomfortable introduction is how the player begins their experience playing *SPENT*. It was not my first or even second time playing this game, and even knowing what to expect, these statements and questions still felt uncomfortable to read. I am confident that was a conscious design decision. We are not supposed to feel comfortable with poverty,

unemployment, and homelessness. *SPENT* (2011) is a web-based role-playing game created for the Urban Ministries of Durham non-profit organization by the advertising agency McKinney, and at a basic level, uses interactive text scenarios to force players to make complicated decisions (Jagoda, 2013, p. 126). The main decision-making mechanic allows players to experience multiple story events, game outcomes, and experiment with making different decisions and taking risks. This makes for great replayability as a game-based learning activity. During this session of play, I played through the game three times, one for each job the game offers in the first choice the player is given. I also made a conscious effort to opt for the options I had not picked in the previous playthrough to experience as many story events as possible. Before detailing my experience, I want to note that there are options given to players that require them to share to Twitter or Facebook to access. I did not choose any of these options.

The first choice that players are offered when they begin the game is where to work. There are three options available: you could be a server in a restaurant, a warehouse worker, or an office temp. Each job offers a different rate of pay and has different pros and cons. On my first playthrough, I opted for the serving job in a restaurant. From this point on, difficult decisions and life events came flying at me at a rapid pace. Next, I had to choose a health insurance plan, all of which are expensive and there is no option to opt-out. Next, I was prompted to decide where to live on a sliding scale that shows how transportation and rent costs vary living closer to and further away from work in the city. Within the first couple of minutes of my first playthrough, I noted that I was receiving immediate feedback for my choices for nearly every decision I made. After deciding where I wanted to live via the sliding scale, I was notified the apartment I had chosen was too small for my belongings. I was given the choice of either renting a storage locker for $45 or having a yard sale. Choosing the yard sale option seemed like

a good idea, considering I knew the goal of the game was to try and make it to the end of the month. Choosing this option adds an additional $150 to your balance. Immediately following the profit from the yard sale, I unknowingly made a mistake. The next scenario I was flung into, I was approached by someone who was affiliated with a union organization, and I chose to talk to them to find out more information about unions out of curiosity. The immediate feedback from this decision let me know that I had been fired from my job as a restaurant waiter because I was seen speaking to union representatives. Once you get fired, you do not get prompted to choose another job, and instead you need to figure out how to make what money you do have last until the end of the month. My biggest issue was that I had been fired before receiving even my first paycheck. For the rest of my first playthrough, I was focused primarily on spending as little as humanly possible, and taking as many opportunities to make money as I could. However, similarly to *Papers, Please* (Pope, 2013), *SPENT* also confronts its players with decisions that may require them to go against their personal values. Alternatively, players could sacrifice their performance in the game to make decisions that reflect their values and morals.

I finished off my first playthrough by running out of money on day 30. The last several in-game days of this playthrough consisted of driving away from a fender bender (I couldn't afford to pay the damages), getting charged bank fees for having a balance under $50, having to surrender my pet to the animal shelter because I could not afford to pay additional rent fees, and telling my sick mother that I would not be able to lend her $100 to pay for her life-saving medication. All throughout the game, each time I decided, I was either given direct feedback on the consequences of my decision, or I would receive a "fun" fact. For example, at a certain point a friend in-game approached me and asked if I wanted a cigarette to help with the stress. I chose against it, as I figured that would be a habit that cost money. I was then presented with a fact

about how many adults begin smoking during transition periods in their life because of the myth that it helps with stress (McKinney, 2011).

On my second and third playthroughs, my goal was to make choices I had not made in the first to experience as many story events as possible. I chose to work as a warehouse worker this second time, and because I expected that choosing this option would result in workplace injuries, I opted for the mid-level health insurance package. Some notable events from this playthrough were having to pay a credit card bill and only being able to pay the minimum amount, and not being able to afford to travel to my grandfather's memorial. Despite not losing my job through this round, I did not make it as far as I did on the first playthrough and ran out of money on day 28. On my final playthrough, I was focused on making it to the end of the game. I chose the third and final option of working as a temp in an office. I had already discovered most of the options for story events through my first and second playthroughs, so this time I was strictly trying to ensure that I made it to day 30 without running out of money. I did so successfully with $80 to spare, and then was humbly reminded that although I had made it through the month successfully without running out of money, that rent would be due the next day.

This game is a humbling experience each time we engage and can be a jarring reminder of the harrowing experiences people have with homelessness, poverty, and unemployment. It has a lasting and impactful message and has the potential to leave players with a new and deeper understanding of the challenges people experiencing homelessness, poverty, and unemployment are faced with.

2.2.2 Why is *SPENT* a good example of game-based learning?

Where there are several learning opportunities to be taken advantage of in *Papers, Please* (2013), *SPENT* (2011) has a more singular learning outcome. First and foremost, the most obvious learning outcome for this game is that players gain a deeper understanding of some of the hardships people are facing when dealing with financial, housing, and job insecurity. For people who have not had the experience of going without and needing to make these difficult decisions, or who haven't needed to worry about money, playing *SPENT* (2011) may raise their awareness. Not only is it possible that *SPENT* (2011) may raise students' awareness, but it may also assist in building empathy for those who are experiencing social and economic disadvantages such as unemployment, poverty, and homelessness.

Secondly, although it is at a level that is much milder and more subtle than in *Papers, Please* (2013), *SPENT* (2011) also requires making difficult decisions that may not reflect the player's values or morals. One that stands out is when the game informs you that you've had a fender bender and offers you two choices: (1) stay and pay for the damages (which amounted to approx. $500 or so) or (2) drive away, which is considered a hit and run (McKinney, 2011). The first time I was confronted with this choice, I was nervous that deciding to drive away would amount to being charged with a hit and run and ultimately costing me more money, but I did not have enough to pay the damages. Ultimately, I chose to drive away. There is no direct consequence for this decision, but I still felt terrible about the choice I made. This terrible feeling was softened slightly by my recognition that this was only a simulation and not a real moral dilemma that I was facing in my own life. I feel it is important to express, however, that that this is not a decision I would make outside of a gaming or simulated environment. It is important for me to relay this information as I am likely not the only person who has made a decision within a game

or simulation that they would not make outside of this environment, and that making certain in-game decisions do not necessarily reflect the values of the player. There was another choice offered to me in each of my playthroughs where I made the same decision each time purely based on my own values. I was offered the choice between doing some work as a favour for $50 or attending my child's school performance. Each time, I opted for my child's school performance no matter how much money I had when given this choice. These are simulations of very real choices that some people are forced to make although it goes against their own personal values to survive and stay afloat. Including them as story events in *SPENT* allows players to explore making decisions based on values, necessity, and weighing their options.

Because the primary element of gameplay in *SPENT* revolves around decision-making and risk-taking, students have the benefit of learning about risk-taking behaviors in an environment where it is safe to make the wrong decision and try again (Plass et al., 2015). This game is designed so that players "fail" in order to achieve the intended learning outcome, and this failure taking place within a gaming environment with no real-life consequences allows for further experimentation and exploration of all available options.

2.2.3 How can SPENT be used as a tool for anti-oppressive education?

My main argument for *SPENT* (2011) as a tool for anti-oppressive education lies in the content of the game itself, which like *Papers, Please* (2013), teaches about how forms of oppression affect people. In contrast to *Papers, Please* (2013), which shows how Arstotzka is not only oppressing potential immigrants at the border, but also how it is oppressing its own people (Pope, 2013), *SPENT* focuses only on one angle of systemic oppression—homelessness and underemployment in the United States (Jagoda, 2013).

SPENT (2011) as a game-based learning tool is not only useful for teaching about the experiences of people living in poverty and struggling with homelessness and unemployment, but it also has the potential to shift the attitudes and beliefs—the implicit and explicit biases, ideas, and expectations—that educators may have that influence their behaviour towards students living in similar precarious conditions at home and provide a counter-narrative to combat deficit-thinking in educators (Warren, 2023) which Warren describes as educators' biases and beliefs that traits inherent to certain students' are responsible for their poor academic performance. Educators who want to facilitate meaningful game-based learning experiences for their students must thoroughly play the game and develop a strong understanding of it before asking their class to play it. Through this process of playing and learning the game before introducing it to the class, the educator should not only be able to develop meaningful discussion points from the game's content and have a thorough understanding of the desired learning outcomes but should also benefit from the learning experience the game has to offer. *SPENT* may be the catalyst for launching in-class discussions about the life experiences of students and moving away from previous assumptions about students. Overall, there are multiple ways in which *SPENT* (2011) can be used as a game-based learning activity to specifically benefit efforts towards anti-oppressive education including educating students about homelessness, poverty, and unemployment/underemployment, and providing students with a safe place to experiment with decision-making and risk-taking (Plass et al., 2015). It is important to note that much like *Papers, Please* (2013) students may have lived experiences similar to the simulated experiences in *SPENT* (2011) and may be triggered by the content. Educators should provide a content warning for students and allow for students to approach them privately to opt-out of play-sessions and post-play discussions that may reintroduce past traumas or cause additional trauma.

2.2.4 Who is the target audience for SPENT as an educational tool?

Whereas *Papers Please,* (2013) is rated on the Apple App store as appropriate for ages 17+ (Apple, 2014) and is far more appropriate for a post-secondary student audience, my suggestion is that *SPENT* is an excellent option for high-school-age students. *SPENT* does not have an official maturity rating, but it does not contain violence, profanity, or nudity. There is a brief mention of cigarette smoking and subsequent addiction, but overall, I would consider this game to be appropriate for students ages 14 and up. In my high school experience, I can remember reading books like *To Kill a Mockingbird* (Lee, 1960) and *A Thousand Splendid Suns* (Hosseini, 2008) which both contain depictions of violence, sexual assault, and profanity including racial slurs. These particular novels were deemed appropriate content-wise by the public school board, and in comparison, *SPENT*'s content is mild. *SPENT* does require some reading, but not at the same level or speed as *Papers, Please* (2013). The decision-making points do come quickly, but only at the pace of the player. There are also no penalties for taking one's time to thoroughly read like there are in *Papers, Please* (2013) (by this I am referring to being unable to process as many immigrants if I took more time reading their paperwork carefully and being penalized with earning fewer credits for the same amount of time worked). *SPENT* also does not require the same amount of time commitment as *Papers, Please* does. Each playthrough took me around 10 minutes on average, and even if students wanted to play two or three times over during a class period, they would be able to do this and there would still be time to spare for classroom discussion afterwards. The nature of the game really does require multiple plays, and the general length of classes sitting at just around an hour for many high schools allows for the game to be played this way, whereas *Papers, Please* requires much more time to play to really engage with and digest the multiple layers the game has.

Students who are in high school are also at the ages (~14-18) in which they can engage with the content of *SPENT* in a way that provokes meaningful discussion. In high school, they are at the ages at which they are capable of engaging with more serious topics and having meaningful discussions (Beaton, 2022) about their experiences in-game, any questions they may have about the game's content and its relatedness to real-world experiences. Anne Beaton found that her high-school students were eager to have meaningful discussions about topics such as immigration, criminal justice reform, food deserts, teen vaping, and homeless encampments (Beaton, 2022). My thoughts are that a class-wide playthrough of *SPENT* offers the perfect springboard for a meaningful post-play discussion about the issues of poverty, homelessness, and job/financial insecurity.

Overall, even though anyone could play *SPENT* (2011) and evoke meaning from the game, or have a valuable learning experience, I believe that it would be an excellent choice to use specifically as a game-based learning activity for high school-age students.

2.2.5 Facilitating post-play discussions about *SPENT*

Much like with *Papers, Please* (2013) I would argue that post-play, educator facilitated discussions on *SPENT* (2011) are necessary for a well-rounded game-based learning experience. From my experience playing this game, there were a number of questions that arose. Subsequently, I have come up with a few suggested discussion points that have potential to add value to the overall game-based learning experience playing *SPENT* (2011).

My most prominent critique of *SPENT* (2011) is that there is potential for this game to include intersectional situations where players are not only tasked with confronting oppression through homelessness, financial and employment insecurity but are introduced to identity-based

oppression as well, but representation of these intersectional experiences of systemic oppression are not included. This could result in the accuracy of the representation being compromised, as identity-based oppression goes hand-in-hand with other forms of oppression such as financial and employment insecurity and homelessness and these experiences are not addressed. Post-play discussion would allow for educators to bring attention to the lack of intersectional situations within *SPENT* (2011) and give students the opportunity to explore and discuss further with their peers and teachers some of the challenges that individuals experiencing identity-based oppression may face along with financial, employment, and housing insecurity. This would also be a good opportunity for educators to point out that although media may be representative of certain experiences, it can also simultaneously exclude the experiences of others.

There is also something to be said about the element of risk-taking in *SPENT* (2011) specifically, in the sense that players are essentially *forced* to take these risks in order to "win" the game. In this context, what could be seen as risk-taking may actually just be difficult decisions that players are forced to make because their choices are limited and constrained by systemic oppression. Although I do agree (with Plass et al., 2015) that there is a positive element of students being able to explore the outcomes of different decisions or take risks within in a safe, simulated environment, I would also argue that in post-play discussions, educators should address and bring attention to the notion that people experiencing these hardships are often forced to make these difficult decisions because they are constrained by systemic oppression.

Finally, I would like to return to my first playthrough of *SPENT* (2011) in which I had an experience where while playing, I am approached by a union representative and after choosing to speak with them to learn more about unions, I am then fired from my job as a direct repercussion. This particular consequence could be considered as enforcing social norms

surrounding unionizing (i.e., this could be teaching players that organizing for their labour rights is bad and will result in harsh consequences). I would argue that this is problematic and requires adequate discussion in post-play. My suggestion is that educators should address this decision and its' consequence and ask students what they feel this feedback (losing their job) taught them about unionizing.

To conclude this section, I would like to reiterate that I highly encourage post-play discussion when incorporating a game-based learning activity into a classroom. It has every potential to allow students to think about and share with their educators and peers what their experience playing the game was like, as well as gaining new knowledge and deeper understanding of some of the key learning points of the lesson.

Chapter 3: Oppression in Education and Anti-Oppressive Education

3.1 Oppression in Education

3.1.1 Who is being oppressed in schools?

When discussing oppression in schools, it is important to recognize *who* is being oppressed to determine the nature of this oppression, and what can be done to combat it. In the context of this research, I am focusing on oppression in schools within North America (e.g., U.S. and Canada) although I recognize that oppression takes place within schools globally.

Kumashiro refers to those who experience oppression in education as the Other (Kumashiro, 2000), which is a term coined by Giyatri Chakravorty Spivak in her article *Three Women's Texts and a Critique of Imperialism* (1985) to describe a colonial empire defining itself against those it marginalizes. He elaborates on this term by describing the Other as groups that are "*other than* the norm" (Kumashiro, 2000, pg. 26) I take the "norm" in this context to be white, male, cisgender, heterosexual, able-bodied and able-minded students who come from families above the poverty line and who are from Christian religious backgrounds, although the labelling of certain identities as the "norm" can be just as problematic as stereotyping marginalized groups, and can contribute to identity erasure, erasure of individuality, and erasure of lived experiences which I elaborate on further in section 3.1.2. According to Kumashiro, marginalized groups that can be considered as Othered can include students of colour, students who are female, male students who do not fit the standards of stereotypical masculinity, students who identify as part of the 2SLGBTQIA+ community, students with disabilities (both physical and/or mental disabilities and chronic illnesses/health conditions), students who do not speak English or who have limited

English language proficiency, and students from religious backgrounds that are non-Christian (Kumashiro, 2000, pg. 26).

3.1.2 Definitions of oppression

Different scholars hold different views of what oppression looks like and have different definitions of oppression. Their understanding and theories of oppression are informed by their own research and lived experiences as well as the research of others.

Kumashiro's definition of oppression focuses on oppression within educational institutions, but I believe this can be applied to oppression outside of schools as well. My understanding of oppression is that it can include discrimination, social isolation, harassment, exclusion, verbal and physical abuse and violence towards groups that are traditionally marginalized (Kumashiro, 2000, p.26; Cudd, 2006; David & Derthick, 2018).

Freire is a seminal author in the discussion of oppression, and his definition of oppression comes from his own experience "during six years of political exile, observations which have enriched those previously afforded by my educational activities in Brazil" (Freire, 2000, p.35). His view of oppression focuses more on imbalances of power between social classes. He views the oppressed as dehumanized and explains that dehumanization is a distortion of one person or group being more fully human and another being less fully human (Freire, 2000, p.44). Returning to one of my claims from my close reading of *Papers, Please* (2013), it is important to acknowledge that oppressors can also be oppressed, and therefore those who are acting as dehumanizers can also in turn be dehumanized. Playing as a border control officer in *Papers, Please* (2013) offers a good example of how one is capable of dehumanizing others while also being dehumanized themselves by those holding a higher level of power. Freire goes on to express that because of this distortion,

being viewed as less human will lead those who are oppressed to struggle against those who oppress them, and rather than become oppressors themselves, the oppressed must liberate themselves and their oppressors (Freire, 2000, p.44) on the basis that they have a deeper understanding of the negative effects of oppression and better understand the necessity for liberation (Freire, 2000, p.45).

Crenshaw's framework of intersectionality should also be discussed in the definition of oppression and how it works. She coined the term intersectionality in 1989 to describe the way that intersecting and overlapping identities can result in differing levels of oppression and privilege (Crenshaw, 1989). Kumashiro argues that those who experience oppression come from historically marginalized groups (Kumashiro, 2000) such as people who are racial or gender minorities, disabled people, and queer people. However, we cannot assume that someone is *just* disabled, or *just* gay, or *just* Black. They may have other identities that affect the way they experience oppression in society. For example, a person who is racialized and disabled may experience systemic oppression far differently than someone who is racialized and able-bodied. I believe that for my research it is necessary to keep intersectionality in mind when analyzing and discussing oppression and strategies for anti-oppression.

My understanding of oppression is informed by the literature I have had the opportunity to engage with and is only partially informed by my own personal experience. I do belong to marginalized communities and have intersecting identities that shape my experience with oppression and the world, but my experiences with oppression (or lack thereof) have not been the same as peers of mine who hold similar identities, as I do not outwardly appear to others as belonging to these communities. I understand oppression to be different forms of harm that are perpetuated by imbalances of power between different social groups, and I certainly hold the view

that intersectionality (Crenshaw, 1989) absolutely must be considered when discussing oppression. It is of the highest importance to acknowledge that oppression looks different from person-to-person because of their intersecting identities, although I also understand that there are limitations and weaknesses to this approach. Purdie-Vaughns & Eibach highlight what they have termed as "intersectional invisibility" as being one distinct disadvantage of applying an intersectional lens (Purdie-Vaughns & Eibach, 2008). What they hypothesize is that possessing multiple subordinate-group identities has the potential to render an individual as invisible in relation to those with a single subordinate-group identity on the basis that people with multiple subordinate-group identities do not fit the prototypes of their respective individual identity groups (Purdie-Vaughns & Eibach, 2008). Although I deem an intersectional lens to be necessary when discussing oppression and what the effects of oppression can be, it is also important to consider that individual identities may be erased in this process, and therefore it is necessary to consider how I am interpreting oppression and anti-oppressive measures on a situational basis (i.e. is this proposed method of anti-oppression going to contribute to intersectional invisibility?)

3.1.3 What does oppression in education look like?

Each author this research is informed by has a different perspective on what oppression in education looks like. Although each author's own understanding of oppression in education is influenced by their own experiences and the literature they have engaged with, and therefore may differ slightly, there are some solid points of consensus as to what oppression in education can look like.

Warren's work addresses what she calls deficit constructs, or deficit thinking, and explains that "deficit thinking is the belief that traits inherent to particular students are responsible for their poor performance in school" (Warren, 2023). She goes on to state that these deficit constructs are

rooted in damage-centered narratives that influence how students are treated within schools and impact the decision-making of their educators (Warren, 2023). She also explains that "people reinforce damage-centered narratives by repeating them and seeking confirming evidence" (Warren, 2023). Similarly, Kumashiro details one of the conceptualizations of oppression in schools as assumptions about and expectations for those who are Othered in schools (especially by educators and staff) that influence how the Othered student(s) is/are treated (Kumashiro, 2000, p.27). Colgan's understanding of how oppression takes place also suggests that educators are unaware of their personal attitudes and preconceived biases about children and their families based on cultural, ethnic, religious and linguistic differences, and that these attitudes and biases do in fact contribute to educational oppression (Colgan, 2022). From Warren's, Kumashiro's, and Colgan's respective research we can see that part of where oppression in education comes from is from the forms of prejudice that educators espouse, even if they are unaware of their attitudes, beliefs and biases about marginalized students and their families.

Kumashiro also describes oppression taking place in schools in the form of actions by peers, teachers or staff, and as inactions by educators, administrators and politicians (Kumashiro, 2000, p.26). He explains that these actions taken by peers can include harassment, discrimination, verbal and physical violence, and exclusion towards the Other (Kumashiro, 2000, p.26). Inactions by educators, however, can include a lack of attention given by an educator to marginalized groups of students and in turn too much of their attention to dominant groups (Kumashiro, 2000, p.27). Administrators and politicians can also cause harm with their actions and inactions. For example, research has highlighted the substandard and unsafe conditions of schools serving marginalized communities (Kumashiro, 2000, p.27). Another very recent example is Ron DeSantis signing the "Don't Say Gay" bill in Florida, which bans public school teachers from holding classroom

discussion and instruction about gender identities or sexual orientations (Diaz, 2022). This law also requires educators to inform students' parents of their sexuality or gender identity without their consent, putting them at risk within unsupportive home environments. According to The Trevor Project, 2SLGBTQIA+ youth face a much higher risk of suicide than their heterosexual and cisgender peers, and when these youth are given access to spaces that affirm their sexuality or gender identity, they report lower suicide attempt rates (The Trevor Project, 2023). The "Don't Say Gay" bill has potential to do great harm to students and contribute to further oppression within school environments, and this form of oppression comes directly from politicians in this case. Similar laws have been passed in other states as well, including Alabama (Alfonseca, 2022), Arizona (Towle, 2019), Utah (Harrie, 2017) and Texas (Levine, 2020).

To conclude this section, there are numerous ways in which oppression can manifest in education, such as through the deficit thinking of educators and assumptions they may have about marginalized students (Warren, 2023; Kumashiro, 2000), a lack of awareness of one's preconceived biases (Colgan, 2022), through actions taken by educators and other students (Kumashiro, 2000) and through actions and inactions by administrators and politicians (Kumashiro, 2000).

3.2 Anti-Oppressive Education

3.2.1 Theories for anti-oppressive education

After exploring theories of what oppression looks like and who the likely targets of systemic oppression are, I will be discussing some theories for anti-oppressive education.

I mentioned Warren's work in the previous chapter, which intends to address what she refers to as "deficit constructs" or "deficit thinking" (Warren, 2023). Through her study, Warren found

that when interacting with counter-narratives in classrooms with students, teachers were able to draw connections between characters in these narratives and their own students, and students were able to communicate to their teachers the impact and importance of the narrative content and their own personal connections to it, and producing pedagogically productive talk (Warren, 2023).

Why is Warren's proposed use of counter-narratives to move away from damage-centered narratives so important? Kumashiro stresses the importance of education about the Other in *Toward a Theory of Anti-Oppressive Education* (2000). He explains that it is necessary for educators to not only focus on the treatment of the Other, but not to turn a blind eye to other ways in which oppression plays out in schools, one of which includes what knowledge students and educators have of the Other (Kumashiro, 2000, p.31). He explains that knowledge about the Other is generally known by inference, is based on stereotypes and/or myths, and therefore is partial and biased (Kumashiro, 2000, p.31-32). In turn, knowledge that the Other may have about dominant groups may also be partial, biased, and based on stereotypes. This partial knowledge can be gained both inside and outside of schools, and through the latter exposure, students are generally learning from stereotypical and prejudiced portrayals of the other in the media and through popular culture (Kumashiro, 2000, p.32). To combat this, it is suggested that the curriculum needs to include specific units on the Other, and to integrate Otherness throughout the curriculum (Kumashiro, 2000, p.32-33). These strategies have the potential to: (1) work against the notion or assumption that education about the Other can take place in just one lesson, (2) work against the tendencies to treat different social groups as mutually exclusive, and (3) provide opportunities for educators to address the ways these identities and forms of oppression can intersect with one another (Kumashiro, 2000, p.33).

Aside from education about the Other, Kumashiro proposes other practices that in theory have the potential to be anti-oppressive in schools (Kumashiro, 2000). He argues that "the entire school needs to *be* a space that is *for* students that welcomes, educates, and addresses the needs of the Other" (Kumashiro, 2000, p.28). Separately from being a safe space that welcomes the Other, Kumashiro expresses that schools also must provide supportive, empowering spaces where students who experience oppression can go to receive specific support, advocacy, and resources (Kumashiro, 2000, p.28). I agree with these arguments and believe that the experiences of myself and my peers could have differed drastically if the public schools we attended at both elementary and secondary levels provided these kinds of spaces and supports. Many of my peers did not receive this kind of support outside of school and would have benefited greatly from accessible resources through the schools we attended. From my experience, the responsibility to support and provide identity-specific resources for students fell mostly on individual educators, and not all of them had the capacity to provide this kind of support that should have been the responsibility of the school and the school board in the first place. Finally, Kumashiro (2000) suggests that educators "not only need to acknowledge the diversity among their students, but also to embrace these differences and to treat their students as raced, gendered, sexualized, and classed individuals" (p.28). This is not to say that educators should define students solely based on their identities as this could prove detrimental to strip them of their individuality and distinct lived experiences, but that they should adjust their teaching according to the student population and acknowledge students' specific needs in an educational context. Kumashiro provides examples of how educators can effectively embrace and acknowledge the different identities of their students, including incorporating students' home cultures into their pedagogies and classrooms, teaching in a way that challenges sexism and heterosexism, acknowledging that a

student's class background has bearings on how they engage with schooling and their peers, and acknowledging that students do bring their sexualities and gender identities into school (Kumashiro, 2000, p.28-29).

From this section, we can see that there are a number of theories of how oppression can be addressed in schools that have the potential to be effective anti-oppressive practices. The purpose of the following section (3.2.2) is to analyze and discuss publicly available policies that detail the anti-oppressive efforts of a selection of some of Ontario's public school boards as well as universities and colleges, and to explore some of the differences and similarities between theory and practice.

3.2.2 What anti-oppressive policies are in place? My findings

In this section, I address some of the anti-oppressive policies in place in different public school boards, colleges, and universities in Ontario and analyze how similar/dissimilar theory is from practice in regards to anti-oppressive education. For this analysis, I have selected four Ontario public school boards, three Ontario colleges, and four Ontario universities. All selected schools are represented in the following table.

Selected Ontario Public School Boards	**Selected Ontario Universities**	**Selected Ontario Colleges**
Waterloo Region District School Board	Wilfrid Laurier University	Conestoga College
Thames Valley District School Board	University of Waterloo	Mohawk College
York District School Board	University of Guelph	Fanshawe College

Toronto District School Board	Toronto Metropolitan University	

What I looked for when selecting these post-secondary institutions and public school boards was publicly available documents that outline their commitments to equity, diversity, inclusion, and accessibility, and maintaining institutions that hold up these policies.

Beginning with the public school boards, I was able to find several policy documents on each board's website that included policies on equity and inclusion, accessibility, and accommodation. Additionally, the Toronto District School Board's policy on gender-based violence will be discussed. All policies selected from public school boards are represented in the table below.

Selected Public School Boards	**Policies on Accessibility**	**Policies on Equity, Diversity, and Inclusion**	**Policies on Gender-Based Violence**
Waterloo Region District School Board	Policy #1010: Accessibility for Ontarians with Disabilities (2021)	Policy # 1008: Equity and Inclusion (2019)	N/A
Thames Valley District School Board	Policy #5012: Accessibility Standards for	Policy #2022: Equity and Inclusive Education (2018)	N/A

	Customer Service (2021)		
York District School Board	Policy #407.0: Accessibility (2020)	Policy #261.0: Equity and Inclusivity (2022)	N/A
Toronto District School Board	Policy #P069: Accessibility (2023)	Policy # P037: Equity (2018)	Policy #P071: Gender-Based Violence (2010)

What I found is that all of the school boards' equity and inclusion policies express their commitment to eliminating discrimination in schools, and that their definition of discrimination is informed by Ontario's Equity and Inclusive Education Strategy, as well as the Ontario Ministry of Education's Policy/Program Memoranda PPM:19 Developing and Implementing Equity and Inclusive Education Policies in Ontario Schools, and decisions of the Board of Trustees (Toronto District School Board, 2018; Thames Valley District School Board, 2018 Waterloo Region District School Board, 2019; York District School Board, 2022). Each school board lists their areas of focus, which are heavily similar to one another and include areas such as school-community relationships, inclusive curriculum and assessment practices, shared and committed leadership, accountability and transparency, accommodation of religious observance, and school climate and the prevention of discrimination and harassment (Toronto District School Board, 2018; Thames Valley District School Board, 2018; Waterloo Region District School Board, 2019; York District School Board, 2022).

In terms of accessibility practices, each school board complies with and follows the four principles of the Accessibility for Ontarians with Disabilities Act (2005) per their policies (Toronto District School Board, 2023; Thames Valley District School Board, 2021; Waterloo Region District School Board, 2021; York District School Board, 2020). Other Ontario regulations such as the Accessibility Standard for Customer Service and Integrated Accessibility Standards, Ontario Regulation 191/11 are also followed by the Waterloo Region District School Board (2021), the Thames Valley District School Board (2021), and the Toronto District School Board (2023) according to their respective policies.

I want to focus on the Toronto District School Board's gender-based violence policy. I could not find another policy similar to this one from any of the other selected school boards, and I find myself questioning why. Essentially, the Toronto District School Board's gender-based violence policy outlines their commitment to eliminating gender-based violence in their schools and defines gender-based violence as any aggressive action that threatens the safety of, causes harm (physical, emotional, social) to, and denigrates a person because of their gender identity, perceived gender, sexuality, biological sex, or sexual behaviour (Toronto District School Board, 2010). Their given examples of gender-based violence also include homophobia, transphobia, and harmful gender-based social practices (Toronto District School Board, 2010). I find it surprising that I could not find another similar policy from any of the other school boards and was discouraged that this information is likely lumped in with other policies and not given its own deserved attention and space, especially since this particular policy has been in place for well over a decade.

Moving on to the policies I found for the selected post-secondary institutions, I noticed differences between the types of policies public school boards published on their websites and

the policies universities and colleges published. I found that they were focused far more on academics, expected student behaviour, and workplace policies for faculty and staff. Despite this, I was able to find a select few policies that relate to anti-oppression at each institution. Policies selected for post-secondary institutions are represented in the table below.

Selected Post-Secondary Institutions	**Policies on Accessibility and Accommodation**	**Policies on Anti-Racism**	**Policies on Gendered and Sexual Violence**	**Other**
Wilfrid Laurier University	Policy #2.3 Academic Accommodation of Students with Disabilities (2016)	N/A	Policy #12.4 Gendered and Sexual Violence (2023)	N/A
University of Waterloo	Policy #58 Accessibility (2020)	N/A	N/A	N/A
University of Guelph	N/A	Policy #1.7 Anti-Racism Policy Statement (2022)	Policy #1.4 Sexual Violence Policy (2022)	N/A

Toronto Metropolitan University	Policy #159 Academic Accommodation of Students with Disabilities (2023)	N/A	N/A	Policy #61 Student Code of Non-Academic Conduct (2021)
Conestoga College	Student Accommodation Policy (2020)	N/A	N/A	Student Rights and Responsibilities Policy
Mohawk College	Policy # SS-3201-2013 Academic Accommodation for Students with Disabilities (2013)	N/A	N/A	N/A
Fanshawe College	N/A	N/A	N/A	Policy # A130 Student Code of Conduct (2019)

My findings were that each of the selected post-secondary institutions had policies on accessibility and academic accommodations for students with disabilities except for Fanshawe college (Conestoga College, 2020; Mohawk College, 2013; Toronto Metropolitan University, 2023; University of Guelph, 2016; University of Waterloo, 2020; Wilfrid Laurier University,

2016). Although they are lacking in policy documents on the matter, Fanshawe do have separate pages on their website detailing their commitment to accessibility and their accessibility services. There were some schools that have policies on their websites that others do not. Wilfrid Laurier University and the University of Guelph were the only two institutions for which I could locate policies on gendered and sexual violence (Wilfrid Laurier University, 2023; University of Guelph, 2023). Surprisingly, the University of Guelph was also the only school out of those selected for which I could find an anti-racism policy statement (University of Guelph, 2022). A lot of the information I was looking for on anti-discrimination/anti-oppression adjacent policies happened to be buried in some of the schools' student codes of conduct/student rights and responsibilities rather than available in the list of policies and procedures (Conestoga College, 2018; Fanshawe College, 2019; Toronto Metropolitan University, 2021).

It was more difficult to locate online information about university and college policies than public school board policies, which suggests that further work needs to be done in post-secondary institutions surrounding their commitments to maintaining anti-oppressive environments and practices. There is a gap between theories for anti-oppressive education and anti-oppressive policies found in some of Ontario's secondary and post-secondary schools. The theories for anti-oppressive education that I have discussed emphasize education for and about those who experience oppression (Kumashiro, 2000; Warren, 2023), and advocate providing spaces for marginalized groups to receive advocacy, support, and resources unique to their needs (Kumashiro, 2000), but this is not what is reflected in the policies I have reviewed. The public school boards focus more on the student experience overall more than post-secondary schools, the latter of which seem to focus more on academic performance – keeping in mind that my

impression is partially informed by my personal experience, and largely informed by the policy documents I have reviewed.

Chapter 4: Gamification and Game-Based Learning

4.1 Gamification

4.1.1 What is Gamification?

Before jumping into an in-depth discussion on how gamification could be an effective anti-oppressive educational strategy, it is important to define what gamification is and provide some context so that readers without a background in game studies can have a deeper understanding of the practice and how it is applicable to anti-oppressive education. It is also necessary to provide information on the positive and negative aspects of anti-oppressive educational practice before theorizing how to best implement gamification as a method for anti-oppressive education.

Gamification involves the implementation of game elements in a non-game setting (Nicholson, 2012; Bogost, 2014; Walz & Deterding, 2014; Stott & Neustadter, 2013). Gamification is not restricted to educational settings and is commonly used by businesses and corporations to attract and keep customers and foster their participation as consumers of business products or services. A common way this is done is through reward systems like stamp cards, rewards points, and contests. Typically, gamification includes elements of gameplay such as a scoring system, a set of rules and boundaries, and a sense of competition (Nwogu, 2019; Erickson et al., 2020). Most of the time people experience or interact with a gamified activity, it is through a rewards or points-based system.

In classroom settings, gamification is still a developing practice (Dichev & Dicheva, 2017; Surendeleg et al., 2014), and game scholars are still doing research to determine how to best use it as an educational strategy to improve the learning experiences of students. Similarly,

to other educational strategies, it is important to understand the benefits and drawbacks of gamification to maximize its potential.

4.1.2 Benefits of gamification in education

Existing research suggests that gamified learning has many benefits including increasing student engagement and motivation, which in turn reflects student achievement (Davis et al., 2018). Other benefits include students feeling more comfortable in gaming/gamified environments, and they may feel a sense of ownership over their own learning (Nwogu, 2019). For example, Davis et al. asked their study participants whether they would be more likely to enroll in a class knowing the classroom activities were gamified and received a positive response from over half of the participants surveyed (Davis et al., 2018, p.497). Other participants remarked that the interactive aspects kept them interested and willing to participate and that the gamified course format was a good way to keep track of how they were doing in the class (Davis et al., 2018, p.497).

When assessing all the positives of gamification, there are specific benefits that are conducive to fostering anti-oppressive learning environments including feeling more comfortable in the learning environment and being more engaged and motivated to learn. Along with increased comfort in the classroom environment, student motivation and lesson engagement, feeling a sense of control and ownership over one's learning is one of the most impactful benefits when considering gamification's effect on anti-oppressive education, and could make significant improvements on students' learning experiences. Giving students the opportunity to make their own choices and receive feedback allows for experimentation, exploration, and the opportunity to take risks in a safe environment where they won't suffer any real-world consequences could have the potential to enhance learning. It would be difficult to find a non-gamified learning

activity that can provide this same level of student-led learning. Aside from the aforementioned potential anti-oppressive benefits, gamification is a type of activity that is adaptable and customizable. Gamified learning activities can be adjusted the suit the needs of the individual according to accessibility needs, and this aspect of gamification has the potential to foster equity and inclusion in the classroom, which, along with accessibility, I consider to be pillars of anti-oppression in schools. Customizability in gamification is not limited to adjusting gameplay for accommodation purposes, however. A hypothetical gamified activity that allows for students to create a customized character to play as has the potential to provide representation for students in the sense that students can express themselves and create a character that shares their unique and complex intersecting identities.

4.1.3 Drawbacks

While there are certainly benefits to using gamification in an educational setting, there are also downsides. When analyzing some of the more critical responses to gamification, the number one issue game scholars have lies within the common structure of gamification. The typical methods of implementing a points and/or rewards-based system are not effective for meaningful gamification (Nicholson, 2013; Robertson, 2010) and do not have much to do with the parts of a game that are cognitively, socially, and emotionally enriching (Robertson, 2010). In the long term, the motivating and engaging effects of this type of rewards-based system can be equally demotivating for students (Nicholson, 2013). Marc Fabian Buck has a similar problem with gamification as an educational practice, but not for the reason of losing engagement with students. In his critique of rewards/points-based gamification, he critiques the teacher's practice of replacing pedagogical instruction with games, and notes that the problem becomes apparent

when games are used solely with the purpose of motivating students rather than encouraging critical reflection in their learning (Buck, 2017).

To eliminate the possibility of negative effects of gamification on the learning experience, the consensus is that what is typical of gamification (the points-based/rewards-based systems) is the part that isn't working, i.e., the potential to demotivate could have negative effects and defeat the purpose of the activity. It is necessary for educators and designers to be creative and leave out the need to motivate students strictly through a reward system when developing a gamified learning activity or course by implementing game elements that allow for meaningful interactions such as player choices that provide students with feedback and directly impact further play (Robertson, 2010; Nicholson, 2012) and focusing on play itself (Nicholson, 2012). This could be done alongside a rewards-based system, or by forgoing one altogether and using different elements of gameplay such as rich narrative and providing students with opportunities for decision-making. There are scholars who believe that a rewards-based system is necessary for motivation and engagement, however. Tom Chatfield argues that rewarding students for effort is a good approach for motivating and engaging students, but also provides six other examples of how to do so (Chatfield, 2010). Chatfield's other suggested examples include using an experience system to measure progress, having multiple long and short-term aims, providing clear, rapid, and frequent feedback, introducing uncertainty, providing moments of enhanced attention, and collaboration with other people (Chatfield, 2010). Put differently, educators should not rely solely on a point or rewards-based system to provide the kind of meaningful, engaging learning experiences that gamification has to offer. I elaborate on how to create meaningful gamification experiences next.

4.1.4 How to create meaningful gamification

After discussing some of the benefits and drawbacks of gamification in education, the next step is exploring how to combat some of these drawbacks. One possible productive avenue is “meaningful gamification” (Nicholson, 2012). Nicholson describes player-generated content and user-centered design as being paramount to meaningful gamification experiences (Nicholson, 2012), and explains that meaningful gamification is accomplished through implementing game elements that focus on play, encourage students to reflect, and that provide information and choice (Nicholson, 2013). Designing gamified content with the student-player at the forefront and allowing them to play a part in the design of their own experience gives them that sense of control over their learning and allows them to engage in the lesson/class in a way that suits their individual needs or their needs as a group. An example of how this would work could be allowing students to make decisions about short-term and long-term goals they wish to work towards. Robertson’s argument for meaningful gamification is that meaningful choices are the answer to the issue of just applying a rewards or points-based system and calling the subsequent activity gamification. She explains that “games give their players meaningful choices that meaningfully impact on the world of the game” (Robertson, 2010). She goes on to elaborate by saying that “Deciding to dump my sniper rifle for an energy sword[2] is a meaningful choice. It’s going to change how I move, who I fight, when I run. It’s literally going to change whether I live or die” (Robertson, 2010). Taking these approaches when designing gamified lessons or

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[2] Robertson is referring to a weapon specific to the Halo series, which are a series of first-person-shooter digital games. The energy sword first became available to players in Halo 2 (Bungie, 2004). Often, weapon choice has a direct impact on player movement and combat. Another example of weapon choice having a direct impact on how the player is able to interact with the game is switching to carrying a knife rather than a gun while in Counter-Strike: Global Offensive (Valve Corporation & Hidden Path Entertainment, 2012) in order to move more quickly.

classes can eliminate the negative effects that a typical reward-based system can have during long-term use.

One of the biggest benefits of using meaningful gamification in anti-oppressive education specifically is that these types of activities can be designed to fit accessibility needs on a person-to-person basis, although this is not to say that other non-game activities lack the ability to be adjusted and modified to fit accessibility needs on a student-by-student or classroom basis. Accessibility and proper accommodation should be a given when working to promote and maintain anti oppression in both learning and in the educational environment itself. There are common educational strategies in place that simply do not work for every individual on an accessibility level, myself included. I can remember learning math in elementary school and being docked marks on tests for solving equations in a way that made sense to me rather than with the formula that the teacher had taught us. Although I had come up with the correct answer, I was punished for working in a way that better suited my thought processes and learning capabilities, and was ultimately demotivated and disengaged with mathematics when this became a recurring issue because my brain simply could not work or think in the way that my educators required it to. From my experience, students (including myself) have much more potential to be motivated to learn and to engage more deeply with content when they are able to make adjustments and receive accommodations to suit their individual accessibility needs in the classroom. User-centered, meaningful gamification (Nicholson, 2012) allows for these types of adjustments and accommodations.

4.2 Game-Based Learning

4.2.1 What is game-based learning?

"Games have emerged as the media paradigm of the twenty-first century, surpassing film and television in popularity; they have the power to shape work, learning, health care and more" (Flanagan & Nissenbaum, 2016, pg. 3). Due to this increase in popularity of (digital) games as mainstream entertainment, the question arises of how to actually use games as education (Plass et al., 2015). Many children attending elementary school in the early 2000's likely remember exploring the website *Coolmath Games* (1997) during computer lab periods and trying their hand at games that test their skills with numbers, puzzles, logic, trivia, strategy, and more. Since then, game-based learning has come a long way, and even though *Bloxorz* (2007) still holds up as a great puzzle game, there is a wide variety of educational games to choose from now that the industry has expanded. This section examines game-based learning and some of its benefits including increased student engagement and providing opportunities for self-directed learning, as well as thoughts on how educators and designers can create meaningful game-based learning experiences for their students. This section is understood through the discussion of Plass, Homer and Kinzer's design framework outlining the four foundations of game-based learning (Plass et al., 2015).

While gamification is the practice of implementing game elements to non-game activities such as standardized testing, popcorn-style class reading where students take turns reading passages and selecting the next student who will read, and spelling and vocabulary lessons in the context of gamifying education with a general goal of increasing motivation to learn and student engagement, game-based learning involves using educational games with a distinct learning outcome to teach a specific lesson (Plass et al., 2015). The research on game-based learning that

informs this research generally focuses on digital games, but I contend that the benefits of game-based learning are not limited to digital games (Plass et al., 2015) but can also include analog (tabletop games such as card games, board games, etc.) games. It is possible for both analog and digital games with a clear learning outcome to be used as educational tools. Game-based learning is not restricted to any particular learning subject, nor is it restricted to any one game genre (Plass et al., 2015). This lack of restriction leaves many possibilities for designers to continue developing unique, informative, and engaging educational games for all types of learners at all levels of formal education.

Some examples of educational games than span across different genres, themes, and learning subjects (with intended audiences of 14+) include *Liyla & the Shadows of War* (Abuiedeh, 2016), *Parable of the Polygons* (Hart & Case, 2014), as well as *Papers, Please* (Pope, 2013), and *SPENT* (McKinney, 2011), which were discussed in-depth in chapter 2. *Liyla & the Shadows of War* is a crossover between a platformer and a choose-your-own-adventure style game in which players follow the struggles of a Palestinian family during the 2014 Gaza War and their attempts to survive. The game's developer, Rasheed Abueideh, intended for the game to teach about the experience of war and its effects on children, and to raise awareness about the situation in Palestine. *Parable of the Polygons* is an interactive narrative. Vi Hart and Nicky Case developed this game to teach about segregation and racial bias through the simple mechanic of moving shapes around to make them happier (what makes them unhappy is if less than a third of their neighbors are the same shape as themselves) (Singal, 2014).

4.2.2 Benefits of game-based learning in education

There are many benefits to using game-based learning as a teaching tool, just as there are for gamification. However, since these practices are quite different in nature, it is only logical for

some of the benefits to differ between the two. Similarly to gamification, game-based learning can also increase student engagement with the learning material. The motivational aspect of games, according to Plass, Homer and Kinzer, is one of their most frequently cited beneficial characteristics (Plass et al., 2015). As well as increasing student engagement and motivation to learn, implementing game-based learning also turns the classroom into a gaming environment, which in turn can make students feel much more comfortable in their learning experience (Nwogu, 2019). Finally, game-based learning also can give students more control and ownership over their learning experiences (Nwogu, 2019) by providing opportunities for self-regulated learning where the player may set their own goals and objectives for their gameplay experience (Plass et al., 2015; Toh & Kirschner, 2020). While game-based learning and gamification do share these benefits, there are unique qualities that game-based learning has where gamification falls short.

Previously it was mentioned that game-based learning is not restricted to just one subject, and it can be used to teach across a large array of different areas of study. This is a significant benefit of game-based learning. Studies have shown it to be an effective tool for teaching programming principles and practice (Hainey et al., 2022; Jemmali et al., 2018) as well as for teaching about research ethics within STEM subjects (Nardo & Gaydos, 2021), and for teaching about human rights and foreign policy (Robinson & Goodridge, 2021). Not only is game-based learning not restricted to one learning subject, but it is also not restricted to any one game genre (Plass et al., 2015). Educational games could fall under the categories of roleplaying games, simulation games, interactive narratives, MMOs, puzzle games, virtual escape rooms, etc. (Plass et al., 2015). It is important to note, however, that one genre of game may be more appropriate than the next depending on the intended learning content. One must keep in mind that because

educational games can cover all of these genres, one cannot assume that results from research obtained by studying games from one specific genre can be applied to a different genre (Plass et al., 2015)

Plass, Homer and Kinzer also present the argument that game-based learning allows for graceful failure (Plass et al., 2015, p.21), and that the low consequences that come with failure in games encourages exploration, risk taking, and trying new things (Plass et al., 2015, p. 21). Without a safe space to experience failure and low consequences, students may not step outside of their comfort zone with their learning to have new experiences, which can seem paradoxical in the sense that students are leaving their own personal realm of safety and comfort to explore and take risks – within the safe environment of a game. Providing students with a game environment in which they can simulate the outcomes of different decisions and receive feedback could have the potential to nudge students who may be a little more reserved and unwilling to take risks to explore in a much more comfortable and controlled environment. A hypothetical example that comes to mind could be aviation students experimenting with flight and aircraft controls through a flight simulator before ever taking control of an aircraft in real life, allowing them to experience failure and make mistakes without the risk of injury or death that could come with making similar mistakes in a real aircraft.

Lastly, another very valuable benefit of game-based learning is that games can be adaptive, personalized, or customizable by the player (Plass et al., 2015, p.260-261). This allows for games to engage players on a level that they can relate to, or that reflects their own specific situation, and for players to be able to adjust the game to fit their individual accessibility needs, level of prior knowledge about the learning subject, game difficulty, etc. I believe that designing a game (or choosing a game as an educator) that allows for this level of customization from the

players/students, is also promoting accessibility, which, in turn, furthers anti-oppression in schools. The concepts of accessibility and anti-oppressive education have been mentioned briefly thus far, but will be elaborated on in much more depth later in this paper. A good game is customizable and adaptive, allowing players to participate at their own speed and pace in a way that works best for them. Examples of ways to make games more customizable and adaptive to the individual (as well as game features for educators to look for) could include adjustable difficulty modes, and accessibility settings (closed captioning, dictation, volume adjustment, compatibility with different types of controllers/devices).

4.2.3 Drawbacks of game-based learning

The most prominent drawback of game-based learning is that it has the potential to amount to what Amy Bruckman describes as "chocolate-dipped broccoli" (p.75). Her argument is that many attempts to make digital software both fun and educational fall short and end up being neither (Bruckman, 1999). Instead of finding a way to make learning itself enjoyable, designers tend to just apply a game idea or mechanic overtop an educational core, which results in a lack of engagement with the subject material, and often, the game elements have no relation to the learning content (Bruckman, 1999). To move away from educational games that are nothing more than chocolate-covered broccoli, Bruckman proposes five guidelines for a more meaningful game-based learning experience:

"1. Make the learning inherently fun—don't sugar-coat an unpleasant educational core.

2. Put learning in context.

3. Open-ended tasks are more engaging and promote creativity.

4. Learning by making things is one useful approach that is both fun and educational.

5. Whenever possible, provide social support for learning" (p.78).

Alongside the potential drawback for a game-based learning activity to be chocolate-covered broccoli, Jääskä and Aaltonen describe some challenges of game-based learning for both students and educators. They claim that challenges for educators can result in negative consequences for students, and these challenges include a lack of resources to prepare game-based learning classes, potential resistance from students, and a lack of knowledge surrounding the suitability of the method of game-based learning to teach the intended subject (Jääskä & Aaltonen, 2022). Regarding challenges for students, they explain that game-based learning could foster discomfort through competition, visibility, and comparison of game results. They also claim that students may see game-based learning classes as more demanding than traditional lessons. Lastly, they claim that game-based learning may be time consuming, and it is difficult to predict the possible durations of play sessions. I would argue that this drawback could be avoided by educators thoroughly researching selected games as well as playing them themselves to determine on average how long a play session can be expected to take.

When examining both the benefits and drawbacks of game-based learning activities, I would argue that the potential benefits outweigh the potential drawbacks, and there are ways to combat some of the negative consequences of game-based learning that Bruckman (1999) and Jääskä and Aaltonen (2022) present.

4.2.4 Meaningful game-based learning for designers and educators

There are several issues to consider when selecting a game to use as a game-based learning activity or developing an educational game as a designer. Plass and colleagues present a design framework that outlines four foundations of game-based learning: (1) cognitive

engagement, (2) behavioural or motivational engagement, (3) social/cultural engagement, and (4) affective engagement (Plass et al., 2015, p.263). Firstly, cognitive engagement can be facilitated by meaningful interactions, scaffolding and feedback, situatedness of learning, gestures and movement, and interactive design (Plass et al., 2015, p.263). Behavioural or motivational engagement has everything to do with the allowance for graceful failure as well as elements of intrinsic motivation and adaptivity (Plass et al., 2015, p.268). To design to promote sociocultural engagement, social context, social agency, social interactions, relatedness and participatory learning must be considered (Plass et al., 2015, p.263). Lastly the affective perspective in game-based learning is focused on how the design of the game environment impacts player emotions, their personal beliefs and attitudes (Plass et al., 2015, p.269). Plass and colleagues add that they believe omitting any one of these foundations of game-based learning would result in an incomplete potential for learning – that game-based learning should include all of the aforementioned foundations (cognitive engagement, behavioural or motivational engagement, sociocultural engagement, and affective engagement) to be effective learning tools.

Taking the above into consideration, game designers interested in developing games intended for game-based learning should ensure that they are balancing each of these foundations of game-based learning in their work, and educators should evaluate each of their potential choices for an educational game based on whether they include these foundations of game-based learning. This should help to determine whether the game will be effective as an educational game/game-based learning activity. When I look at *Papers, Please* (2013) and *SPENT* (2011) and compare them to the criteria above, these two games do meet these criteria, and both games include all four foundations of game-based learning that Plass and colleagues present (Plass et al., 2015).

Chapter 5: Discussion

5.1 What role do games and gamified learning play in anti-oppressive education?

After reviewing *Papers, Please* (2013) and *SPENT* (2011) as potential beneficial game-based learning practices, as well as discussing definitions of oppression and anti-oppressive education, the opportunity for deeper discussion arises: what roles can game-based learning and gamified learning play in anti-oppressive education? There are several ways that gamification and game-based learning activities have the potential to be beneficial as anti-oppressive education strategies, but I want to stress that these practices are *not a definitive solution to fighting oppressive education*. Gamification and game-based learning are powerful tools, but on their own, they are not the sole solution to ending oppression in schools. My approach to imagining gamification and game-based learning as potential anti-oppressive educational practices is that they would act simply as aids that can facilitate a wider net of anti-oppressive practices. Other practices and methods alongside game-based learning and gamification would be necessary.

Primarily, my approach to applying gamification and game-based learning as strategies for anti-oppressive education focuses on how games and gamified activities change the classroom environment, the attitude towards learning, and engagement with the learning content, as well as how they can promote equity, diversity, inclusion, and accessibility (commonly abbreviated to EDIA). Additionally, games can benefit anti-oppression through teaching about systems of oppression and their effects on different communities and people. (*Papers Please* (2013) and *SPENT* (2011) are both great examples of this), but for the purpose of this specific discussion I would like to focus on the aforementioned potential benefits.

Benefit #1. Benefits of Agency and Ownership of Learning

One of the most important beneficial elements of both gamification and game-based learning, is their ability to give students control and ownership over their learning (Nwogu, 2019). This particular benefit of both practices stands out to me as beneficial to anti-oppression because it has the potential to shift imbalances of power that are inherent and common within educational environments. Buck (2017) sees this ability as a negative, however. He writes: "A professional ethos formulated as such is problematic in multiple respects: firstly, the difference of power between adults and children or adolescents, between teachers and students, is systematically denied or re-interpreted" (Buck, 2017). In this context he is speaking specifically about gamification. What Buck sees as negative regarding gamification's ability to change that difference of power between educators and students by allowing for learning that is independent from the educator, and educators' roles moving towards more of a facilitating/supervising role during these activities, I interpret as positive. I contend that shifting away from this imbalance of power by giving students more agency over their learning via gamified or game-based learning methods is just one way that these practices can contribute to anti-oppression in education.

Benefit #2: Environmental Benefits

As mentioned previously, another benefit that both gamification and game-based learning share is that they have the ability to change the environment that the learning takes place in and to make it a much more comfortable place for students (Nwogu, 2019). From my own experience in both learning environments that incorporate gamification and game-based learning, and learning environments that do not, learning is usually more enjoyable in the former classrooms. As a child, myself and my peers learned through play, and many of us played digital and analog games both in and outside of school. I would argue that this familiarity with games could be one aspect of how student comfort could be increased during gamified and game-based learning

activities. Game worlds also introduce a new set of rules and boundaries to players that are different from rules and boundaries in the world outside of the game, changing how the environment *feels*. This feeling of entering a new world when participating in a game is often referred to as the Magic Circle (Juul, 2009). One could argue that the Magic Circle may be the biggest element of playing a game that contributes to student comfort, along with previous gaming experience and familiarity with learning through play. Feeling more comfortable in one's learning environment through games can also increase student participation and engagement with the lesson, which is another benefit of both practices (Childers, 2020; Kiener et al., 2014; Martin Public Seating, 2021).

Promoting equity, diversity, inclusion, and accessibility (EDIA) is highly important when considering games and gamification as anti-oppressive, and I address how both game-based learning and gamification can promote EDIA. One productive way is for educators to design their own gamified activities and/or to have a careful selection process when choosing a digital or analog game for a game-based learning activity, as not all educators have the knowledge necessary to design game-based activities. For educators that wish to design their own gamified and game-based learning activities to bypass their lack of expertise and background knowledge on the game design and development process, I would recommend beginning by engaging with appropriate literature. My recommendations include Tracy Fullerton's *Game Design Workshop: A Playcentric Approach to Creating Innovative Games* (2014), Mary Flanagan and Helen Nissenbaum's *Values at Play in Digital Games* (2016), and Yu-kai Chou's *Actionable Gamification: Beyond Points, Badges, and Leaderboards* (2015). For either designing one's own gamified activities and educational games or selecting a pre-existing game, there are a series of questions that an educator may want to ask themselves when designing a gamified activity or

choosing a game to promote and maintain an equitable, inclusive, diverse, and accessible learning environment/experience. For gamified activities, some of the questions an educator could ask themselves are:

(1) Is this activity able to be modified to an individual's accessibility needs so that everyone can participate?
(2) Is this activity age-appropriate?
(3) Is this activity going to allow students to express and embrace their individual and diverse experiences?

Very similar questions should be posed when selecting a digital or analog game. For *designers* of digital and analog games that are intended to be educational or have a learning outcome who wish for their games to be anti-oppressive and promoting of EDIA gaming experiences, I believe it is important to consider the following in the design and development processes:

(1) Is my game accessible for a wide variety of people's accommodation needs?
(2) Can I include customizable or different settings/rules/game modes to make my game more accessible?
(3) Does this game include diverse playable characters or character customization features?, and
(4) If the game includes representation of people from marginalized groups, is this representation accurate and respectful?

These are just some generic examples of considerations I would personally recommend educators and designers ask themselves when designing or selecting a game or gamified activity to use for an educational purpose to create an anti-oppressive educational environment. In terms

of accurate and respectful representation in games, I could not find any existing standards for evaluating the accuracy of representation of equity-deserving groups in games. Further questions that I would prompt designers to ask themselves regarding representation include:

(1) Do my equity-deserving characters have full and unique personalities and lives outside of their racial/sexual/gender/ethnic identities?

(2) Am I tokenizing my equity-deserving characters or including equity-deserving characters just to check off a box?

(3) Am I aware of my implicit biases that may affect how accurate and respectful the representation of this character is?

(4) Did I do enough in-depth research with the community I am trying to represent?

Another key benefit of gamification and game-based learning as anti-oppressive education strategies (where it applies) is that they can act as forms of representation. Felisa Ford writes that "one detail that is often overlooked but that can have a huge and long-lasting impact on creating an inclusive learning environment for all students is selecting content that represents our students" (Ford, 2022). Ford goes on to explain that students are often influenced by what they are seeing and reading on the internet (I would also claim that this statement also applies to any form of digital media that students have access to, including movies, games, television shows, etc.) and that when they see positive representation of somebody who they can relate to (someone that looks like them, talks like them, or comes from the same place they are from) it can build their confidence and can help other students become more understanding of other cultures and groups that they may have not had exposure to yet (Ford, 2022). Representation matters, and this is something that I tried to relay through my own digital game, *Obstacles* (2022). What I intended for this game was for players to feel represented and seen when they

looked at the lineup of playable characters. Not only did I want players to feel represented visually through my characters, but I wanted them to feel represented through the experiences and challenges of the characters as well. Some of these characters are affected by mental illness, poverty, cancer remission and recovery *along* with being racialized, and these are real things that real teenagers experience on a regular basis. Through *Obstacles* (2022), I wanted players to feel seen and represented even if it was just in a minor way. To avoid tokenization, I created these characters in a way that they are not solely defined by their racial identities or any subsequent challenges that they may face. Each character has their own unique personality, interests, goals, and hobbies that also shape who they are alongside their visible identities. I think that one of the best ways to show representation within a game aside from having a diverse (in race, sexuality, gender identity, ability, etc.) selection of both playable and non-playable characters is to offer character customization. Character customization is common across a wide variety of game genres, and it varies in terms of how detailed the customization process is. Games such as *Cyberpunk 2077* (CD Projekt Red, 2020) and *The Sims 4* (EA, 2014) allow for players to customize their character from their skin tone, body dimensions, and facial features all the way to what kinds of tattoos, piercings, makeup, and hair they could have. *The Sims 4* (2014) even goes so far as to allow for more than just physical customization, and players can assign aspirations and personality traits to their characters (more commonly referred to as sims in this context). More recent updates even include options for players to choose the sexual preferences, pronouns, and gender identity of their sims. However, I have not yet seen character customization options in a digital game I have encountered that allows for players to have their characters use mobility aids, hearing aids, or to have a disability. Character customization can also be seen in tabletop role-playing games such as *Dungeons and Dragons* (Arneson & Gygax,

1974), *The Burning Wheel* (Crane, 2002), and *GURPS* (Jackson, 1986). Character customization can and absolutely should be integrated into gamified activities that are intended to take place over an extended period of time (more than one session of the same activity).

The shift in game design and development over the last two decades has shown that video games can accomplish many things as a form of interactive digital media and can be more than just entertainment or leisure activities. They can also be tools for learning. This shift that I am referring to may suggest that games are moving away from a focus on core gameplay elements such as game mechanics, rewards systems, combat systems, and game progression, and increasingly emphasizing game content and narrative. Of course, gameplay does matter and has an impact on how players interact with games as a key element, but I find some of the more popular digital games from previous decades don't include rich and intriguing narrative, or characters with depth and complicated personalities that mirror real human experiences. There are games now that tell very meaningful stories and tackle difficult subjects, such as *That Dragon, Cancer* (Numinous Games, 2016) and *Depression Quest* (Quinn, 2013). The former is an autobiographical game about the creators' experience raising their young son with terminal cancer, and the latter is a choose-your-own-adventure style story game that simulates what it can be like to experience depression (Numinous Games, 2016; Quinn, 2013). Games can also be representative of a diverse array of experiences, such as *Liyla & the Shadows of War* (Abuiedeh, 2016) which is about a Palestinian family's experience living through war, *Obstacles* (Skillman, 2022) which is a narrative-based choose-your-own-adventure style that explores the lives and challenges of six girls in high school, *Dys4ia* (Anthropy, 2012) which is another autobiographical game that details creator Anna Anthropy's personal experience with gender dysphoria and hormone replacement therapy (commonly abbreviated to HRT), *Hotel Avaritia*

(Harry, 2022) which features an autistic, non-binary main character and a diverse cast of queer demons, *Blank Canvas* (Clown Town Games, 2022) also features a non-binary main character who faces difficulties at home and school but escapes through their dreams with a paintbrush at night, and finally, *Dramatic Irony* (Rehanek, 2022), which is a deep-dive into the experiences of a closeted transgender teenager in high school – with a Shakespearean twist! Each of these games offers a unique playing experience that brings a vast array of diverse stories, rich narratives and experiences to life, and are wonderful examples of how digital games have evolved to cover such a wide variety of genres and themes. Notably, there are several games listed here that would be beneficial to anti-oppressive education in the sense that they have the potential to fill in and counteract those partial and biased knowledges about those who are marginalized, and to act as part of those specific units on the Other and the integrated Otherness throughout the curriculum that Kumashiro suggests as potential solutions for anti-oppressive education (Kumashiro, 2000, p.31-33). I would argue that the identities of game designers can have a significant impact on the content of the game and on character design. For example, I previously mentioned Anna Anthropy's *Dys4ia* (2012). I would argue that Anthropy's identity as a transgender woman absolutely has an impact on the content of the game, being that the game is centered around her experience as a trans person. I think that the same thing could be said about Warren's argument for counter-narratives to address deficit thinking/deficit constructs (Warren, 2023), and that there are games out there that have the ability to act as these counter-narratives.

This shift in game design towards more meaningful games and games meant to teach is not exclusive to digital games. There are a good number of analog games (card games, board games) that have also been developed within the last few decades that sort of break out of the box of "traditional" analog game design themes and mechanics. One of the most distinct examples to

me is Brenda Romero's *Train* (2009). Romero designed this game specifically for a series she called *The Mechanic Is the Message*, which explores the use of game mechanics as a way to garner an emotional response (Thurm, 2019). How this game works is players will fit yellow pawns representing people into a train car, and then moving the car along a train track from one end of the board to another. The rules for this game are intentionally left incomplete, and this forces players to agree on the way they will proceed, almost becoming game designers themselves in the process (Thurm, 2019). This design choice by Romero is intended to have players seriously committing to their choices and the boundaries of play that they have designated, and therefore, to the consequences that become revealed (Thurm, 2019). Eventually, players will flip over a card to reveal that the trains they packed with pawns has gone to Auschwitz or Dachau (two of many concentration camps used to exterminate millions in the genocide of Jewish people during the second World War by Nazi Germany). Essentially, the game ends once this realization is made, and this comes in the form of player's reactions to the reveal (Thurm, 2019). Romero's other games in her *The Mechanic Is the Message* also force players to confront the idea of their own complicity within an oppressive system.

Other notable board games that offer meaningful and educational gameplay include *Freedom: The Underground Railroad* (Mayer, 2013) and *The Period Game* (Gilsanz & Murphy, 2016). *Freedom: The Underground Railroad* (2013) was designed to teach about slavery in the United States and tasks players with attempting to guide slaves to freedom in Canada via the underground railroad network and avoid slave catchers who will send the slaves back to the slave markets (Schloesser, 2014). This game takes approximately two hours to play and can be played by up to four players. Although slavery is a sensitive subject that many are uncomfortable to address, designer Brian Mayer deals with this in a "historical yet sensitive manner" (Schloesser,

2014). *The Period Game* (2016) tackles the topic of menstruation and education about menstruation and educates players not only on how the menstrual cycle works, but on menstrual products such as pads, tampons, and menstrual cups, on PMS, on using pain relievers during your period, exercising on your period, and more. This game is intended to destigmatize periods and provide education on the menstrual cycle for those who do not have an in-depth understanding of it yet. I can imagine that this game would also make young people who menstruate feel significantly less alone, less embarrassed, and less afraid of their periods.

Finally, to conclude this discussion I want to discuss my thoughts on the future of educational game design and development. I mentioned previously that there has been a shift over the last two decades in the game design world that revolves around game content. When I refer to game content, I am using it as an umbrella term to describe game mechanics, characters, narratives, in-game symbolism, intended learning outcomes, and other attributes of games that contribute to an experience of play that is not simply for entertainment, leisure/recreation, and/or mental stimulation. With the direction that game design and development has been taking, and with the research that has been done on games as valuable and beneficial educational tools, I am under the impression that designers/game studios are going to continue experimenting with unique mechanics, characters, and stories, and that there will be a continuous influx of unique games (both digital and analog) that have the potential to act as incredible tools for learning.

Chapter 6: Conclusion

6.1 Where did we end up?

After researching different definitions of oppression and theories for anti-oppressive education, as well as exploring some methods of gamification and examples of digital and analog game-based learning and putting the two seemingly unrelated topics together, I found that there still is significant room for discussion. There is much left to analyze and discuss in terms of how games could not only be beneficial to education in general, but also for anti-oppressive education specifically. What I did find are possible foundations for how these two educational gaming practices could be implemented to contribute to anti-oppression in schools, including how they could provide positive representation of marginalized communities to students and educators and combat partial knowledge (Kumashiro, 2000), and similarly, how they could act as counter-narratives to address deficit constructs/thinking (Warren, 2023). The following section explores potential future directions for this area of research, including in-depth theorization and the development of frameworks for gamification and game-based learning as strategies for anti-oppressive education.

6.2 Where do we go from here?

Exploring gamification and game-based learning as beneficial practices for anti-oppressive education is still new. There is much prior research on game-based learning, gamification, and anti-oppressive education respectively, and these pieces did inform my exploration, but there is a lack of research that seeks to tie these research topics together, and this has left me feeling almost like an innovator in anti-oppressive educational gaming research. I do want to make it clear that this paper is only one puzzle piece of what could be the very beginning

of research on educational gaming as anti-oppressive educational strategy, and that *much* more research is needed to determine whether or not these practices will in fact be beneficial to anti-oppressive educational efforts. As I mentioned previously, gamification and game-based learning are not the be-all and end-all of anti-oppressive education, and they are not practices that will be able to "solve" oppression in schools by any means, but they certainly can make a difference and contribute to anti-oppression in combination with other practices. These other practices, whether they be providing extensive support and advocacy specifically for marginalized students (Kumashiro, 2000), updating mandated curricula and introducing new units to include education about marginalized groups including racialized, queer and disabled students in order to combat biased and partial knowledge (Kumashiro, 2000), and implementing different forms of media (books, documentaries, games, etc.) that can address deficit thinking and provide counter-narratives as well as opening up the door for beneficial, pedagogical conversations (Warren, 2023) should continue to be explored and revisited as education continues to be an ever-evolving practice. There is an important opportunity for further research to gain a better understanding of how theories for anti-oppressive education and the actual practices and policies in place compare with one another. A more in-depth study is warranted on this particular topic: how to take theories of anti-oppressive education and turning them into policies and practice.

As I briefly mentioned, I believe that there is a lot of research still to be done on the path forward when looking at the subjects of gamification and game-based learning as anti-oppressive educational strategies. Because it is an area that has not been explored in as much depth as other areas of social science research, there is a lot of potential for different types of studies to be conducted on this topic. I believe that further exploratory and theoretical research should be done before in-person research studies are conducted with human participants and subsequent data is

collected and analyzed. Solid frameworks and assessment guides for gamification and game-based learning as anti-oppressive educational strategies/practices should be developed and established prior to studies with human participants. This would mean determining and establishing attributes for educational games and gamified activities that can be considered anti-oppressive, as well as further solidifying what anti-oppressive education should look like in gamified and game-based contexts. My work does discuss some of the potential anti-oppressive attributes of games as well as theories of anti-oppressive education, but there is no framework or evaluation criteria for what a game or gamified activity *must* include in order to be considered anti-oppressive, and similarly, there is no official universal policy out there that says “here is what anti-oppressive education is, and here is exactly how to make a school/classroom/educator anti-oppressive.” Having these frameworks and criteria in place would allow for future researchers to plan and conduct in-person studies that can help to determine just how well certain games and their mechanics can promote anti-oppression.

While conducting this research, I became engrossed in my exploration of this topic as it aligned with my educational background in game design and development, as well as my understandings of some established theories and concepts in anti-oppressive education. When stepping back from my own perspective and looking at this research subject as a whole, there are remaining gaps to be filled and much potential for further development. I see my research in this paper as a steppingstone to embracing games as contributors to anti-oppressive practices in schools, and to influencing the future of educational, anti-oppressive game design and development.

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