Cross-Saving in the Classroom: The Intersections of Transfer and Game-Based Learning

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Abstract

This dissertation seeks to discover and examine the intersections between writing knowledge transfer and game-based learning. Writing knowledge transfer represents one of the ultimate goals of composition pedagogy: the recontextualization of writing skills into different contexts. Game-based learning is a set of practices that utilizes gameplay in the classroom to lead to student learning. Taken together, game-based learning can inform our methods of facilitating transfer in the writing classroom. This dissertation encourages composition studies to further consider how game-based learning can be utilized to foster the recontextualization of knowledge. By explicitly bringing these two bodies of scholarship together, this dissertation creates new opportunities for both research and teaching. In order to best understand the intersections between transfer and games, this dissertation examines how current practices that have been identified as fostering transfer are present in game-based learning, and how games in the classroom can be leveraged to facilitate the recontextualization of knowledge into contexts both inside of and beyond the writing classroom.

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Chapter One

Situating the Bodies of Scholarship on Gaming and Transfer: Definitions and Current Practices

The title of this dissertation, "Cross-Saving in the Classroom," comes from a phenomenon popular in contemporary gaming, wherein a player can save their data from one device onto a cloud server and then access it again from a different device. Sometimes the devices will remain the same (such as transferring a *Destiny 2* save file from one desktop computer to another via the cloud or a USB), sometimes they will differ slightly (moving from a desktop to a laptop), and sometimes they will differ drastically (saving between a PlayStation 3 and Sony's handheld device, the PlayStation Vita). Across all of these instances however, the circumstances of play change significantly: the physical space afforded the player, the physicality required of the player (sitting at a desk versus a laptop in your lap versus holding a controller), and even the way the player plays the game differs across modes and interfaces as they switch between control schemes on different devices.

The phenomenon of cross-saving was heralded as an achievement in gaming, since it allowed for greater flexibility in play: players were no longer anchored to a single experience of a game. The affordances of cross-saving allowed for players to take their core knowledge of how to play a game and recontextualize it in new ways, to experience play differently. Thus, cross-saving functions in a way as a form of knowledge transfer, where knowledge is translated across contexts. The transfer of knowledge into new situations has been a longstanding concern of scholars from multiple disciplines, with much metaphorical and literal ink spilled on figuring out ways of both conceptualizing and fostering transfer from situations of original learning (such as the classroom) to situations of reapplication (a different classroom, or a workplace or extracurricular environment). This dissertation seeks to build on conversations of knowledge

transfer in a specific environment, the First-Year Composition (FYC) classroom, and offer new means of looking at writing knowledge transfer through another currently much-written about phenomenon: game-based learning.

In this dissertation, I will present a cohesive interweaving of the theories of writing knowledge transfer and game-based learning through specifically looking at several key concepts where the two bodies of theory overlap: dispositions/affect, multimodality, and metacognition. Through this, the dissertation will demonstrate potentialities for the use of game-based learning to foster writing knowledge transfer in an FYC environment, taking as a presupposition that transfer is one of the core goals of the writing classroom. It is a goal of this dissertation to point out how practices that have been shown to facilitate transfer are present in game-based learning, and to point to the potential of games in the classroom for leading to the recontextualization of knowledge inside and outside the writing classroom. To that end, the theoretical chapters of this dissertation will build into and contribute to the final chapter, which is a series of pedagogical materials designed with all of the findings of the dissertation in mind, so that scholars can take up the work of this dissertation and engage in praxis and further research of these principles.

Game-based learning, sometimes referred to as "gamification," is the practice of using games, play, and playful behaviors to foster education. The use of games to achieve positive outcomes has seen a lot of success when used in marketing and business contexts, both to increase employee productivity (Bensinger) and to create more returning, invested customers (Schiff). Within the specific context of education, games have been used in many different ways to achieve positive learning outcomes, from the integration of pre-existing video games into the classroom, whether explicitly educational or not (Farber) to the classroom itself being treated as a game (Sheldon). The use of games to motivate in this way is not without criticism, however,

and is often labelled “exploitative” or, famously, “bullshit” (Bogost); this will be expanded on later, in the chapter’s exploration of game-based learning.

Before we can begin discussing the intersections and overlaps between the bodies of theory of transfer and game-based learning and how they build on one another, I need to define my terms more clearly. “Transfer,” “play, and “games” are all broad terms that have been defined and used differently by scholars over the years, as well as complicated and problematized. The following sections will act as a history of the development of these terms (first transfer and then play and games taken together as highly interrelated concepts) and the movements and research that led to their growth and change into their contemporary iterations. I will then explicate how I intend to use these terms throughout the dissertation, so as to ensure clarity of language throughout. Additionally, I will explore how it is not just the terms evolving, but the very conceptions of learning that these terms gain their foundations from, and how looking at this evolution further maps the connections between transfer and gaming. Then I focus specifically on games in the classroom, and close by foreshadowing the importance of these definitions for an understanding of other important concepts in writing knowledge transfer like dispositions, multimodality, and metacognition, to demonstrate how looking at game-based learning can provide opportunities for a more nuanced understanding of fostering writing knowledge transfer.

Defining Transfer

In order to understand how transfer and game-based learning relate to each other, the history of transfer itself must be addressed, since all of the component concepts and their development come into play as the study of transfer grows into its modern conception. The movement of ideas between situations and contexts has been of interest to scholars for well over

a hundred years now, with research from educational and developmental psychologists dating back to the early twentieth century. The means and modes of studying what would come to be known as transfer, however, have changed drastically as our understanding of the phenomenon has improved. Although this dissertation naturally deals with more contemporary views of transfer, it is important to see how the term and its attendant study have evolved over time, and what principles from the last linger in our current conceptions. Despite being largely forgone in contemporary research, these early historical perspectives still have a foothold in the collective consciousness of the education community, particularly amongst educators who are unfamiliar with transfer research but who recognize the importance of knowledge moving between contexts. So, it is important to address these early conceptions, since rather than there being a straight chronological evolution, there are points of contest within transfer scholarship that will later become important as I unravel the connections between transfer and game-based learning.

The beginning of transfer research was the purview of psychology and focused on specific mental faculties thought to be indicative of intelligence. This led to specific conceptions of transfer as a cognitive phenomenon, which would be contested but not disappear entirely in contemporary transfer studies. In 1901, E. L. Thorndike and R. S. Woodworth published a paper entitled “The Influence of Improvement in One Mental Function Upon the Efficiency of Other Functions” which detailed a series of studies of proto-transfer: while not looking for the recontexualization of skills, but rather how learning one trait would help with the learning of another, separately measured trait, the study still sought to measure how learning influenced actions across contexts. And, as many other scholars of transfer would find in the coming decades, measuring and identifying positive instances of transfer proved difficult. Thorndike and Woodworth concluded that “improvement in any single mental function rarely brings about

equal improvement in any other function, no matter how similar, for the working of every mental function-group is conditioned by the nature of the data in each particular case" (250). The importance of the situation surrounding the act of transfer, while here thought of as a deterrent to transfer, becomes a crucial part of understanding how transfer occurs in later years.

Continuing this trend, transfer scholarship progressed in the early 20th century as looking specifically at traits deemed to be possessed by those with generally high intelligence, which set a troubling precedent for the teaching of transfer. A few decades after Thorndike and Woodworth, in 1936 Charles H. Judd published *Education as Cultivation of the Higher Mental Processes* and came to a very different set of conclusions about transfer than his predecessors. In his book, Judd looks at several different cognitive faculties, including memory recall and language fluency (specifically, depth and breadth of vocabulary) with a particular focus on what he terms "inference," or the ability of the mind to make leaps in reasoning from prior knowledge to new situations (18). While Judd recognizes that there are situations in human life which require rote response, he focused on the human mind's ability to generalize and make abstractions from knowledge that could be used in new situations and says that "at the higher levels transfer is typical, not exceptional. Indeed, the function of the higher mental processes is to release the mind from particulars and to create a world of general ideas" (200). This idea, that successful transfer of knowledge relies on successful abstraction and generalization of that knowledge, is an idea that is very important to understanding transfer scholarship as a whole, but Judd's reliance on what he deems "higher" mental processes as a marker of intelligence and thus ability to generalize, casts a particular elitist pall over early transfer work. The lingering effects of this elitism can be seen in more contemporary discussions of transfer, with scholars giving preference to what they deem to be the more valuable cognitive exercise of abstracted "high-

road" transfer (Perkins and Salomon), a concept that will be expanded upon in greater detail later as it arises in the scholarship.

These two works, while of great import to understanding the development of transfer scholarship, look very different from contemporary transfer scholarship in terms of how they are attempting to measure the presence and efficacy of the transfer act. Though concerns of things like memory recall as in Judd or how the learning of Latin effects reasoning in math in Thorndike and Woodworth do not often appear in current transfer research, they are still indicative of a particular mode of conceptualizing transfer, called the "cognitive notion" by Tertta Tuomi-Gröhn and Yrjö Engeström, which relies on "certain mental faculties such as memory, attention, and judgement" (20). While the cognitive notion is still present in some ways in conceptions of transfer, it has now evolved to look at phenomena like metacognition and disposition; for those who ascribe to the metacognitive view, "successful transfer occurs when the problem solver is able to recognize the requirements of the new problem, [and] select previously learned specific and general skills that apply to the new problem" (22). The dispositional view of transfer holds that "transfer is no longer thought of as skill training or strategy instruction, but as something more like character education" and is discussed further by scholars like Bereiter (Tuomi-Gröhn and Engeström 24). Scholars working with these concepts of transfer, who still conceive of the transfer act as housed in mental capacity but no longer directly use draconian ideas of intelligence as a means to how transfer can be achieved, will be further expanded upon in later sections, and their role in how we conceptualize of teaching transfer or utilizing it in the classroom will be complicated.

While cognitive notions of transfer supply concepts of interest to fostering transfer in the classroom (metacognition in particular is something that can be explicitly developed as a habit of

mind with the use of reflective activities), the importance of the environment in which transfer is occurring, as well as the positionality of the person engaging in transfer, cannot be ignored. The cognitive notion of transfer is challenged by what Tuomi-Gröhn and Engeström call the situated notion of transfer, which is the idea that "what is transferred is not knowledge from task to task but patterns of participatory processes across situations" (25). Thus, the context of the transfer situation is of much more import than any cognitive faculty that the person attempting the transfer may or may not possess. This presents a very different state of the union for fostering transfer in classrooms, because the act of transfer no longer lies in a nebulous set of mental capacities that the student in question may or may not be deemed to possess (and be judged because of it).

Tuomi-Gröhn and Engeström categorize discussions of transfer in the two ways discussed above, and emphasize the focus on context, which is highly relevant to contemporary definitions of transfer. Beyond this, however, they also discuss the different ways scholars conceptualize of transfer occurring, beyond the cognitive and the situated. According to Tuomi-Gröhn and Engeström, there are three basic conceptualizations of transfer: *task*, where the importance lies on moving skills from one discrete task to another and thus the onus for transfer lies in the creation of similar tasks(Thorndike and Woodworth; Judd); *individual*, where transfer must be initiated by a single person with the proper dispositions and behaviors (Bereiter); and *context*, where the situation surrounding the behavior is what allows patterns in behavior, or transfer, to form (Lave and Wenger; Beach). All of these conceptions will be broken down in more detail as they emerge in the scholarship, but it is important to acknowledge that these differences in looking at and thinking about transfer exist, since they point to complications within any understanding of transfer.

While the situated view of transfer provides many new avenues for looking at classroom instruction, some scholars attempt to disabuse the notion that the classroom is a good place to be looking for transfer into different contexts at all. In 1991, Jean Lave and Etienne Wenger published *Situated Learning: Legitimate Peripheral Participation*, a monograph that tackles a lot of the concerns of the situated view of transfer. In their work, Lave and Wenger establish "legitimate peripheral participation" as a way of understanding learning as being always already involved with participating in a community of practice, and that "a person's intentions to learn are engaged and the meaning of learning is configured through the process of becoming a full participant in a sociocultural practice" (29). Thus, according to Lave and Wenger, "learning is an integral and inseparable aspect of social practice" and transfer occurs not through identification of similar tasks and cognitive abstraction, but through assimilating into patterns of behavior in particular communities and learning to become a full, rather than peripheral, member (31). This view of transfer means that the burden of transfer lies neither in the task nor in the individual, but is distributed: "agent, activity, and the world mutually constitute each other" (33).

This view of transfer, which Lave and Wenger are adamant about not being a set of pedagogical methods but a lens through which to view learning, presents specific problems for our current educational model. Lave and Wenger specifically avoid discussing school situations in their examples in the text, because "the organization of school as an educational form is predicated on claims that knowledge can be decontextualized, and yet schools themselves as social institutions and as places of learning constitute very specific contexts" (40). This complicates notions of transfer, since through legitimate peripheral participation students would not be learning skills they could abstract into the workplace, but actually be involved in becoming full participants in school and student life. It also particularly complicates notions of

games as vehicles for learning and transfer, since games create environments distinct (according to some scholars) from the greater situations they are played in. It does not feel like a leap to assume that Lave and Wenger would see games as situations wherein participants learn only to become better at the game they are playing, and not as a vehicle for skills to be translated into other scenarios. Thus, the situated notion of transfer, and a conceptualization of transfer as one involved with context, is one that will need to be considered carefully moving forward with this project. This dissertation accepts the importance of context to the act of transfer but wants to challenge the claim that transfer into and out of a school setting necessarily involves the decontextualization of that knowledge. While Lave and Wenger make several important claims about the nature of context, they do not consider things like how a student's prior knowledge (derived from different situations) is already influencing the site of initial learning, which would then naturally lead to the student being able to use classroom-derived knowledge in non-classroom settings.

Despite Lave and Wenger's hesitation, understanding the classroom as a site of transfer can be helpful to our understandings of how to foster the recontextualization of knowledge. Another proponent of the context conceptualization of transfer is King Beach, who has written several works on the ideas of knowledge generalization, including a chapter in the volume edited by Tuomi-Gröhn and Engeström, cited earlier. In this chapter, Beach agrees with Lave and Wenger that "knowledge generalization is never separate or decontextualized from social organization" but points to knowledge generalization as a broader phenomenon than simply increased participation in social structures (40). Beach claims that "generalization involves changes in both individuals and social organizations" and that this means that understanding their changing relationships are integral to understanding the generalizations themselves (41).

Since generalizations are always already involved with not only the situation, but the individual, looking at generalization of knowledge across contexts in terms of the relationship between student and classroom can further our understanding of how transfer can occur in these environments. When generalizations have an effect on the individual and the context, they are called "transitions," and these transitions are "consequential" when they are "consciously reflected on, struggled with, and shift[] the individual's sense of self or social position" (42). Further, consequential transitions "involve a change in identity"; thus, for Beach transfer has heavy implications for the individual, though the individual is not where the burden for transfer lies (43). Beach defines four types of consequential transitions, each with a different relationship between individual and activity: lateral, where the individual moves in one direction between related activities, as from school to work; collateral, or simultaneous participation in multiple related activities, as between different classes; encompassing, or when the activity itself undergoes a change, as being promoted from employee to manager; and mediational, or simulated involvement in an activity (42-47). While all the forms of consequential transition are important, it is the concept of the mediational transition that should be of interest to scholars looking at the intersections of games and transfer, since games often function as simulations of other scenarios, and scholars such as Lynn Troyka and James Brewbaker have already written about the use of simulation in the classroom. Such a connection would appear to indicate that the context view of transfer is not entirely at odds with the use of games in the classroom, as using purely Lave and Wenger's model would suggest.

While context-dependent views of transfer seek to broaden what could be seen as transfer of knowledge, more work was being done to redefine what was being looked for itself. Working at the same time as Beach was Giyoo Hatano and James Greeno, who collected their thoughts on

the state of transfer studies in a 1999 education article. In this article, they point out that while many scholars were already noting the difficulty of identifying and articulating transfer, that using prior knowledge to problem solve is actually incredibly common; it simply doesn't appear in the ways being measured as transfer. Thus, Hatano and Greeno argue that the conceptions of transfer at the time and the way transfer was being measured were too narrow. Instead, they advocated for the use of the term "productivity" to replace transfer, as a way of broadening what could be looked at and researched. They also advocate for improving initial sites of learning as a way to promote this productivity, since prior knowledge must be acquired and fully comprehended in order to be used productively in new situations. This view of transfer has many implications for the classroom, including that it indicates that even when transfer is not explicitly being taught for, a well-structured learning experience could still be fostering the potential for transfer. This is because it increases the likelihood of retaining and understanding knowledge in the first place, without which positive transfer is impossible. Similar ideas are brought forward by John D. Bransford and Daniel L. Schwartz, who talk about "preparation for future learning (PFL)" (68). In PFL, rather than looking at people's abilities to solve problems in a vacuum, "the focus shifts to assessments of people's abilities to learn in knowledge-rich environments" (68). By thinking about transfer in this way, instructors and scholars open up the door to finding instances of positive transfer in previously unthought-of contexts.

While there is still much debate about what is and is not transfer, and what counts as an instance of successful transfer, subdividing the definitions and identifying different types of transfer, much like Beach does with his kinds of consequential transitions, can be helpful to an understanding of the broader phenomenon. Such work has been undertaken by David N. Perkins and Gavriel Salomon, who have written at length across several works about their

categorizations of transfer. The work of Perkins and Salomon is incredibly popular in the field of Rhetoric and Composition, and their definitions of transfer are often drawn upon by other scholars working in transfer. In particular, their contribution on transfer of learning to the *International Encyclopedia of Education* contains several useful distinctions. Perkins and Salomon create several binaries that place the act of knowledge transfer on a continuum of effectiveness, as well as recognize both task and context conceptualizations of transfer. First, Perkins and Salomon make a distinction between "near" and "far" transfer, which points to the importance of task: near transfer takes place when knowledge is translated between incredibly similar tasks, and far transfer occurs when knowledge is recontextualized for use in dissimilar situations. But Perkins and Salomon do not stop there: they also divide transfer up into "low-road" and "high-road" transfer, which suggest two different cognitive processes. Low-road transfer is, according to Perkins and Salomon, a reflexive activity that naturally occurs in similar situations, and high-road transfer is when conscious abstraction and seeking of connection take place in order to generalize and re-apply knowledge. Thus, it would seem to follow that while task conceptions of transfer are acknowledged by Perkins and Salomon by near and low-road transfer, they also allow for context-based instances of transfer that rely on abstraction of knowledge between shifting situations.

Even as these broader definitions of transfer began to surface in scholarship, transfer scholarship still had a strong contingent of skeptics. Much of this doubt, however, was couched in ways of thinking of transfer that are unhelpful to facilitating it in the classroom or, indeed, anywhere. In 1993, psychologists Douglas K. Detterman and Robert J. Stenberg released the edited collection *Transfer on Trial: Intelligence, Cognition, and Instruction* in which they present an incredibly pessimistic view of the likelihood of transfer occurring at all, let alone

something that can be actively fostered. However, when you examine the claims that act as the basis for the collection, a very distinct and narrow definition of transfer appears, much different from how other scholars of transfer are conceptualizing of it. In Detterman's introductory chapter to the volume, he defines transfer as "the degree to which a behavior will be repeated in a new situation," which means that transfer for this volume is the one-to-one replication of an action between discrete scenarios, or a very clear "task" conception of transfer. This flies in the face of all context-based conceptions of transfer, where the action, the agent, and the situation are all always already implicated in the use of prior knowledge. If all Detterman is looking for is the exact replication of behavior across scenarios, which are all inherently unique, it is no wonder that he is frustrated in his search for instances of transfer, and claims that "novel insights as cases of transfer are probably rarer than volcanic eruptions and large earthquakes" (2). However, this mode of looking at transfer as the wholesale translation of skills and behaviors into different contexts persists in broader educational circles, and so must be addressed as a concern when considering new modes of transfer scholarship like this work.

The foundational texts of the field of transfer scholarship may be from the 90s, but they still hold incredible sway over how transfer is defined and researched today, and the debate about whether transfer is a cognitive or situated phenomenon still occurs, with scholars looking at cognitive phenomena like dispositions (Driscoll), memory (Jarratt et all), and prior knowledge (Yancey et al) as a means to understanding and fostering transfer. But scholars have also been taking a closer look at the idea of transfer as the transformation of knowledge across contexts: notably, Rebecca Nowacek in her book *Agents of Integration*, claims that "transfer is best understood as an act of recontextualization" (loc 118). Nowacek identifies transfer as an inherently rhetorical act, with students engaging in transfer as active agents informed by their

knowledge of contexts and, notably, genres. Notably, Nowacek also disagrees with one of the most popular tenets of cognitive transfer, saying that metacognition is not necessary to engaging in transfer (loc 220). Nowacek's work thus presents an important new perspective for thinking about transfer in the classroom, since it indicates more fully than prior transfer research that students are not passive receptacles for knowledge who later perform that knowledge acceptably, but rather that they are active and agentive in the transmission and use of knowledge; transfer becomes a distinctly conscious rhetorical choice. The idea of transfer as recontextualization is complemented by the work of Elizabeth Wardle, who discusses the difficulty of measuring transfer if the researcher is searching for directly translated instead of transformed skills: "we are looking for apple when those apples are now part of an apple pie" (69). By recognizing that a large part of transfer involves making metaphorical pastries with the raw ingredients of knowledge given to students by an instructor, those interested in both studying and fostering transfer gain a more nuanced understanding of both the goals of and potential tools for transfer.

The second chapter in this dissertation will more directly address the concerns of the affective aspects of transfer, but an overview of the field would be remiss to not acknowledge that much work has been done on looking at how affect influences when, how, and what students transfer. In particular researchers have been looking at the concept of student dispositions, which Driscoll and Wells define as "qualities that determine how learners use and adapt their knowledge" (so behavioral traits as opposed to skills or abilities) (np). Research from scholars like Driscoll and Wells, Driscoll and Powell, and Bereiter indicate that the presence of positive or generative dispositions towards learning is critical to the successful transfer of knowledge, and that the presence of negative dispositions will impede or entirely prevent transfer from occurring. This demonstrates the need to look beyond what the instructor is doing in the classroom as a

means of fostering transfer, and to be conscious of the attitudes and beliefs that students bring into the classroom with them.

As this dissertation has demonstrated, transfer is a difficult concept to define from above: what counts as transfer and how transfer can be measured are questions that scholarship has yet to fully answer. However, it seems prudent to acknowledge that the idea of transfer is still a central one in most educational contexts and is viewed by many as a vital goal of the classroom (Yancey et al; Anson and Moore; Moore and Bass), so the concept cannot be dismissed out of hand as by Detterman. And further, if we broaden our ideas of what counts as transfer and consider it as an act of transition (Beach), productivity (Hatano and Greeno), or recontextualization (Nowacek), we can begin to see that transfer and the application of prior knowledge occurs in great quantities across contexts, from classroom to classroom to workplace and beyond, in addition to moving across mediums. Thus, for the purposes of this dissertation, I will move forward with an attempt to define transfer from below: seeing how games and play facilitate the movement of knowledge across contexts and further developing existing conversations surrounding the boundaries, goals, and exigencies of writing knowledge transfer.

The next section takes a similarly historical approach to defining play and games, and examines the implication of these terms for learning, as a precursor to how they literally "play into" our understanding of transfer. Everyone, regardless of if they have formally studied games and play, has a sense of what these things encompass, and so it is important to address all of the conceptions of play and games, including those that have been addressed and largely refuted by current scholarship, since they still hold great popular sway. Since this dissertation is specifically concerned with how games and play can be used in educational contexts, each definition will be

assessed in terms of its potential for classroom application, which will let me more easily translate the work of this overview into a discussion of game-based learning specifically.

Defining Play and Games

The relationship between play and games has begun to look a lot like the age-old debate between the chicken and the egg, with scholars like Salen and Zimmerman pointing out the blurry distinctions between the two, and posing the question if play is a subset of games, or if it is the other way around, and games are a subset of play. In untangling this conundrum, we must seek out definitions of both terms, and determine from these definitions how these terms can be useful to use when looking at things like playful behavior and explicitly denoted games in learning environments.

One of the earliest scholarly definitions of play comes from Johan Huizinga in his 1938 book *Homo Ludens*. In this book, Huizinga makes the claim that play predates human culture, and as such the entirety of human civilization, from religion to war and beyond, are all suffused with the characteristics of play. But what is play, exactly? According to Huizinga, it is:

> A free activity standing quite consciously outside "ordinary" life as being "not serious," but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means. (13)

This definition indicates that play has several discrete and very important traits. Play is distinct from non-play scenarios, or "ordinary life" as Huizinga terms it. Play is immersive, has no productive material end (i.e., nothing is made during the course of play), and it takes place within strictly regulated temporal and spatial boundaries. These boundaries constitute what Huizinga calls the "magic circle," which is an all-encompassing self-imposed boundary between the circumstances of play and the reality that exists outside of the confines of the play engagement. The magic circle can be a helpful tool in conceiving of the classroom as a place for play, as well as for thinking of how to create a game-based learning environment centered on immersion in the play experience, since it allows for the creation of a discrete, all-encompassing play environment that can be entirely tooled to meet learning goals.

Huizinga's definition offers a meaningful starting point, but his elaboration on the definition problematizes play in several important ways. Huizinga makes the claim that play itself hinges on the concept of *fun*: that there is a "fun-element that characterizes the essence of play" (3). Fun is a difficult concept to pin down; though many games scholars in more contemporary scholarship make claims about the relationship between games, play, and fun, finding a definition of "fun," or even a way in which the experience of having fun can be quantified, is very difficult. "Fun" is a word with a complex, subjective assumed meaning that scholarship has yet to really examine, though it is often touted as a positive affordance of the use of games in different contexts. Furthermore, the idea that all games and play are necessarily fun at all times is patently false: losing a game you care very much about can hardly be considered a fun experience, and there is a well-known phenomenon of video gamers becoming so frustrated and enraged at the games they are playing that they throw their controllers and "rage-quit." Similarly, Huizinga makes the claim that play "has no moral function," which seems problematic

given the real potential of aggressive forms of play for harm both physical and emotional (6). Thus, while Huizinga's definition is still widely cited and provides a meaningful framework to begin an understanding of the uses of play, we must look to how others have conceptualized of it in order for it to be useful to an understanding of games in the classroom.

Building off and expanding on Huizinga's work is Roger Caillois, whose book *Man, Play, and Games* was published in 1958. Caillois complicates Huizinga's assertions about play by making the claim that Huizinga did not adequately address the phenomenon of games, choosing instead to interpret the phenomenon of play so broadly as to be functionally useless. According to Caillois, play can best be understood as the product of several distinct categories of game, which can then be applied to all instances of play and analyzed based on their adherence to the forms Caillois puts forward (thus indicated that, for Caillois at least, play is a subset of games). Caillois does agree with Huizinga on the concept of the magic circle, however, and categorizes play broadly as "essentially a separate occupation, carefully isolated from the rest of life, and generally … engaged in with precise limits of time and place" (6). This leads naturally into his listed criteria that an activity must meet in order for it to constitute play: according to Caillois, play must be freely engaged in, separate from everyday life, uncertain in its outcome, materially unproductive, governed by rules, and constituted of make-believe (9-10). While not relying on the problematic idea of fun like Huizinga does, the last criterion presents some issues: though a lot of children's play involves pretending and using the imagination, it is hard to argue for an organized sports team engaging in make-believe on the field. This complicates how we can use games in the classroom, since it limits our understanding of games to things like simulations, which are an important subset of but clearly do not represent the full range of games currently being used in classrooms.

Caillois goes on to present his four categories of games: “agon,” or games of competition, like most sports, “Alea,” or games of chance such as cards or dice, “Mimicry,” or games of illusion (an example here would be the actors in a play), and “ilinx,” of games of vertigo, where the player attempts to achieve a particular physical sensation, like when riding a rollercoaster. These categories present an interesting challenge when attempting to qualify the experience of play: A child pretending to be a knight is certainly engaging in play, but would we say the same of a paid adult actor on the stage? Ilinx in particular presents challenges, since a lot of the ways in which senses of vertigo are achieved bear very little resemblance to what a lot of people commonly consider play: someone getting on a rollercoaster is certainly freely engaging in a materially unproductive activity, but is the outcome actually uncertain enough and are there rules for the person to follow such that it meets Caillois’s own criteria? The ideas of “agon” and “mimicry” seem most immediately applicable to a classroom experience (competition is easily built into a classroom that already uses a point system for grading and simulation has been used to great effect in the classroom by scholars like Brewbaker and Troyka and Nudelman), but things that can clearly be defined as competitive or simulation games still struggle to fit into the criteria Caillois sets up, so again we must continue our search for an applicable definition.

Finally, Caillois adds another layer of categorization, on a sliding scale of how structured the play-activity is. On one end of the spectrum is “Paidia,” or spontaneous play, and on the other is “Ludus,” or rule-governed play. This at first seems contradictory to earlier statements in a lot of ways. First, Caillois has previously stated that all play is governed by rules, so the existence of paidia seems at odds with his definition of play. Upon further examination, however, ludus comes forward not as play where rules exist at all, but play wherein rules are formalized and codified, as in the case of an established sport. Spontaneous play, like playing

pretend, still has rules (or you could not scold someone for not playing properly), but those rules exist solely within the minds of the players and are subject to greater flexibility and change. The issue of the existence of spontaneous play itself, however, is a more complicated one. Since Caillois seems to adhere to the idea of the magic circle and states that play is separate and distinct from everyday activities, it appears difficult to argue for play that arises truly spontaneously from non-play, and that remains spontaneous after the creation of its own internal rule set. Play in the specific classroom environment seems to naturally lean more towards ludic play, as opposed to paidiac play since the presence of learning goals and outcomes seems to often presuppose the presence of rules and structures, but having the scale in place is useful to an understanding of the types of play environments being fostered.

In 1966, Lev Vygotsky set about studying the role of play in the mental development of children, and comes to a very interesting conclusion that is starkly at odds with Huizinga's edict of fun: "defining play on the basis of pleasure can certainly not be regarded as correct" (6). Instead of constructing a notion of play as something engaged in purely for enjoyment, Vygotsky examined play as something that sought to fulfill vital developmental needs, to acquire and practice skills and foster ways of thinking. His definition of play is, then, less interested in what is happening in the moment of play and more interested in the goals or outcomes of play, which makes them particularly relevant to game-based learning. Vygotsky defines play, interestingly, as a transitional stage between the visual world and the world of meaning, wherein children experiment with exploding and reconstructing the semantic or commonly accepted realities of physical objects and environments. This definition of play is, again, almost entirely applicable to the realm of make-believe, wherein a hobby horse is treated as a living animal and a fort made of couch cushions becomes an impenetrable Medieval fortress. Such a definition has little

applicability to many of the realities of play, such as an organized sport, a card game, or a video game. This means that while this definition works in some ways to explicitly serve play meant for educational purposes, it does not do the necessary work of fully contextualizing play for a lived classroom experience.

Vygotsky's work is complemented by the work of another psychologist, Jean Piaget, who identified play as crucial to the cognitive development of children in his book *Play, Dreams, and Imitation in Childhood*. Piaget constructs play as part of a discrete developmental stage that children begin to enact after they have passed through the phases of engaging in pure imitation, and in which children do things not out of a need to respond to the objective reality which surrounds them, but for the simple pleasure of mastering activities for their own sake. While Piaget's work is important to note in a discussion of play, his larger theory of discrete developmental stages has been critiqued by scholars, including Vygotsky himself, who developed the theory of the "zone of proximal development" where cognitive development occurs not in stages but as an ongoing process.

Following directly from Vygotsky and Piaget's work on play as a developmental tool, though taking place several decades later, is Brian Sutton-Smith's book *The Ambiguity of Play*. In this book, Sutton-Smith decries any attempt to actually define play, saying that attempting to define the play-act in any meaningful fashion leads to "silliness" (1). Despite refusing to define it, however, Sutton-Smith certainly has a lot to say about the ways in which society views and attempts to use play. He divides our perceptions of play into seven discrete "rhetorics" (defined in the work as "persuasive discourse[s], or implicit narrative[s], wittingly or unwittingly adopted" (8)) which he lists as follows:

1. Rhetoric of play as progress, or that we develop through our play

2. Rhetoric of play as fate, or that play is controlled by destiny (as in gambling)
3. Rhetoric of play as power, or that play is a demonstration of strength and prowess
4. Rhetoric of play as identity, or that play is used to confirm and maintain community, as in a festival
5. Rhetoric of play as the imaginary, or that play is creative make-believe
6. Rhetoric of the self, or that play is for the sole enjoyment of the player
7. Rhetoric of play as frivolous, or that play is idle and useless (9-11)

Sutton-Smith tackles each of these rhetorics in turn, especially as they relate to the actions of children, but it is the first, "rhetoric of play as progress," that concerns us here, since it is related to a theory of using games in the classroom to develop skills and knowledge. Sutton-Smith critiques the idea of play as developmental as being deeply ingrained in the scholarship and "so taken for granted" by most academics who work in childhood development (36). In reality, Sutton-Smith is skeptical of play actually leading to development at all and says that the greatest outcome possible is that a "successful play experiences increases the potential for continued happy playing" (44). Thus, play only works to increase motivation and desire to continue playing, not to work toward any sort of developmental improvement, according to Sutton-Smith. While it is important to note criticism of the idea of play as development, it must be noted that Sutton-Smith is clearly in the minority, and that scholars such as Vygotsky have fruitfully studied the relationship between play and development. Indeed, the sheer force of play's motivational power, even if not explicitly motivating also toward a learning goal, can act positively upon the disposition of the learner and thus upon the act of learning (the role of dispositions in game-based learning will be covered in Chapter 2).

Looking toward contemporary definitions of play and games, three notable works stand out: Katie Salen and Eric Zimmerman's game design textbook *Rules of Play,* Mary Flanagan's *Critical Play,* and Jane McGonigal's famous text *Reality is Broken.* The first takes a very specific tack toward defining games and play, since it is a text that explores the particularities of video game design, as opposed to taking a broader look at games and play to include non-digital experiences. The second looks more broadly at play across contexts, and thus looks at things as broad as dolls, Victorian culture, and fine art. The third, while also leaning towards looking at digital games, examines games and play in terms of their outcomes outside the play-space, or what we can leverage games into doing for our lives. All three present valuable insights into how we can conceptualize of games and play for a classroom environment.

Salen and Zimmerman, while posing the question if games are a subset of play or vice versa, appear to answer it in their breakdown of game design. They divide the experience of examining and designing a game into three schema: rules, play, and culture. According to them, rules are "the organization of the designed system," play is "the human experience of that system," and culture is "the larger contexts engaged with and inhabited by the system" (6). While they spend a lot of time on each of the three criteria, let us begin with their conceptualization of play. They at first define the relationship between play and games somewhat circularly, saying that "the goal of successful game design is the creation of meaningful play" (33). But then instead of elaborating on how meaningful play is generated, they simply state that "meaningful play emerges from the interactions between players and the system of the game as well as from the context in which the game is played," thereby only reaffirming the importance of their own examination criteria (33). However, they do expand somewhat on how meaningful play can be achieved, by saying that "meaningful play occurs

when the relationships between the actions and outcomes in a game are both discernable and integrated into the larger context of the game" (34). This definition of a particular kind of play, play as meaningful, will be particularly useful when considering play in the classroom as a means of achieving specific learning goals and outcomes.

Salen and Zimmerman's definition of meaningful play rings similarly to the work of another scholar, Mary Flanagan, and her work on what she defines as "critical play." Critical play, according to Flanagan, is to "create or occupy play environments and activities that represent one or more questions about aspects of human life" (loc. 99). Flanagan goes on to say that "critical play is characterized by a careful examination of social, cultural, political, or even personal themes that function as alternates to popular play spaces" (loc. 101-105). This definition of play does two things; First, similar to Salen and Zimmerman, it demonstrates that not all play accomplishes all the same goals, and that there is a subset of play that would be particularly desirable for achieving specific ends, including that of teaching a concept. These types of play are implicitly cast as more desirable than their non-meaningful or critical counterparts. However, differently from Salen and Zimmerman, who are looking at play from the level of how a game designer can orchestrate the play experience, Flanagan considers play as hinging on the perspectives, motivations, and dispositions of the players: critical play happens or not depending entirely on the actions of those playing. This has interesting implications for an understanding of play in the classroom, since it indicates that fostering play itself is not enough to also foster learning, and that what must be striven for is a specific subset of play that does this additional critical work.

Salen and Zimmerman and Flanagan both also tackle the definition of "game," though one definition is more robust than the other. Salen and Zimmerman offer this seemingly simple

definition of games: “a game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome” (80). This definition, however, has six key parts that Salen and Zimmerman approach in greater detail: a system, players, artificiality, conflict, rules, and a quantifiable outcome. The system is “a set of things that affect one another within an environment to form a larger pattern that is different from any of the individual parts” (50)**.** All games, then, are systems, and the rest of the parts fall into place: the players are the people interacting with the system; the artificiality is the boundary that separates play from “real life” much like Huizinga’s magic circle; the conflict indicates that all games are “a contest of powers”; the rules are what indicate what players can and cannot do; and the outcome is the measurable success or failure of the player (80). This is a much more fleshed-out definition than Flanagan’s which is simply that “games can be thought of as… situations with guidelines and procedures” (loc. 124). The difference in depth can likely be attributed to the difference in goals: Salen and Zimmerman are offering an instructional text on game design, and Flanagan is putting forward an analytical text on a particular critical phenomenon, so it behooves her to have a broader, more flexible definition in which to discuss her more developed term, critical play. Both of these definitions, however, do indicate that games are what provide the structure that makes play with the goal of achieving specific ends for the development of the player possible, which is important for an understanding of games meeting a specific goal such as learning or transfer.

The other notable contemporary work, Jane McGonigal’s book *Reality is Broken: Why Games Make Us Better and How They Can Change the World,* has achieved great popular success and has helped popularize the notion of games as helpful to daily adult life instead of being frivolous time-wasters. McGonigal covers a multitude of games in her book, that do things from facilitate political engagement to make doing chores more fun. McGonigal’s case for games

in her book and her equally famous TED talk have shot her to the forefront of popular "games as useful" discourse. McGonigal is also herself a game designer: her game *Superbetter* provides a set of gamified digital goals to aid in various kinds of health recovery, for everything from depression and anxiety to chronic pain and concussions (see the *Superbetter* website, superbetter.com, for a more thorough breakdown of the game and the science behind it).

McGonigal provides a very clear definition of games, broken down into four component parts: in order to be a game, it has to have a goal, rules, a feedback system, and be entered into through voluntary participation (21). Each of these things is worth looking at in more detail: the goal indicates that all games have a specific, desirable outcome that players will work to achieve, though McGonigal is explicit in saying that achieving this goal is not synonymous with "winning." The rules are what place restrictions on how players can work to meet the goal. The feedback system is how players know whether they are working effectively towards the goal or not. And finally, voluntary participation is what ensures that players will follow the rules, work toward the goal, and acknowledge the feedback (or, that they will play the game). It is also a game's voluntary nature that ensures that a game is a "pleasurable activity," despite being made up of "stressful and challenging work," according to McGonigal (21). This definition of games, because of the book's popularity, is one of the most commonly used today in popular discourse surrounding games and gamification, as well as educational scholarship surrounding games in the classroom. While it does provide a meaningful framework to operate from, it lacks a counterpart, a definition of play. McGonigal directly addresses play in another work, the essay "I'm Not Playful, I'm Gameful." In this work, McGonigal ascribes to Huizinga and Caillois' identification of play as purposeless and seeks to differentiate the experience of play from the experience of engaging with a game. Those who game, according to McGonigal, are not

purposeless, but rather display several distinct traits, including being highly motivated, goal-oriented, resilient, and optimistic about their own skills and abilities when faced with challenges (654). Separating play from games so clearly is an interesting and unique claim that complicates our common parlance surrounding games: if we do not play them, then what do we do with them? McGonigal's definition of games has several implications for a classroom environment, especially in terms of its emphasis on voluntary participation: if a student is mandated to be in the classroom, and the classroom happens to be engaged in play, how voluntary of an experience can the play be? McGonigal's definition presupposes the presence of motivation and positive dispositions in the classroom; this dissertation will seek to expand upon the relationship between classroom environments, positive dispositions, and play, and how these concepts relate to, build off of, or potentially hinder one another.

Each definition of games and/or play presents both strengths and weaknesses, because of the breadth of popular conceptions of each term. Definitions which seek to provide a robust, comprehensive vision of games and play leave out clear examples of things that fall under their purview, and definitions that take a broader stance include things that are clearly not play or games (Flanagan's definition of games is a clear example of this). Furthermore, games and play operate from a position of being at least partially determined by the participants within individual or collective lived experiences. The rules and structures of a given game might be in place but play only really occurs if the participants involved *feel* that they are playing, as opposed to going through the motions of following rules. This is particularly important for games in the classroom: simply giving the students a game-like structure and telling them to engage does not necessarily mean that students are playing in good faith; alternatively, students may experience sensations akin to those familiar to play in a classroom environment not explicitly typified by game

structures. Thus, similarly to the definition of transfer, the definitions of games and play being used by this dissertation will arise from our understandings of both the games and instances of play being discussed, as well as how these terms interact with our growing definition of the transfer of knowledge. Over the course of this work, these terms will change and develop to reflect our new understanding of the ideas (quite literally) in play, but for now, we move forward with an admittedly abstract understanding of games and play, with an understanding that even as I land on a definition, something that is undoubtedly considered a game will appear that does not fit under my definition.

The following section discusses the specific uses of games in the classroom, as expanding upon and complicating these definitions of games and play. I will draw a distinction between different means of using games to achieve goals and discuss which terms and methods this dissertation will be focused upon.

Gamification vs. Game-Based Learning: Games in the Classroom

"Gamification" is the commonly used term to describe the practice of using game mechanics and play to incentivize productive behaviors in otherwise non-game settings, such as businesses and education. The term was coined in 1980 by game designer Richard Bartle but did not catch on in popularity until thirty years later**.** While many scholar-educators have used the term to describe their use of games in the classroom and have even produced guides to let others follow in their footsteps (Farber; Sheldon; Kapp), this dissertation consciously makes the choice to not use the word "gamification" to describe the use of games in the writing classroom, instead using "game-based learning." This section will explore the origins, uses, and issues of gamification in order to demonstrate why game-based learning is being used instead as the term to describe the use of games in the classroom. This section also seeks to provide a very brief

overview of the uses of games specifically in the writing classroom, from scholars who have moved beyond the trappings of a standard gamified environment.

While the use of games in the classroom is a phenomenon that has gained incredible popularity over the course of the last few decades, the use of games to increase productivity has actually been a concept in practice for a century. According to Mark J. Nelson, early precursors to gamification occurred in Soviet Russia in the early 20th century. Workers in factories were incentivized toward greater productivity with activities such as factories earning points for increased manufacturing, or various teams building a structure racing to see who could progress the fastest (Nelson). Gamification was a handy way to prompt workers to work harder, since it does not rely on capitalist financial incentives. The use of games in this way was not without its detractors, however, with several members of Soviet society, including notably Leon Trotsky, decrying these games as implementing a simple substitute for capitalism, with points and merit functioning as replacements for money. At this time, using games as motivation was also present across the world, in the United States: the Boy Scouts of America, who earn "badges" as achievements for completing tasks and learning new skills, was established in 1908.

The use of games as a motivator for productivity received much greater attention in 1973, with the publication of *The Game of Work* by Charles Coonradt. Coonradt, known today as the "grandfather of gamification," grows his theory from a single fundamental assumption: "people will pay for the privilege of working harder than they will work when they are paid" (loc. 89). Coonradt asserts that acts of leisure and recreation, such as hunting or playing sports, entice people to exert more effort towards achieving goals than they do when provided with the financial incentive of earning money. This is due to the motivational nature of recreation, which Coonradt breaks down into five principles:

Clearly defined goals

Better scorekeeping and scorecards

More frequent feedback

A higher degree of personal choice of methods

Consistent coaching (loc. 65)

These principles are very similar in nature to McGonigal's definition of games, which seems to indicate that those looking to define games for productive purposes focus on particular aspects of games and play, such as goals and feedback. Notably, Coonradt does not explicitly mention rules, and his idea of voluntary participation is clearly couched in player choice. While Coonradt's ideas have had a lot of cultural purchase in using games for productive purposes, this work, as with a lot of work on gamification, focuses on industry and capitalist production, as opposed to education. Thus, while acknowledging these principles as valuable to an understanding of how games can be used in the classroom today, Coonradt's work is a predecessor to, and not a direct source of, using games in education.

The use of games to motivate and create situations for productive work gained a lot of popularity in the early 2000s, with the official coining of the word "gamification." However, as gamification grew in popularity, scholars began to question the practice, not simply from a standpoint of value but from one of ethics. Ian Bogost in particular has written at several points about what he feels are the perils of gamification, calling it both "exploitationware" and, famously, "bullshit"; it bears noting for the field that the exigence for at least some of his writing in this vein was prompted by a question he was asked about gamification at CCCC (2013; 2011). According to Bogost, gamification takes the least important structures of games, the tedious feedback mechanics of points and achievements, and leverages it so that people feel that they are

having fun when they are really being taken advantage of. He does not address specifically educational uses of gamification and focuses on its business applications, but the implications for gamification at large are apparent: if not done with particular care, games in the classroom can be coercive in harmful ways. Thus, while it will not be discussed in terms of its application in the classroom beyond as a cautionary tale, gamification can function helpfully for this dissertation as a critique of the potential ways in which games can be used exploitatively.

Conway agrees with and expands on Bogost's skepticism of gamification in his 2014 article "Zombification? Gamification, Motivation, and the User." In the article, Conway explains that gamification in the way many think of it, which he calls "pointsification," only works to increase the extrinsic motivation of students, where they seek validation from an outside source (133). Conway then points to research which demonstrates that relying on extrinsic motivation to complete a task damages the intrinsic motivation of the participant; in the writing classroom, this would mean dampening students' drive to compose unless to satisfy some external force in exchange for a reward. Conway, does, however, still make the claim that games in the classroom can be beneficial, with a rather large caveat: "for gamification to fulfil its premise, [he argues] that it must fundamentally transform the user activity" (131). This view of games as not always intrinsically motivational has interesting ramifications for the belief that games generate Huzinga's "magic circle" and are immersive, since immersion seems to require some sort of internal buy-in on the part of the player, and thus that purely externally motivating things would not generate a magic circle of play. This in turn affects the way in which we can conceptualize metacognitive activity in the scope of these dubiously immersive games (this will be covered in chapter four). Because of the potential for harm and exploitation, as well as the ease with which these techniques can be applied uncritically, this dissertation does not explicitly use the term

"gamification" and instead uses "game-based learning" (a term similar to "game-based pedagogy" used by scholars such as Shultz Colby) to indicate a broader understanding of how game mechanics and the act of play can be used in a classroom environment.

While gamification remains a contested term, scholars of games and games writing have not given up on implementing games in the writing and literacy classroom. One of the most famous treatises on how games can be used as a platform for learning is James Paul Gee's 2003 book *What Video Games have to Teach Us about Learning and Literacy.* In this book, Gee identifies thirty-six different learning principles that he feels are exemplified by games, though he does not go so far as to actually demonstrate what applying these principles in a game-like fashion would look like in a classroom. Perhaps one of the most significant of Gee's claims is how he deals with games and identity: According to Gee, "all learning in all semiotic domains requires identity work" in order for students to feel like the sort of person who engages in learning, so, like a scientist or a writer (loc 994). Video games, with their easy adoption of player avatars as an alternate identity within the context of the game, "encourage identity work and reflection on identities in clear and powerful ways" (loc 1004). By allowing students to explore and take on various identities, games can make it easier for them to inhabit the embodied and semiotic spaces wherein specific sorts of learning can occur.

Gee is also not the only one writing in defense of games in the classroom: two of the most prolific scholars on the side of what they term a "pedagogy of play" are Rebekah Shultz Colby and Richard Colby (2008). Working both separately and collaboratively over the course of a decade, Shultz Colby and Colby have written and studied games extensively, engaging in classroom study of the use of games (particularly the popular online multiplayer game *World of Warcraft*) (2008), interviewing both teachers who use games in the classroom and game

developers (2017; 2008), and editing a collection of work on games in the classroom, 2016's *Rhetoric/Composition/Play*. Through their work, Shultz Colby and Colby have continually emphasized that games, if applied properly to the writing classroom, can have a positive impact through taking part in a shared community of interests. In particular, "games are productive in helping students apply, synthesize, and think critically about what they learn through active and social participation" ("Pedagogy of Play" 301). In an individual piece titled "Game-based Pedagogy in the Writing Classroom," Shultz Colby also points out that games in the classroom have the benefit of facilitating writing knowledge transfer by increasing student engagement through writing about the games they are playing (Shultz Colby commonly uses *World of Warcraft*). Shultz Colby does not expand upon this claim, but it is meaningful to see that others have seen the connections that this dissertation seeks to solidify.

Also operating under the assumption that the usefulness of games in the classroom is apparent and moving forward with exploring various means of application is Douglas Eyman and Andrea D. Davis's 2016 edited collection *Play/Write: Digital Rhetoric, Writing, Games.* The essays in this collection are divided into four sections: "Writing About Games," or discussions of using games as texts for analysis and discussion in the classroom; "Writing Around Games," or using gaming paratexts (writing that springs up around and in response to games, such as walkthroughs and chat forums) in the classroom; "Writing In or Through Games," or the use of digital games themselves as sites for rhetorical creation; and "Writing Games" or having students create games (8). This work particularly emphasizes the use and creation of digital texts, which points to the importance of an understanding of multimodal literacy and composition when using games in the classroom. This emphasis will be further explore in chapter three of this dissertation.

This overview only barely scratches the surface of research being done on the use of games in the classroom; multiple edited collections have been released in recent years that take the concept of games' usefulness in the classroom as a given, and explore the various ways how games can be used to enhance the classroom experience (see Colby, Johnson, and Shultz Colby and Eyman and Davis for more information). This dissertation seeks to expand upon their work and provide concrete practices with which to insert games into the writing classroom, with the goal of fostering transfer into different contexts, in addition to giving space for thinking more broadly about transfer, dispositions, multimodality, and metacognition.

Implications for the Field: A Prospective Glance

This chapter has sought to explore and further solidify the key terms of the argument to follow and has demonstrated that both transfer and games and play are complex fields of scholarship that carry with them multitudes of meaning and overlapping interests in terms of cognition, context, mediation, identity, and affect. While we have not yet come to a definitive set of definitions, this actually works in our favor; by allowing ourselves to continue to explore these fields of scholarship and make connections, we will build into an understanding of the terms for our purposes and create fuller definitions couched not in the abstract, in order to bring these two bodies of scholarship together and explore opportunities for game-based writing pedagogies.

The following chapters each explore a specific concept related to both transfer and games in the classroom, to expand the network of connections we can make between the two bodies of theory. Chapter Two focuses on dispositions and how games and transfer interplay with affect. Chapter Three looks closer into the affordances and constraints of multimodal instruction and composing to see how texts beyond the traditionally print-based build effective classroom environments. Chapter Four looks specifically at the phenomena of metacognition (considered

by many to be integral to transfer) and games' tendency to be immersive and examines how necessary each of these things is to creating a transfer-oriented game-based classroom. Finally, Chapter Five puts the concepts of all prior chapters into practice and generates a set of pedagogical materials that use game-based learning to facilitate transfer.

Chapter Two

Rage-Quitting Writing: Dispositions, Motivation, and Engagement

Introduction

Playing a game can be a very stressful experience. When a player's skill level does not meet the threshold for completing an in-game task, or when they lose repeatedly in a competitive multiplayer environment, they can become frustrated and angry. When the negative emotion reaches a critical point, some players lash out with aggression or, in a multiplayer game, possible hate directed at other players. The enraged player then abruptly stops playing and walks away from the game, presumably to cool off. This phenomenon is so common that it has earned a name in the gaming community: rage-quitting.

While rage-quitting might not be formally named within the act of writing, it is nevertheless a familiar phenomenon to writers and teachers of writing alike. Students, unsure of their audience or unfamiliar with the genre or any of a myriad of other possibilities, become frustrated with their writing and either abandon it or put forward only minimal effort, which ends up being reflected in their grades. Students can choose not to engage in the work of developing their writing for many different reasons, ranging from the material (not enough free time between work and caregiving, no good, safe composing space) to the affective (uncertainty about how to progress, boredom with the task, frustration with guidance or a perceived lack thereof).

While instructors have very little control over the material conditions of their students' lives outside of their classrooms, they do have some effect on the way their students feel about their courses, their assignments, and the writing they are asked to produce. The *Framework for Success in Postsecondary Writing*, a joint effort between the Council of Writing Program Administrators, the National Council of Teachers of English, and the National Writing Project,

lays out eight “habits of mind” or “ways of approaching learning that are both intellectual and practical and that will support students’ success” and then demonstrates ways in which teachers can foster these habits through the work of the writing classroom. These habits of mind (which will be further developed below) have elsewhere been called “dispositions” by scholars researching the affective aspects of transfer (Driscoll; Bereiter). The *Framework* does the work of aptly demonstrating that in order for writing instruction to be effective, teachers must not only consider the content and means of delivery, but the state of the mind of students who will be receiving and hopefully utilizing/transforming/recontextualizing the information being communicated. If students are experiencing specific negative dispositions surrounding the act of writing, their ability to both initially learn and to transfer knowledge, either from prior tasks into the current task or out of the current task to future ones, will be impacted; these claims will be unpacked and further developed in the discussion to follow. Thus, the writing teacher has to be aware of the affective state of their classroom and be putting in the work to foster positive dispositions for their students.

The goal of this chapter is twofold: first, I set out to demonstrate the importance of the role of affect and dispositions in fostering motivation and engagement, which I then argue are essential to the act of transfer. I then demonstrate how games in the classroom work to promote motivation and engagement in the tasks at hand through the generation of productive dispositions and are thus useful to an attempt to facilitate the transfer of writing knowledge.

I will begin this chapter with a discussion of the roles of dispositions and affect across both writing and gaming, to do the work of defining both dispositions and affect and demonstrating how the two different acts of writing and gaming can overlap to lead to generative dispositions in students. Then, I will move into specifically discussing the roles of motivation

and engagement, as created by generative dispositions and as they relate to transfer. Then I will discuss several motivational theories to determine exactly how motivation and engagement are defined and measured in both gaming and learning to write, as well as tackle the difficult concept of "fun" and how that bears on our discussion of dispositions and transfer.

The Role of Dispositions and Affect in Transfer

Before the role of dispositions and affect in the writing classroom and in gaming can be discussed, these terms need to be clearly defined. The aforementioned *Framework,* after all, does not call the traits it seeks to cultivate "dispositions" but "habits of mind." According to Driscoll and Wells, "dispositions are not knowledge skills, or abilities – they are qualities that determine how learners use and adapt their knowledge" (np). This definition is very similar to the *Framework*'s, and points to the interchangeability of the two. Thus, in this dissertation the habits of mind of the *Framework* will be considered examples of dispositions.

The *Framework* points to eight specific dispositions that they deem integral to success in a collegiate writing classroom. These eight traits are as follows:

- Curiosity- the desire to know more about the world
- Openness- the willingness to consider new ways of being and thinking in the world
- Engagement- a sense of investment and involvement in learning
- Creativity- the ability to use novel approaches for generating, investigating, and representing ideas
- Persistence- the ability to sustain interest in and attention to short- and long- term projects

- Responsibility- the ability to take ownership of one's actions and understand the consequences of those actions for oneself and others
- Flexibility- the ability to adapt to situations, expectations, or demands
- Metacognition- the ability to reflect on one's own thinking as well as the individual and cultural processes used to structure knowledge (np)

In his book *A New Writing Classroom*, Patrick Sullivan posits that we should add three additional habits of mind to the framework: Accountability, humility, and grit. Two of these habits tie into already existing habits of the *Framework* – accountability to responsibility and grit to persistence. Humility at first stands out as an entirely new contribution, but Sullivan's description of humility is that it makes us "open to difference" and to new ways of thinking and learning (160). Thus, humility is tied to the *Framework* habit of Openness.

While each of these traits are valuable to the experience of college writing, and an argument can be made for games helping with the fostering of each, this chapter will focus specifically on the disposition of engagement as being directly facilitated by the use of games in the classroom. Further, this dissertation asserts that many of these habits of mind are interconnected, and that fostering one disposition necessarily leads to the fostering of others – for example, while curiosity and openness are distinct dispositions, without a willingness to consider new ways of being, the desire to know more would not go very far. Thus, even though this chapter will specifically focus on engagement, I consider engagement a vehicle through which these other dispositions can also be achieved. Additionally, Chapter Four of this dissertation will specifically devote itself to the phenomenon of metacognition, so while it will be referenced briefly in this chapter where relevant, interested readers should look to Chapter Four for a more in-depth discussion.

In order to understand how dispositions and transfer are related in the writing classroom specifically, we must first look at how they are more generally seen as interconnected by the field of educational psychology. Carl Bereiter defines dispositions as sets of personal characteristics (which overlaps with Driscoll and Wells' definition that this dissertation relies upon) separate from cognitive skills and argues that instead of teaching for transfer of knowledge in the first place, instructors need to teach for the transfer of dispositions themselves. This is because attempting to teach for knowledge transfer itself is too intertwined with sites of original learning and the prior knowledge of the learner to be able to adequately separate transfer from other forms of knowledge use. In contrast, teaching for the uptake and use of generative dispositions surrounding the acquisition and contextualization of knowledge is both easier to measure and has far broader applicability across sites of learning than the recontextualization of a single piece of knowledge. According to Bereiter, "transfer of principle depends on depth of understanding, and transfer of disposition depends on incorporation into character" (23). This means that, for Bereiter, the role of an instructor invested in transfer is not actually fostering a comprehensive understanding of the material being taught, but in attempting to instill specific generative emotions and dispositions in the student; said dispositions will then interact with the students' prior knowledge and lead to both acquisition of new knowledge and the later transfer of that knowledge. Thus, dispositions are not a static trait that teachers must accept and work with, but a dynamic characteristic of learning that teachers can actively work with to foster positive learning outcomes.

Also working in educational psychology, McCune and Entwistle discuss a specific disposition that they feel is essential to knowledge transfer, and that has ties to engagement and motivation; as they put it, students need to acquire a "disposition to understand for oneself"

(303). McCune and Entwistle tie this disposition with what they term a "deep approach" to learning or learning to understand meaning as opposed to satisfy external requirements (304). This means that the disposition to learn for oneself is explicitly tied to intrinsic motivation, which will be covered in greater depth in a following section. This disposition is also tied to several generative emotions, such as "feelings of pleasure and confidence" (304). In clearly tying dispositions to both affect and motivation, McCune and Entwistle demonstrate that instructors cannot separate desirable student traits such as engagement and motivation from the experience of positive emotions.

Moving specifically to Rhetoric and Composition as a field, Dana Driscoll and Jennifer Wells worked to clearly define dispositions in their article "Beyond Knowledge and Skills: Writing Transfer and the Role of Student Dispositions" for *Composition Forum.* Driscoll and Wells posited five "key features" of dispositions that aid in understanding both how a disposition functions in the writing classroom and how their presence works as precursors to the act of transfer, and then noted four major motivational theories that can be translated into dispositions (expectancy-value, self-efficacy, attribution, and self-regulation, which will be discussed in greater detail in the subsequent section). Driscoll and Wells draw on David Slomp's argument that activity theories of transfer, where transfer is conceived of as a task, are insufficient in their consideration of the interpersonal factors of knowledge use. Slomp, and by extension Driscoll and Wells, turn to the bioecological model of human development put forward by Urie Bronfenbrenner and Pamela Morris, which takes together the four concepts of process, person, time, and context, and demonstrates that they act together as an ecological system to help or hinder development (Driscoll and Wells np). Bronfenbrenner and Morris also include dispositions such as motivation in their understanding of the "person" section of the equation.

The first key feature Driscoll and Wells note is that dispositions are not isolated things and are "a critical part of a larger system, that includes the person, the context, the process through which learning happens, and time" (np). This indicates that while dispositions are a key part of transfer, that instructors cannot simply teach for positive dispositions and expect that to carry through equally to all students, who come into the classroom with their own prior knowledge and motivations, and who read the context of the classroom differently, in addition to having wildly varying material conditions surrounding their ability to participate in the course. The second key feature expands on their broad definition quoted above, and states that dispositions are not "intellectual traits like knowledge, skills, or aptitude," but that they function to determine how things like skills are applied in a given situation (np). This places a dispositional view of transfer in stark contrast to a lot of prior conceptions of transfer, which emphasizes measurement of the skills themselves in transfer situations, rather than how and when those skills are deployed. A dispositional view of transfer does not, thus, only view transfer as having occurred when a skill is applied successfully in a new situation but opens up all acts in education to the possibility of being attempts at transfer.

The third feature directly speaks to transfer and says that dispositions determine students' "sensitivity toward and willingness to engage" in the act of transfer (np). What Driscoll and Wells do not specify, however, is whether these dispositions help foster both unconscious and conscious instances of transfer (Perkins and Salomon's "low-road" and "high-road" transfer) or if dispositions are solely helpful in conscious abstraction and recontextualization of knowledge. It is unclear if they feel that dispositions are irrelevant to instances of low-road transfer or if they were simply only considering high-road, which is often considered the more coveted form of transfer, as well as being more easily identifiable.

The fourth and fifth key features of Driscoll and Wells' piece deal with the ways in which dispositions are not a one-size-fits all positive development in the course of a student's learning. The fourth feature states that dispositions, in addition to being positive for the student, may conversely "negatively impact the learning environment" (np). Driscoll and Wells term these dispositions "disruptive" and place them in contrast to the "generative" dispositions that teachers should strive to foster, such as curiosity and drive to pursue goals. The final feature is simply that dispositions are not static; rather, they are highly context-dependent and may be generalized out to encompass the entire learning environment, and not simply the task at hand. While these key features do not address the full depth and complexity of working with dispositions, they are nevertheless a solid foundation and a workable starting point for the content of this chapter, so I will move forward largely accepting these tenets as a working definition of a disposition. Driscoll and Wells' work function to facilitate an understanding of a disposition within the context of the writing classroom specifically, as well as what dispositions we should seek to foster or facilitate, and which we should seek to ameliorate.

Tenets Defining Dispositions (Driscoll and Wells)
1. Dispositions are part of a system that includes person, context, process of learning, and time
2. Dispositions are not intellectual traits but determine how traits are applied
3. Dispositions determine students' sensitivity for and willingness to attempt transfer
4. Dispositions can be generative or disruptive
5. Dispositions are context-specific and dynamic

While dispositions are not entirely synonymous with affect, later work by Driscoll (along with Roger Powell) demonstrates that the two are often deeply related during the writing process. In their 2016 article, Driscoll and Powell coin the term "emotional disposition" to discuss the ways in which students manage their emotions across situations and in response to adversity. Across a long-term study of the role of emotion in student writing, Driscoll and Powell identified three different types of emotional dispositions: "emotional interpreters," or those who use their emotions as their primary form of guidance during their writing experiences; "rational interpreters," or those who do not use emotional terms to work through the experience of writing; and "emotional managers," or those who have achieved control over their emotional responses to writing through metacognition (np). Driscoll and Powell also identified specific emotions as generative, disruptive, or circumstantial (either generative or disruptive depending on student responses). Several of the noted emotions have ties to the disposition of engagement: boredom, often considered the opposite of engagement, is noted as a disruptive emotion, and enjoyment, often tied to the experience of being positively engaged, is noted as generative. Driscoll and Powell concluded that the emotional dispositions present for the student, which are deeply tied to both "students' past personal and educational experiences" and "their current identities as writers," are integral in how students transfer knowledge, as well as what knowledge they transfer in the first place (np).

While emotional dispositions are integral to our conceptualization of student affect, other scholars have identified other subsets of dispositions that are important to our understanding of how dispositions function. Perkins et al characterizes a set of "thinking dispositions," such as inclination to learn and sensitivity to situations in which to apply knowledge, which they claim "challenge the idea that intelligence as it shows itself in realistic situations can be accounted for

adequately within abilities-centric paradigms" (271). Thus, not only are our definitions of success highly dependent on the presence of positive dispositions, but even our conceptions of what accounts for intellect can be explained not by raw skill or cognitive power, but by personal characteristics. Further, sensitivity in this sense is clearly a case of transfer, since sensitivity to application of knowledge is tied to Perkins and Salomon's phenomenon of "detecting" instances of potential knowledge transfer (250), and was indicated to be the single largest contributing factor in positive displays of intellect across the studies analyzed (281).

In contrast to looking at dispositions as markers of intellect, Jo-Anne Kerr looks at fostering "writing dispositions" as a means of "enculturation" within a particular discourse community in order to facilitate transfer. These writing dispositions are the ways in which students become both "socially and culturally situated" within a community of writers and achieve what Lave and Wenger call "full participation" within a community of practice (Kerr 108; Lave and Wenger 29). Kerr notes that among some of the most important writing dispositions to foster are inclinations to engage in meta-cognition about their work and flexibility about performing writing tasks.

Student ability to recognize the need for flexibility in writing is a phenomenon that has also been researched by Mary Jo Reiff and Anis Bawarshi in the context of prior genre knowledge. In their article for *Written Communication*, Reiff and Bawarshi identified two distinct groups of students, called "boundary crossers" and "boundary guarders" (324). Boundary crossers are more flexible and willing to engage in high-road transfer by utilizing strategies from various genres when confronted with a new writing task, rather than attempting to apply an old familiar genre wholesale. Boundary guarders, on the other hand, remain within the confines of their knowledge and engage in low-road transfer by using already learned genres in static ways.

In terms of who is a boundary guarder and who is a boundary crosser, Reiff and Bawarshi identify "confidence level" as a means of determining which strategy students will utilize. While confidence is often deemed a generative emotion that leads to positive dispositions, in this case confidence actually functions against the student: students who are confident in their prior genre knowledge are more likely to engage in boundary-guarding and maintain generic conventions in situations where they may not be appropriate or useful. As students become less certain about the task in front of them, as they experience the anxiety and confusion that Driscoll and Powell identified as circumstantial emotions, they actually become more likely to engage in the more productive boundary-crossing. Thus, introducing a new and unexpected activity system such as a game could be a catalyst for harnessing some of the uncertainty students feel into fostering boundary-crossing and transfer. This is turn will lead to positive affective consequences, as students work through affective experiences like confusion that are not explicitly positive, they could eventually overcome them and experience satisfaction and pride in a job well done, which also does the work of adding value to the knowledge learned through the experience and thus makes it more likely to transfer.

The Role of Dispositions in Gaming

Now that this chapter has demonstrated the general connections between dispositions, affect, and transfer, I need to discuss how the other key component, games, factors into the equation. The relationship between games, affect, and disposition is one that has been talked about amongst scholars of digital gaming, though the word "disposition" is not commonly used in contexts outside of the educational, and affect takes on nuanced dimensions beyond simply the presence of emotion. Eugenie Shinkle describes affect in games as "synaesthetic, embodied perception… a full-body, multisensory experience, temporally and corporeally delocalized,

incorporating emotions but not reducible to them" (3). Shinkle goes further and describes affect as a way to describe the "unquantifiable features of gameplay" including the "'feel'" of a game (3). Thus, it may at first seem like the relationship between games and affect is a nebulous one, specifically defying critical attention. But where scholarship has in some ways failed to tackle the relationship between games and emotion, political figures are engaged in a continual debate over the emotional effect of games on players.

A common argument against games, particularly games that utilize acts of violence as part of gameplay (like most shooters or videogames that contain gun-based combat), is that games lead to the desensitization of the players, particularly numbing them to negative emotion in the face of violent acts. This argument saw a lot of traction in 2005, when Hillary Clinton joined forces with Joseph Lieberman for the Family Entertainment Protection Act, during which she claimed that "'these violent video games are stealing the innocence of our children'" (Peterson). If this argument is accepted as true, it makes sense to assume that games actually lead to a decrease in the affective engagement of their players with both the game itself (being numb to the violence enacted on screen) and with reality (thus making them more likely to enact the violence in the real world). James Ash, however, argues for the opposite with his theory of games and attunement. By presenting scenarios such as multiplayer maps that have the possibility for very intense encounters between players, Ash argues that games open up "possibility spaces" for increased attunement to the game environment, and thus heightened affect (28). By attuning oneself to the game, players are engaged in "self-management of the affective and emotional state of being… in an attempt to minimize negative affects such as frustration and vulnerability" (28). This use of attunement recalls Heidegger, who describes attunement as synonymous with "feelings" and expresses that attunement is something that must

be “awakened” in man and consciously sought after, so that people can reap the benefits of being fully cognizant of their emotional experiences such as joy (28). Thus, via playing a game, people are engaged in the exact same sort of affective work as Driscoll and Powell’s emotional manager disposition, since they must control strong emotions brought up during play and maintain focus in order to play successfully. Therefore, a game in the classroom that requires a level of attunement and self-management has the potential to instill positive dispositions of self-management in the student as player, which may foster transfer of learning.

Games in the classroom also have the potential to help instill other generative dispositions in student-players, and through looking at a selection of transfer studies, the connections between dispositions as a facet of transfer and games in the classroom become apparent. In their article on transfer between school and workplace contexts, in this case internships, Baird and Dilger point to the critical dispositions of “ease and ownership” in influencing writing knowledge transfer (690). In their case studies of students participating in internships, Baird and Dilger identified that the perceived level of difficulty of a writing task and the ease with which a student feels they can accomplish it as critical to the amount of transfer that the student will engage in. If a student feels that a task is either too easy or too difficult (if they do not perceive that there is a level of challenge that will reward their engagement), they will disengage from the task and only engage in the minimum amount of effort required to complete it, and their work suffers.

This phenomenon identified by Baird and Dilger is a critical piece of theory in games’ scholarship, though it goes by another name: flow. Psychologist Mihalyi Csikszentmihalyi describes flow as the state in which the challenge of a task and the player’s skill are well-paired, and so they become immersed and engaged with the activity while performing it (mostly)

successfully. The flow state is something that game developers strive to achieve in both digital and analog games, because it influences the likelihood of a player continuing to play: if the game is too easy, players will deem the game not challenging enough and will become bored. Conversely, if the game is too difficult, players will be unable to progress and become frustrated. Thus, games must create a delicate balance of increasing challenge to continue to engage the player as they learn to play the game better and thus experience an increase in skill. Games, with their continual learning and increase in skill level, are in some ways perfectly engineered to instill both continued engagement and a sense of appropriate challenge, which makes them an excellent vessel for the conveying of skills and tasks in a writing classroom. Baird and Dilger's other critical disposition, ownership, will be discussed in greater depth in the final section of this chapter, dealing with agency and identity. It should also be noted that the concept of flow is not without necessary criticism; Csikzentmihalyi's discussion of flow first of all does not offer any sort of methodology to engender a flow state so people wishing to enter flow must figure out the conditions for flow for themselves, and that the immersive nature of a flow state hinges on a particular set of neurological qualities, which thus means that considering entering flow as a purely productive and positive thing can have ableist ramifications, as has been pointed out by indie game developer Sascha Moros (Twitter). We must thus consider a flow state not as an essential part of achieving a positive disposition, but as a potential mechanism either enabled or constrained by Bronfenbrenner and Morris' ecology of person, context, process, and time.

Many of the emotions and dispositions discussed up to this point are those generally denoted as positive, such as enjoyment and confidence, but there is not an exclusive relationship between positive emotions and engagement and growth in writing tasks. Driscoll and Powell identified "circumstantial" emotions that could function as either positive or negative, including

"frustration, anxiety, and confusion" (np). Whether these emotions led to positive or negative consequences depended on the disposition of the student, and whether or not they were emotionally managing their feelings and engaging in the work of growth to overcome these seemingly negative emotions.

This section only scratched the surface of the ways in which games in the classroom foster generative dispositions and affect that will in turn lead to transfer. In the next section, I directly address the disposition of engagement as key to transfer and as a central touchpoint for games' efficacy in the classroom. In order to do so, I must address the intersections between engagement and motivation, the latter of which is a phenomenon that has been exhaustively researched in psychology. Moving forward, I address some of the most prevalent motivational theories and how they contribute to an understanding of engagement in the classroom, as well as how games have been proven to be motivating.

Motivational Theories: Engagement and Fun in the Classroom

Motivation is deeply tied to the disposition of engagement, since being invested in the act of learning is a key prerequisite for motivation in the sense that most educators strive for. But not all motivation is created equal; there are two key forms of motivation that are differentiated based in where the factors prompting motivation lie. Extrinsic motivation occurs when people are motivated by a desire for external rewards or through threat of external punishment and does not actually indicate positive affect about the experience. People can be motivated by fear of failure or out of a desire for material benefits without any of the attendant positive emotions that teachers wish to instill about the knowledge being applied. What educators wish to occur in their classrooms is intrinsic motivation, or when students are motivated to complete the task due to internal, self-sustaining factors such as personal betterment, unrelated to outside stimuli.

Motivation has been discussed in transfer research by several scholars, as it is often noted as a key disposition that fosters transfer (Driscoll and Wells, Kerr, Perkins et al). Even when motivation is not explicitly addressed, it often appears as a corollary to issues of transfer. Bergmann and Zepernik discuss the issues of transfer from FYC to writing in the STEM disciplines, and note that STEM students often view what they do in FYC as "fluff" that will not be useful to them, and are not motivated to attempt to abstract and reapply the knowledge (25). Similarly, Wardle uses the language of Perkins et al and talks about what literate learners are and are not "inclined" to do, and that a learner who is not inclined to do the coursework will not engage in a meaningful instance of transfer, since they will not encounter things that challenge their current modes of thinking (163). Nelms and Dively also specifically cite "lack of motivation" as a roadblock to students' ability to transfer knowledge – if there is no will to use the knowledge or to complete a new task, transfer naturally will not occur (226).

Using games in the classroom has been demonstrated by many scholars (Divjak and Tomic, Garris et al, Usher) to increase the motivation of students to complete tasks toward learning objectives, but the sort of games being employed alter the type of motivation being fostered. According to Conway, using gamification techniques in the classroom leads to an increase in extrinsic motivation, but little to no increase in intrinsic motivation: students aren't completing the tasks to learn, but to achieve the external awards of points, badges, or material goodies that gamification promises them. This method of using games in the classroom can be detrimental because "if applied to work of sufficient complexity and interest, it may actually devalue the activity and lessen one's motivation" (132). Games in the classroom can only be effective if they "fundamentally transform the user activity" instead of just adding game structures onto a non-game, like a traditional writing classroom (131). This idea, that

gamification only increases extrinsic motivation and damages intrinsic, is challenged by Sun and Hsieh, who conducted an experiment that demonstrated that gamification led to "significantly greater intrinsic motivation" for students learning English, and did not actually have any meaningful impact on extrinsic motivation (113). The sort of gamification measured by Sun and Hsieh was only briefly described and used betting with in-game currency on correct quiz answers and a leaderboard to show which students had the highest number of correct answers, so aligns clearly with traditional ideas of gamification instead of game-based learning. A bibliographical essay by Alsaweir that compiles various studies done on gamification demonstrates that there is a substantial body of scholarship that points to a positive correlation between engagement, motivation, and gamification – and even goes so far as to explicitly claim that gamification has more benefits than game-based learning, though the definition of game-based learning is very narrow (using extant digital games as learning tools) and does not encompass the totality of what games in the classroom can be.

Thus, motivation is a tricky subject when dealing with games in the classroom. The following motivational theories will all be assessed in terms of how they potentially contribute to the fostering of transfer, as well as how their concepts hold up in the context of games and play. These motivational theories are briefly covered by Driscoll and Wells but are here expanded on and placed in conversation with game-based learning.

Expectancy-Value Theory

This motivational theory popularized by Wigfield and Eccles ties student motivation and persistence in the face of difficulty to the value that someone places on a task, and what they expect to get out of successful completion. Students who do not see the value in the work they are assigned are less likely to complete the task successfully through effort, as well as unlikely to

transfer knowledge both into and out of the task. The assumed value of the task can be either external or internal for the student: while some value is necessary for the task to be completed well, expectancy value theory does not differentiate between extrinsic and intrinsic or elevate intrinsic motivation.

Expectancy-value has clear implications for transfer, particularly Perkin's and Salomon's three bridges for transfer, noted in their 2012 article "Knowledge to Go." These three bridges are mental processes that students must undertake in order to engage in the abstraction and recontextualization of knowledge. The first bridge, detect, is that the student has to first identify a potential connection between their prior knowledge and a new situation. The second bridge, elect, is where value comes into play: the student must see the worth in exploring this connection and choose to examine it. After this exploration, the student will successfully engage in transfer and use the third bridge, connect, to bring the prior knowledge and the new situation together. Without the drive to both look for (detect) and explore (elect) these connections, transfer cannot occur. This means that students must not only see value in the task at hand, but in their prior knowledge; if they do not think what they have learned is valuable, they will be less likely to be looking for and be able to identify potential sites for transfer, as pointed out by Bergmann and Zepernik in their focus groups of upper-level students about perceptions of FYC.

Expectancy-value's application to games, with its equal applicability to intrinsic and extrinsic motivation, is more complex. This model of motivation could also be used to endorse gamification techniques like leaderboards and material rewards (or "loot") systems, since these techniques do in fact provide very tangible rewards for the player. Thus we must be cautious when thinking about this motivational model, because it could be equally well applied to systems of games in the classroom that the work of this dissertation does not support. Gamification as a

model for purely extrinsic motivation conflicts with the evidence this dissertation brings forward for the need for intrinsically motivating activities, such as those provided by game-based learning.

Self-Efficacy Theory

This theory, coined by Albert Bandura, asserts that if someone believes that they are capable of a task, that they will be more motivated to engage in the actions necessary to complete and excel at the task. Students with a high self-efficacy are more likely to engage in difficult work, persist in the activity through adversity or challenge, and to not experience negative emotions like anxiety while working on the task (Bandura). A student with low self-efficacy will feel that the task is beyond their skill and knowledge, perceive it as more difficult than it actually is, and experience negative feelings such as stress, fear, and sadness about the task, all of which will impact the original site of learning and prevent the recontextualization of knowledge later. Bromley et al (2017) conducted a study demonstrating the necessity of self-efficacy for transfer: across several writing center sessions, students reported higher instances of transfer in correlation with higher instances of feeling capable of completing various writing tasks.

Games can help with self-efficacy in several ways. First, games often present a "lower-stakes" environment where students can engage with the content without feeling the traditional pressures of performance of a classroom, while still instilling the desire to succeed. While the attitude of "it's just a game" is often used to deride the use of games in supposedly "serious" learning environments, this can actually help to decrease the inherent stress associated with the need for high performance in the classroom. Thus, students who might experience low self-efficacy in traditional classroom environments may feel empowered by the presence of a game

they feel that they can play well, and this will then lead to an increase in self-efficacy, motivation, and engagement.

Second, an effective game is built with lots of in-game learning to teach and coach players through learning to play. This learning takes place both through formal tutorials, or essentially practice environments where players are walked through how to use the mechanics without risk of failure, and through playing the game itself, as a well-designed game regulates the challenge and the introduction of new skills to maintain an effective flow state for the player. An example of this is the classic videogame model of the platformer, a game genre based in requiring increasing skill in terms of precise motor control and timing from the player. Games like *Crash Bandicoot* and *Shovel Knight* begin the game with very simple levels meant to familiarize players with their controls, and then slowly and steadily increases the difficulty to be commensurate with the skills the player has thus acquired through play.

Thus, while some types of games (such as most videogames) still do come with some expectations of prior knowledge about how to play and could lead to players inexperienced with this type of play to experience low self-efficacy (because they're "not a gamer"), games also include within themselves instances of learning that work to increase the self-efficacy, and thus the motivation, of players, as has been demonstrated by studies done by Meluso et al (fifth grade science learner's efficacy through game-based learning) and the US Army Research Institute for the Behavioral and Social Sciences (computer and gaming self-efficacy as increasing the effectiveness of game-based training).

Self-Regulation Theory

Self-regulation, a concept commonly associated with self-discipline and how likely a person is to complete a task even if it becomes difficult, unpleasant, or boring, is key to engaging

in transfer because of its connection to the *Framework* habit of mind persistence. As tasks become more challenging and less familiar, which tends to lead to a higher probability of needing to recontextualize knowledge, students need to have self-regulation to continue pursuing the task and actually transfer, as opposed to giving up and not engaging in any use of knowledge.

Self-regulation is a fraught concept when thinking about the gaming community. Long-time dedicated gamers are often thought to have low levels of self-regulation, because of the hours they devote to play instead of other, more "productive" pursuits. But not only is this idea flawed in the sense that it automatically discounts any benefits to be had from play and categorizes play as fundamentally frivolous and even lazy, it also misunderstands what self-regulation is. Barry Zimmerman presents the tenets of self-regulation – feasible goal-setting, consciously picking strategies for learning, effective time management, self-evaluation of progress, and the ability to reflect on and make changes to ineffective strategies – not as inherent traits learners either possess or do not, but as learned behaviors. A highly self-regulated learner possesses many of the same qualities identified as having high levels of intrinsic motivation and the disposition to learn for oneself, where a novice self-regulator will attempt to measure their progress not through self-evaluation of growth, but by measuring against the performances of others. Thus, poor self-regulation can only lead to the presence of extrinsic motivation and competition, the drive to do as well or better than one's peers. Self-regulation and self-efficacy are also related: according to Driscoll and Wells, highly efficacious students display the traits of being highly self-regulated, such as reasonable goal-setting.

The relationship between games and self-regulation is a complicated one, since games are often predicated upon the act of competition, and thus appear to teach only negative means of self-regulating. This also necessarily lends credence to Conway's ideas about the negative effects

of gamification, since most gamified environments are tied to the use of things like points systems and leaderboards and place students in direct competition with other students. However, this does not mean that all games lead to poor self-regulation. On the contrary, games utilized by game-based learning can engage a lot of Zimmerman's principles of self-regulation to create highly regulated learners. Games are often exploration spaces for the adoption and use of different strategies in order to find success in play; the choice between stealthily evading enemies and engaging in combat is a common one in videogames. Games not only encourage self-regulation and reflection on the effectiveness of choices through giving feedback of success or failure and the opportunity to try again, but they also allow for different types of strategies to be successful based on player competency and preference, as evidenced by Gabbiadini and Greitemeyer's work, which shows a positive correlation between self-regulation and playing computer strategy games (2016). Games do not encourage a one-size-fits-all approach to problem solving, but rather allow players to bring both their prior knowledge and skills and their preferences for how to solve problems into the play space.

Attribution Theory

While self-efficacy and self-regulation deal with how students perceive themselves and their abilities, attribution theory (popularized by Bernard Weiner) deals with the ways in which people ascribe causality to events. How people ascribe causality is a product of their "locus of control" (Weiner). If someone believes that their success is generally the product of their own actions and abilities, they have a high internal locus of control. On the other hand, if someone commonly believes that their failure is not their fault but can be blamed on outside factors, they have a high external locus of control. People with high external loci believe that they will only be successful if certain other factors are present – in the case of a student, things like the proper

amount of assistance from the teacher, how the teacher feels about them, and the very nebulous category of luck. A high internal locus of control is associated with greater success in learning environments, since students feel as though they exercise a greater amount of control over how well they complete educational tasks. If a student feels responsible for their own learning, they are more likely to actively participate in the acquisition and transfer of knowledge.

While games clearly contribute positively to both self-efficacy and self-regulation, the relationship between games and attribution is more complex. Because games are independent feedback systems that are controlled by a system outside of the student (either another person acting as game master or, in the case of digital games, code), there is a possibility for error in the feedback such as a bug in the code that would mean that students could engage in the proper behavior and still fail. Additionally, most role-playing games depend on probability via dice rolling, and so success and failure is more dependent on how a player has built their character at the beginning of the game and not at all dependent on their actions in the moment of play. What this means for games in the classroom is that instructors must carefully consider the mechanics of the game that they use, whether it is a pre-existing game that is being co-opted into the classroom or a game that the teacher has created specifically for learning. Doing so will ensure that they are not utilizing mechanics that encourage the adoption of a high external locus of control in students, which will decrease the motivation to transfer knowledge in situations that lack the same material benefit.

The Problem of Fun

In the preceding discussion of various types of motivations and how they interact with games in a classroom environment, one particular term has not been broached, despite the fact that it is almost omnipresent in popular discussions of games: fun. Many scholars have discussed

the concept of fun in relationship to how games can be used productively: Malone (1981) explicitly focuses on what makes games fun, not on what makes games educational, in his study of computer games providing motivation, and Tews et al (2016) argues that fun promotes learning in a workplace environment. Whether or not a game is considered fun is often the sole condition upon which players will consent or refuse to play, and a fun game is generally considered to be a good game by people who play.

Despite what appears to be its centrality to the work of this dissertation, fun is actually an exceedingly difficult concept to define and quantify, for the simple reason that there is no objective means of measuring what an individual person will find to be fun. Fun is an entirely subjective experience: what one person finds fun, another could find dull and uninteresting, and third could find too difficult and thus frustrating. Thus, while games are generally designed with fun as a goal, there is no way to universally engineer the presence of fun in a game environment for all players.

So how, then, can this dissertation conceptualize of fun? While I was originally tempted to forgo the concept of fun entirely as being too nebulous for any sort of discussion, fun is in fact very clearly tied to the dispositional factors that this chapter focuses on. The cultivation of generative dispositions like engagement are also mostly individually determined, and the presence of dispositions like self-regulation and self-efficacy come part and parcel with a fun and enjoyable play experience, since generally one must believe that one can succeed in order to enjoy the experience of play. Thus, while specifically aiming for a "fun" classroom writing experience through the use of play and games might prove to be a difficult proposition, fun is a potential consequence of attempting to cultivate generative dispositions in the classroom, and can set up a positive feedback loop of students experiencing enjoyment and thus continuing to

put in the work of learning. Fun can also foster transfer, since students may be more likely to remember the experience of having fun and seek to translate the experience of fun (and thus the skills used in the original fun scenario) into new situations.

But it should be noted that fun is not the be-all, end-all of the gaming experience; games can still create productive environments while not being fun. None of the circumstantial dispositions of Driscoll and Powell (though they do refer to enjoyment as a generative disposition), or the boundary-crossing of Reiff and Bawarshi, are dependent on a fun environment, and actually require distinctly "un-fun" emotions such as uncertainty and confusion in order to effectively motivate transfer. Thus, a game that is exclusively fun and engenders only positive emotion is not necessarily the most productive game in a learning environment if transfer is the goal. Games also, particularly those that involve competition or extreme difficulty, do not necessarily rely on fun for motivation for continued play. While the title of this chapter comes from the phenomenon of negative emotion overcoming the player and stalling the play process, the drive to overcome the source of frustration and anger can also be incredibly motivating in both play scenarios and writing challenges.

Thus, while fun can be difficult to quantify, it can be useful in the classroom; fun can lead to engagement, and if it is the natural product of play and students are experiencing positive emotions, those emotions can be leveraged to increase the intrinsic motivation of students, since if someone is experiencing something pleasant, they are naturally motivated to continue doing the action that creates the positive feeling. This section is simply meant to point out that while fun is an important aspect of the experience of play, it is not the sole affective outcome of a productive gaming experience; games offer a much more complex array of dispositional potential than can be afforded by simply using the term "fun."

Conclusions

This chapter begins the process of grappling with one of the most powerful and difficult aspects of learning to write: affect. How a student feels about their own writing, the process of learning to write, the writing classroom, the instructor, and an infinite number of other concerns can deeply impact all parts of the educational process, up to and including the likelihood of fostering transfer. This chapter has demonstrated that the presence of particular dispositions toward learning and writing, deeply tied to the presence of emotions, is integral to the possibility of transfer both into and out of tasks in the writing classroom. This chapter also demonstrated the many nuances of attempting to foster motivation in the classroom as another integral affective component of a mindset conducive to transfer. Finally, this chapter demonstrated how games can help foster and create the needed affective environments for writing knowledge transfer through instilling things like self-efficacy and self-regulation in learners, as well as promoting general engagement in the learning experience. It is still ultimately up to the instructor, however, to use games in ways that will be productive for their particular learning goals; further discussion of how games can specifically be leveraged to provide specific affective environments will be present in Chapter Five. If we fail to consider the affective states of students, we are ignoring a core aspect of how people learn and will fight an uphill battle to see the knowledge we impart taken into other arenas.

The next chapter will move beyond pure abstractions and discuss the implications of using games to compose in the classroom in several different ways. Through examining how both games and transfer contribute to and enrich our understanding of multimodal and new media composition and pedagogy, I begin the process of creating a framework for concrete use of games to teach writing.

Chapter Three

Twine, Machinima, and MMOs: Game-Based Classrooms and Multimodal Composition

Introduction

This dissertation has thus far discussed the game-based classroom in the abstract, with some references to different types of games but no real concrete recommendation about how a classroom that utilizes games and play should look. This is because games are not a monolith in the educational sphere, and games can appear in the classroom in many forms. In one class, students may log into a multiplayer online game such as *World of Warcraft* and play and chat with their classmates. In a second classroom, students work on building their characters for the classroom role-playing game, complete with miniature figures to represent themselves. In yet a third, students work in groups to design and play-test a board game. In each of these scenarios, games are the centerpiece of the learning going on within the classroom, but the experience is not solely characterized by play. Games in the classroom also involve a concept of great concern to the broader conversation of first-year writing scholarship: multimodality.

Multimodal composition is a key point in contemporary discussions of FYC classrooms, with scholarship ranging from digital media production in the form of videos (VanKooten) to the audio production of podcasts (Jones) to ties into the making community through things like scrapbooking (Poe Alexander). Students are being asked to compose in modes beyond the traditional text in greater quantities than ever because of an understood importance of multimodality to rhetorical awareness, and instructors are incorporating multimodal texts into their classrooms, and even delivering original instruction in the form of multimodally composed pedagogical tools. The use of games in the classroom is, then, a natural supplement to an already

established phenomenon, particularly as instructors become more and more concerned with cultivating their students' digital literacies**.**

The relationship between multimodality and transfer is a complex one, since the sites of original learning and the recontextualization of knowledge often involve translating across not only situations and genres, but entirely different mediums. Michael-John DePalma and Kara Poe Alexander wrote about the relationship between multimodal composition and transfer, and discovered that students often find it difficult to conceptualize of an audience for multimodal composing and to negotiate the "multiple semiotic resources" afforded to them, and so struggle to transfer knowledge from their print-based composing into multimodal texts (182). This means that multimodal composition, while a valuable endeavor in the composition classroom, presents an additional set of considerations for attempts to teach for transfer. It is not, however, impossible for multimodal composing to involve transfer, since composing across modes has great potential for abstraction of skills and metacognitive reflection a la Perkins and Salomon's "high road" transfer.

This chapter sets out to demonstrate that games in the classroom are multimodal composition artifacts or tools for multimodal text production, and that using these tools can lead to the transfer and recontextualization of knowledge into and out of traditional print-based composing methods, as well as into both broader academic and non-academic contexts. I will begin with an exploration of the term "multimodality" to solidify how I am using it in this context, as well as to establish the framework of scholarship I hope to build off of. Then I will move into discussing how games in the classroom contribute to the use of multimodal instruction and the production of multimodal texts through three different ways of using games: playing extant or teacher-created games in the classroom, using games as the frameworks for creating

multimodal compositions, and having students engage in game design itself, all towards the goal of fostering writing knowledge transfer.

Defining and Problematizing Multimodal and New Media Composition

In 2005, the National Council for Teachers of English issued an official Position Statement on Multimodal Literacies, which states that "integration of multiple modes of communication and expression can enhance or transform the meaning of the work" that they are used in (np). This is because "all modes of communication are codependent" and each mode influences both "the nature of the content" and the "overall rhetorical impact of the communication event" (np). This means that the various modes work together to produce a single cohesive text via their communicative affordances, and that even traditional text-based documents can be argued to have elements of multimodality, through visual elements like layout and font choices, as addressed by Anne Frances Wysocki in *The Multiple Media of Texts*. The statement goes on to say that we can clearly see multimodal practices in the acts of children, who move between multiple modes including gaming "naturally and spontaneously" (np). This might seem to indicate that humans are in some capacity inclined toward multimodal composition, which is a very large and nebulous claim that this dissertation does not seek to actively defend. What this does indicate, however, is that the masses of non-print communication and media that have amassed over human history are not incidental, and that visual, oral, and haptic (as material and embodied) communication have been omnipresent in civilization for a long time, and that the privileging of print media in our academy is almost certainly doing a disservice to the rich composing possibilities and histories of the world in which we live, though it is reductive to think of print-based texts, who still face concerns of design in terms of organization and style (ie, font choice), as not being in some ways also multimodal.

This section is meant to give an understanding of the terms used in contemporary discussions of multimodality through examining their historical use and evolution, similarly to the discussions of the terms in Chapter One. Through this examination and negotiation of language, I seek to more concretely situate these terms in the here and now, as well as demonstrate their applicability for a discussion based specifically in the affordances of games and play, as opposed to a broader conception of multimodal composing.

In 1996, the New London Group published "A Pedagogy of Multiliteracies: Designing Social Futures," an article that opened the door to contemporary discussions of multimodality. While the NLG uses "multiliteracies" as their term instead of "multimodality," they are still discussing the ways in which the composing and communications system of the world had changed and how the composing systems of the classroom should thus change to reflect it. By structuring their conversation around the concept of literacies, the NLG addresses the needs of the classroom to prepare students for different environments, so that they may "participate fully in public, community, and economic life" (60). And the way to do that, they assert, is through multimodal instruction in all its forms. They also make the claim that multimodality is more inclusive via its accessibility to diverse groups of people, which is promising in its implications for both workplace and public life (67).

Many people feel that the conversation of digital multimedia composing and the broader conversation of multimodality are one and the same, which is untrue and neglects to think about the important roles making, craft, and materiality play in a truly multimodal classroom. This conversation is further muddied by the introduction of the term "new media," which indicates the advent of newer digital texts and composing tools and can sometimes be used interchangeably with "multimodal." While this dissertation sometimes has a focus on digital composing

specifically, due to the prevalence of games in the digital sphere, it should be noted that not all new media texts are heavily multimodal (with the example of text-oriented digital documents like blogs or news articles without images), and not all multimodal texts are new media (such as the creation of material craft products like fiberwork, sculpture, or scrapbooks). Thus, these terms should not be used interchangeably, and any discussion of games in the classroom must also consider the rich rhetorical possibilities of analog space, and the material affordances of non-digital composing practices.

One of the scholars who has written most prolifically about multimodality and new media is Gunther Kress, who worked with the concept as a member of the New London Group, as well as solo and in publication with colleague Theo van Leeuwen. In his book *Literacy in the New Media Age,* Kress discusses how the difference between traditional print-based composing and multimodal composing is one of "epistemological commitments" (3). Traditional writing and verbal expression is a temporal commitment: things happen in a linear fashion, causality plays a large role, and the reader is made to experience the text in a temporally straightforward, one-thing-after-another way. Kress contrasts this with the use of image, which he says requires a spatial commitment of the mind and a totally different understanding of how the text is communicating information. Thus, a piece of new media such as a videogame requires a multiplicity of epistemological commitments from the viewer/reader/player, since they are experiencing both verbal information via text and spoken language as well as constantly shifting images. Gaming adds yet another element to this, since most contemporary gaming experiences require an understanding of three-dimensional space (to control the character in a video game or understand the layout of a board game, for example) as opposed to the two-dimensional space of images. Kress does not specifically address how new media can partake in the interactive touch-

based mode that Jodie Nicotra calls the "haptic" mode which is key to an understanding of gaming, but he does nod to the digital sphere's interactive capacity.

Another scholar to work specifically with the term "new media" is Cheryl Ball, who in a 2004 article defines it as follows: "texts that juxtapose semiotic modes in new and aesthetically pleasing ways and, in doing so, break away from print traditions so that written text is not the primary rhetorical means" (405). While Ball was speaking specifically in the context of recognizing the scholarly rigor of academically-produced new media scholarship, today mostly known as "webtexts," the definition of new media serves as an engaging starting point for a discussion of digital media use in the production of any level of scholarship, including the things produced in a composition classroom. In her discussion specifically of new media, Ball is using a lot of the same terminology used to talk about multimodality more broadly, such as placing new media in opposition to "print traditions." This definition is very timely for its place in early 2000s, but needs some reconceptualizing for almost twenty years later, where a large portion of print-based texts are now accessed very easily through digital spaces, such as PDF and ereaders.

Courtney Werner further contextualizes this definition of new media in her article analyzing the body of scholarship on the topic produced between 2000-2010, and makes the point that, despite being a term often used in rhetoric and composition spaces, the field as of her writing had not actually established a single definition for , and thus that the term itself was reflective of how in flux the knowledge base, methodologies, and interdisciplinarity of rhetoric and composition is. Furthermore, through the field's either embrace or rejection of new media and multimodal digital composing, scholars are not simply fussing with a term or set of practices, but with the identity of the field itself, and whether we prize "writing" or "composing" in a broader sense as one of the core tenets of the discipline.

Looking toward more recent definitions, in their 2013 edited collection *Multimodal Literacies and Emerging Genres*, Bowen and Whithaus define multimodal composing as "involv[ing] the conscious manipulation of the interaction among various sensory experiences" (7). This definition stems from the assertion that multimodality broadens the scope of how students can access and create meaning. In composing multimodally, Bowen and Whithaus assert that students are "drawing on the stuff of everyday social interaction to rethink the shape of written academic knowledge" (2). Multimodality is, then, a process that leads students to utilize both their embodied sensory knowledge and their various situated literacies as members of communities of practice inside and outside the classroom. In order to compose meaningfully in a multimodal way, students must be aware of and have a sense of familiarity with the modes and means of composition, as well as the expectations people have of a particular type of multimodal text. This means that an understanding of multimodality is clearly tied to an understanding of genre, since "understanding how readers' and users' experiences with works in other media shape their responses to multimodal student compositions helps students imagine and predict some of the dynamics that will shape the interpretive framework in which their multimodal pieces will be read and evaluated" (3). So, multimodality in the terms of a composition classroom involves an understanding of both embodied sensory experience and genre conventions, since an understanding of genre necessarily involves expectations of mode (ie, we think of newspaper articles as textual, news broadcasts as video/auditory, etc).

Similarly to Bowen and Whithaus, Jason Alexander and Jacqueline Rhodes say that "we should consider multimodality as both multiple modes of communication and multiple paths and possibilities of communicative interaction" (128). In their book *On Multimodality*, Alexander and Rhodes claim that while many scholars and teachers are open to embracing the multimodal,

there is still a tendency to be overdeterministic with how closely multimodal texts conform to the goals of traditional print composing. Indeed, even referring to them as "texts" that are "authored" to make "arguments" presupposes a certain set of expectations carried over from print-based composing. While acknowledging Jason Palmeri's 2012 claim that the composition classroom has been interested in multimodal composing from its inception and thus multimodality is not a new concern brought in with the advent of the digital, Alexander and Rhodes exhort their audience to consider the different "logics" of the modes teachers ask students to compose in (logic here meaning an epistemological framework), which they feel has thus far not played a large part in the collective conception of the goals of the field (4). This chapter seeks to continue this train of thought and consider the goals of game-based learning not through the lens of traditional print composing, but in exploring composition in a broader sense, as a phenomenon with varied affordances, constraints, and values.

But in discussing multimodal composition, we should not solely consider the final textual product; rather, the entire process of composition is multimodal, and so must be examined, as Jody Shipka says, for the "highly distributed and complexly mediated processes" that deal not only with the creation of texts, but their "reception… and use" (39). Shipka actually explicitly warns against textual overdetermination in *Toward a Composition Made Whole* and calls for teachers and researchers to examine multimodal composition as a holistic process, inextricable from both its creation and its means of dissemination. This means that a classroom that seeks to cultivate the production of multimodal texts must engage with the processes of multimodal instruction and creation as an integral part of learning and thus of transfer. Therefore, this dissertation will use the concept of "multimodality" to not only refer to texts that display

multiple sensory modes, but also to the means of composing texts, as well as a type of classroom pedagogy.

This use of the term when coupled with an argument about how Rhetoric and Composition is currently overdetermined in its focus on print-based texts is not without its complications, so I'll address some problems briefly here. This understanding of multimodality naturally lends itself to a conception of gradations of how multimodal a composition is – a written word-oriented newspaper article with discrete images included is, by the arguments put forward, considered to be in important ways less explicitly multimodal than a composition like a video or a game which uses different modes in a more intertwined way. Thus, while this dissertation acknowledges that all compositions are to some degree multimodal, the work that follows privileges and discusses works that engages with multiple modes holistically and thoroughly and make full use of the affordances of the modes with which they work. Furthermore, this dissertation acknowledges that while the overdetermination in favor of print texts is an issue within the field of Rhetoric and Composition, it makes sense in the context of the broader academy and the long history of pedagogy and theory built up behind the concept of "writing" in a narrow, print-based sense. While I agree with calls for a re-examination of the fundamental goals of the field to look toward multimodal composition, I also recognize that this re-examination would require a fundamental paradigm shift and re-orienting of the tenets of the ways in which Rhetoric and Composition scholars teach, research, and write, and so is necessarily more difficult and involved than a single document such as this dissertation could ever hope to reconcile.

Connections Between Multimodality and Transfer

Ryan P. Shepherd, in an article published in 2018, engaged in a study meant to measure the ways in which students transferred knowledge from their prior digital and multimodal composing practices such as social media into their classroom environments. While Shepherd largely found that students struggled to make connections between in class composing and out of class digital composing and that they needed prompting to consider the ways in which different composing acts were related, he also pointed out that instructors will likely benefit from the digital composing skills of their students, since engaging with their prior composing experiences will allow for a more rich exploration of semiotic meaning making in the classroom (112). I present this study at the beginning of this section to indicate that, while such work is being done fruitfully and that the larger academic community is taking concerns of multimodal composition seriously, the relationship between multimodality and transfer is still complicated and requires much thought in order to be effectively dealt with in a classroom.

A large portion of the field of Rhetoric and Composition's decision to open up the composition classroom to multimodal means of composing comes, of course, with implications for transfer of knowledge. Since students will now be transferring knowledge not just into and out of different genres and situations, but across entirely different modes (how does one take one's knowledge of how to write and apply it to the creation of an image?), the concerns of how to foster transfer become more immediate for the instructor, since the likelihood of low-road, unconscious transfer has decreased and students are expected more than ever to engage in conscious abstraction of skills. In his 2015 piece for *CCC*, Michael-John DePalma brings up how discussions of transfer have shifted over the course of scholarly study from being about "reusing" writing knowledge to being about "reshaping" said knowledge (616). In his qualitative

study of students engaged in multimodal composition, DePalma points out the ways in which effective multimodal composing involves "cross-contextual reshaping through the integration of literacies," particularly through a case study of one student who utilized her literacies both as a writer and as a musician in composing (623). In the creation of a digital project, the student used her knowledge to "forge literacy connections" and thus see the composing tasks of music, image, and verbal communication as interconnected and similar instead of discrete (626). This in turn, according to DePalma, led to "increased rhetorical awareness" for the student, and was a catalyst for a more nuanced understanding of all of their literacy knowledge (626). Thus, the relationship between multimodal composition and transfer appears to be in important ways a process of creating knowledge through the composition process: as the students work to integrate multiple modes, the knowledge they share across their literacies enriches both the bases of original knowledge and the final textual product.

This process is not, however, without its difficulties. As mentioned before in this chapter, DePalma collaborated with Kara Poe Alexander on an article discussing the challenges of multimodal composition for successful transfer. Based on a series of focus group interviews and written reflections, DePalma and Alexander found that students' attempts to transfer knowledge across modes was more successful when they saw textual and multimodal composing tasks as inherently similar to one another, and less successful when the multimodal composing act was viewed as "new or unfamiliar" (182). More specifically, the move to a multimodal composition task led to issues with students being able to clearly identify and compose toward an audience of stakeholders, whose needs and concerns would be met by the composition. DePalma and Alexander identified this as a result of the assumption that multimodal composing was meant for a "public" as opposed to "academic" audience, and thus that "the general public" was used by

students as a substitute audience, which resulted in far too vague of a conception of the stakeholders for a project (186). Taken together, these concerns make the process of transferring knowledge across modes a complex endeavor for students. DePalma and DePalma and Alexander both present specific pedagogical techniques to work through these issues through the acts of tracing (DePalma) and semiotic mapping (DePalma and Alexander), but neither of these approaches works explicitly with the specific affordances and constraints of composing with games; tracing refers to the act of identifying the shifts and rhetorical moves throughout a text, and articulate exactly what work the text is doing, and semiotic mapping is a two-step process that involves first tracing a text and then considering the "inventional possibilities" of this form of composing, including how different literacies interact (DePalma and Alexander 196). While both could be fruitfully used to examine games as texts, neither approach adequately deals with how the key component of interactivity effects the message of the game and how meaning is therein constructed and communicated. The rest of this chapter will show how the concerns of transfer can be addressed through the use of games in the classroom as a facet of the multimodal composing process, which will thus demonstrate how play can foster transfer.

The remainder of this chapter will outline different specific ways that the intersection of writing, games, and multimodality can occur in an FYC classroom and, as a result, foster the transfer of writing knowledge. The following sections utilize a modified classification system taken from the division of essays in Douglas Eyman and Andrea D. Davis's edited collection *Play/Write: Digital Rhetoric, Writing, Games.* Eyman and Davis divide the chapters in their collection into four distinct ways of being for games in the classroom: "Writing About Games," "Writing Around Games," "Writing In or Through Games," and "Writing Games." (v-vi). This dissertation will specifically focus on three primary points of entry for games into writing spaces.

The first section, “Playing Games,” will be about how instructors can use extant games as both texts to analyze in writing and as sites of classroom learning, such as having class time take place inside a digital game. This will be followed by “Using Games to Compose” where games will move from the sites and objects of analysis to tools for rich rhetorical text production in various ways. Finally, the chapter will close with a discussion of “Rhetorical Game Design” or giving students license to author their own play experiences as well as create those experiences for others.

Playing Games

The presence of a game in a composition classroom indicates the potential of play, but in reality determines very little else about the type of learning experience at hand. The act of playing a game for a class can have many different goals and desired outcomes, dependent upon how the instructor wants to use the play experience, and it should be noted that the simple act of play does not inherently guarantee that learning will take place. Rather, instructors need to choose or design games with specific goals and learning outcomes in mind and be explicit about those outcomes with their students as a means of fostering transfer. Doing so will aid in student metacognition, which will be discussed in much greater detail as the subject of Chapter Four.

One of the primary ways instructors can use games in the classroom that still retains a sense of the traditional FYC environment is the construction of games as texts: they are played and engaged with as objects of analysis, much in the same way an essay, novel, or poem would be in a literature classroom. In my own teaching, I have used games as texts in a topics class about videogames, where students engage in play and then analyze the game’s use of rhetoric and language to communicate value, as well as what literacies and skills they deploy to be successful in play. This is particularly useful in an FYC classroom if students are learning

multimodal rhetorical analysis, because games are rich in visual, verbal, auditory, and haptic experiences; or in a classroom where students will be expected to engage in rhetorical game design and need exemplars of genre and how tools and affordances are deployed, which will be more thoroughly covered in a later section of this chapter.

Another instance of playing games for learning is a genre colloquially referred to on occasion as "edutainment," which are games explicitly meant to be educational and to communicate subject content to players; a famous example is the game *The Oregon Trail* (1971), where players attempt to keep a band of pioneers alive as they cross the American West, which is meant to give players a situated sense of the historical struggle settlers faced. Playing these games is thus less about the experience of play itself, and more about getting players to retain subject matter that they can then repeat at a later time, such as for assessment. In this way, games function as a sort of textbook for the course. While edutainment games are notoriously motivating (Usher)**,** they are more akin to gamification than substantial game-based learning (ie, the application of game mechanics on top of non-game contexts instead of using games to construct the entirety of the experience. See Chapter One for a fuller explanation) because of the superficiality of the content that is often conveyed: particularly for writing and literacy, edutainment focuses almost solely on grammar rules and testing formal language "correctness," as opposed to teaching and evaluating higher-order writing concerns like voice and argument development – there are several resources such as the free online game FreeRice and the gaming hub website ESLGamesPlus that demonstrate this point. Thus, there are few to no extant edutainment games appropriate for an FYC classroom.

Games as texts is not the only way that extant gaming experiences can be used in a classroom, however. Rebekah Shultz Colby, writing both independently and with Richard Colby,

demonstrates that playing games in the classroom can be used to foster composing tasks through the games themselves. Shultz Colby particularly utilizes *World of Warcraft*, a Massively Multiplayer Online (MMO) computer game first launched in 2004 and still played by five million people today (Brown). MMOs are persistent online game-worlds that continue to exist outside of the participation of any one player, and that allow for either solo play in a multiplayer environment (ie, the player is not obligated to interact with other players) or for collaborative play to trade goods, accomplish goals, and interact socially. Shultz Colby and Colby propose using *World of Warcraft* (*WoW)* as a space in which players can not only play, but compose documents related to the experience of play, meant to communicate with other players, in an "emergent" pedagogy (309).

In her 2017 article for *Computers and Composition*, Shultz Colby brings to bear specifically why using extant games in the classroom can be beneficial through the lens of multimodality: in addition to simply using games to explore the "affordances and constraints" of multimodal composing, which is a broad goal of the composition classroom in getting students to acquire knowledge of semiotic composing tools, Shultz Colby specifically points to the ways in which videogames specifically utilize various modes to communicate, and how their position as multimodal texts are different from a lot of other digital texts, using Lev Manovich's work on multimedia (56). According to Manovich, most multimedia is actually a case of media hybrid, and not truly multimodal. As an example, think of a standard web page, with image and text juxtaposed. While this piece of work uses multiple semiotic resources, it does not actually have the resources fully engage with each other: the image and the text potentially reference one another, but they are still separate and discrete entities in important ways. Videogames, on the

other hand, present multiple modes as synthesized in a single experience with visual, auditory, and haptic elements.

In their *WoW*- based classroom, Shultz Colby and Colby do not use the game itself as a text, but rather as a springboard for the composition of texts within a genre ecology that arises naturally around the experience of play of a complex and multifaceted piece of software. Players in *WoW* have a large amount of choice about what amounts to a successful play experience: they can choose to engage with the game as a traditional high-fantasy adventurer, fighting increasingly powerful enemies and collecting in-game rewards, or they can focus on collecting fictitious wealth via the in-game economy by joining a profession such as alchemy or leatherworking, and crafting digital goods to sell to other players. Players can often mix different styles of play and switch between goals depending on their needs for the game or their desired play experiences that day, but the lack of singular path to success means that *WoW* has a multitude of avenues for character and player advancement, and thus that players seeking out how to be successful in a particular way need similarly varied resources to supplement their play. Shultz Colby and Colby encourage their students to create such texts, referred to as "paratexts" or texts that arise in response or as a supplement to a primary text, and to share these texts with the broader *WoW* community. Examples of student work include a guide on how to succeed in the jewelcrafting profession and a proposal to the developers, Blizzard, asking for a change to a popular social feature to increase the feature's usefulness.

This approach has several benefits: instead of giving students a specific assignment within a genre or with a predetermined rhetorical goal, allowing students to choose the genre and goals of their text mimics in some ways the voluntary experience of play, which in turn Shultz Colby and Colby say increase the likelihood of immersion in the composing process, which has

an impact on the transfer of writing process knowledge. Immersion as a benefit of play, as well as how it interacts with and complicates the process of metacognition, will be discussed as the subject of Chapter Four, but it is worth noting the benefit of this particular use of games now.

Another benefit of Shultz Colby and Colby's approach to games in the classroom is the way in which they get their students to conceptualize audience. Instead of retreating into the traditional conception of audience in a writing classroom, where students are exhorted to write for an imaginary audience of stakeholders but are in reality only writing to an audience of their instructor, for their *WoW* paratexts students were actually given reign to write texts that an audience of interested members of the gaming community would see, such as a contribution to the game's wiki. In doing so, Shultz Colby and Colby are giving their students experience with a core concept of multimodality and new media, as identified by Henry Jenkins in his 2009 book, *Confronting the Challenges of Participatory Culture*. In participatory culture, people become involved in shared communities of interest around a piece of media and become active creators and curators of content surrounding that media, such as posts on message boards or fanfiction. A similar idea also published in 2009 by Harrison and Barthel is that of the "active audience," which leads to the claim that user-generated content is largely responsible for the success of the development of the internet as a cultural phenomenon and communicative superpower. Thus, across at least the digital spheres of multimodal texts and composition, there is a prevailing idea that the audience is not a passive consumer of the message, but an active participant in the creation and maintenance of the genre ecologies that spring up around media.

By having their students engage in this participatory culture as active audience members, Shultz Colby and Colby are engaging with a core principle of multimodality, but also working with a concept central to situated notions of transfer: that of legitimate peripheral participation.

First addressed by Jean Lave and Etienne Wenger, legitimate peripheral participation involves "learners… participat[ing] in communities of practitioners" with the eventual goal of "mastery" and "mov[ing] toward full participation in the sociocultural practices of a community" (29). Lave and Wenger characterize learning not as a process of passive internalization, but as a process of active participation as an "evolving continuously renewed set of relations" (50). In the terminology of games, players engage in legitimate peripheral participation by engaging in the process of learning to play and become fuller members of a community of players by contributing to the knowledge of the community through the creation of paratexts, and through their actions engage in the conveying of their knowledge in service of the community via multimodal composing, which is the expected parlance of these communities.

Videogames are not the only means to playing games in the composition classroom – a variety of analog games, such as card games or board games, can be used to achieve similar goals, both when used as texts and to teach higher-order concepts. An anecdotal example comes from my own teaching: as a special Halloween treat, I had my composition students play the social deduction game Werewolf, where players are assigned roles and the goal of the game is to determine who the werewolves are and eliminate them before they kill the rest of the players, who are villagers. In order to find and defeat a werewolf, the other players must actively debate about who they think the guilty players are in order to come to a consensus, while players accused of being werewolves must defend themselves. Werewolf is thus an excellent means of teaching the practice of particular rhetorical strategies, especially in regards to developing ethos. While this game, as a verbal exercise, does not engage with the visual or haptic modes in the same way, it is still multimodal in the sense that students are engaging with both verbal concerns in that they must craft persuasive arguments and remain cognizant of their auditory presentation

in terms of tone. Through the affective elements of fun as addressed in Chapter Two, games like Werewolf allow students the opportunity to practice skills of rhetorical persuasion that they can carry into other contexts. Playing multimodal games such as Werewolf in the classroom also taps into the experience of fostering engagement and motivation as addressed in Chapter Two as directly contributing to dispositions conducive to transfer.

Across these examples, the use of games as texts themselves and the springboard for participation in genre ecologies comes forward as a very explicit and almost traditional means of utilizing games for writing knowledge transfer. The next two sections will tackle two other approaches to using play in the classroom, that lean even further into the multimodal affordances of games and their unique approach to audience, with which instructors can effectively engage in the process of fostering transfer.

Using Games to Compose

While games as texts and using the genre ecologies of games for classroom composing are both fruitful potential avenues for the use of games in the classroom, there is another means through which students can use extant games to practice multimodal composition skills: using the games themselves as tools to compose through. This may at first seem difficult to conceptualize, since games can be thought of and defined as constricting rules-based systems not inclined to the freedom of expression necessary for composing: we do not think of ourselves as composing while we play, for example. But this view of the ways in which students can engage with games, being purely participatory and not productive (which is a view held by many foundational scholars of play such as Huizinga and Caillois), is a reductive one that neglects to examine the ways in which the technology and structures of play can be leveraged and subverted in the process of creation. Games as sites for and tools of composing present a rich field through

which students can explore the affordances and constraints of the genres and modes the games contain, which in turn will encourage transfer.

An explicit way to use games as a tool to compose is through the creation of machinima. Machinima is the use of a game's engine and computer graphics to create a cinematic production akin to an animated film. To create machinima, composers synch up gameplay footage with recorded audio such as dialogue or music in order to create a narrative experience. The most famous instance of machinima is the series *RedvsBlue*, distributed digitally by the gaming entertainment group Rooster Teeth using the game engine from the revolutionary first-person shooter *Halo: Combat Evolved.* Machinima is often used as a way to present commentary on the game engine in which it is created (functioning as a sort of metatext), as well as the lore and universe of the game world, being often, but not necessarily always, satirical and humorous.

While machinima is traditionally thought of as an act of fan labor on the part of enthusiastic members of gaming communities, Wendi Sierra wrote about using them in the classroom as a composing tool. Sierra points out that, similarly to using games as sources of content, using games as systems for authoring texts is an act of participatory culture, since students will be actively contributing to the culture of the game through their work. Additionally, Sierra points out that machinima is an example of a commonly discussed form of multimodal composing by way of scholars such as Shipka, Palmeri, and Ridolfo and DeVoss, the remix. In remix, composers take elements of an already existing composition and retool, augment, distort, and supplement it to fit a different rhetorical purpose; the name is taken from the longstanding tradition of musicians' altering existing songs either as a tribute or response to the original artist. Thinking of machinima as remix is very fruitful to our understanding of games as multimodal authoring systems, since it places the use of games and play within an established multimodal

framework that emphasizes the reshaping and recontextualization, rather than the static reuse, of knowledge. Robertson, Taczak, and Yancey specifically connect remix to transfer, via a process of incorporating new knowledge into prior knowledge and applying it to prior models of composing. In this way, machinima would utilize the student's prior knowledge of how the game engine works with their new knowledge of using the engine as an authoring tool, to apply the game engine towards creation of texts in new and unexpected ways.

While machinima can be a useful tool in thinking of games as authoring systems, engaging in it can be a challenge for some students who lack certain technological competencies, which is a common complaint lodged at many forms of multimodal composing. However, machinima is not as difficult as may be assumed, and often only involves the same skills required for video creation (ie, screen capture to record footage, audio recording, and basic editing kills). Thus, machinima should not be viewed as a form of composing that requires a high level of technological competency on the level of other uses of games as authoring systems, such as "modding" a game by altering the game's source code. Further, by engaging in machinima students are actually remixing on multiple levels: both in terms of subverting and adding onto the content of an extant composition, and through the act of play itself, by engaging in play not to complete the goals of the game but to create the visual scenarios needed for their remixed composition.

While digital games exist within the confines of pre-authored systems of code and procedures and thus require a certain amount of non-standard play in order to compose with them, non-digital tabletop role-playing games (TTRPG) like *Dungeons and Dragons* (D&D) present a rich space as authoring systems for players while being more flexible in terms of rules and play. TTRPGs involve a large amount of authoring on the part of different roles in order for

play to be effective. TTRPGs rely in large part on the authoring prowess of the Game Master, known popularly in D&D as the Dungeon Master (DM). These players are in charge of controlling the narrative of the game, and often create the game environment (locations, non-player characters, items, goals, and plot) entirely from scratch, using the basic rules of the game to write new stories as opposed to using prebuilt stories, called campaigns. Other players are responsible for the creation of their characters and author things like their appearance, abilities, possessions, and backstory, as well as having a hand in co-creation of the story. The multimodal component of TTRPGs is variable, dependent on the resources and temporal and financial investment of the DM in particular, but often involves visual and material components: both players and DM will generate maps of specific play-spaces such as the archetypal dungeon in order to facilitate spatial awareness and ease of play, and oftentimes the play space is dominated by a scaled grid on which players, other characters, and monsters are represented in the form of small figures painted and designed by the players and DM, to better keep track of combat scenarios. Thus, the act of playing a TTRPG, even without considering the rich collaborative role-play that defines the play experience, is inherently multimodal.

This, then, raises the question of how the environment of a TTRPG could be useful in a classroom setting as an authoring system and a means of fostering transfer. By the act of engaging in TTRPG play, students would be actively composing within the narrative of the gameworld, through doing things like creating a character that meets the criteria for being an effective actant in the world and then using that character to act upon the game-world; thus, TTRPGs are actually an interwoven mesh of games as both content and authoring systems, since the very act of playing is an act of authorship. But these actions are not simply play for play's sake, and composing for the pure value of engaging with the play environment: scholars such as

James Paul Gee have pointed out the potential consequences of engaging in role-play for player identity, and how that identity work can be leveraged in educational spaces.

In his 2003 book *What Video Games Have to Teach Us About Learning and Literacy*, Gee argues that a player's identity can be shaped and molded by the experience of taking on a character and engaging in role-play. Foremost, Gee argues that essentially all learning requires identity work, because it involves "taking on a new identity and forming bridges from one's old identities to the new one," which sounds suspiciously like situated knowledge transfer (loc 996). Gee uses the example that if a student is to learn about science in a lab, they must take on aspects of inquiry and scientific thinking in line with the identity of a scientist. Gee claims that there are three identities to consider during the act of play: the identity the player has generated for their character, the identity of the player as a person playing a game, and what Gee calls the "projective identity" or the ways in which the player projects their values and beliefs onto the character and is similarly molded in their non-game life by the way they perceive their character as an extension of themselves makes choices (loc 1079).

It is this concept of projective identity that can be leveraged into encouraging the learning and transfer of knowledge in a multimodal TTRPG setting. As Gee puts it, when people engage in learning, in order to do it fully, they must be willing to see themselves as "the kind of person who can learn, use, and value" the knowledge they're going to acquire. In the specific parlance of an FYC classroom, students are not going to learn to write if they do not view themselves in important ways as writers. Thus, by asking students to engage in play through the act of composing, teachers are creating an environment where the student could feel a sense of ownership over the products they create (while receiving immediate feedback as to their efficacy in the play space) and through navigating the world as a composed character, gain confidence in

their ability to compose more broadly (ownership was also identified as a generative disposition for transfer in Chapter Two). We become players through play, and we become writers through writing, and through these two mutually constitutive acts in a TTRPG setting, students as players can engage in the sort of valuable identity work that makes them become the sort of person who not only composes, but actively engages with and recontextualizes composing knowledge.

This method of applying games to the concerns of multimodal composing and transfer allows for open-ended expression and full determination of the goals of composing, which in turn gives students greater ability to engage with the participatory culture and active, collaborative audience of multimodality. Through engaging with the audience in these ways and structuring composing through play as a potentially collaborative act, as in the case with TTRPGs, games can work to address the issue of audience conception that DePalma and Alexander bring up by making the composing act not a siloed classroom task but a situated and active work in progress where the audience is actively present and being engaged with throughout the act of composing.

Rhetorical Game Design

The final way to introduce games into the classroom that this chapter will address is one that a lot of instructors may find intimidating, due to the perceived necessity of technical literacies such as programming proficiency. But as the next section will demonstrate, the task of rhetorical game design is not only beneficial as an act of multimodal and rhetorically productive composing but can be easy to facilitate using skills and literacies already present in the composition classroom.

The structure of an FYC course often works in a somewhat linear fashion, moving students from the process of analyzing and interpreting rhetorical texts through written

assignments, into creating texts of their own that clearly demonstrate their rhetorical flexibility. Thus, it seems like a natural progression of things that a classroom concerned with multimodality would have students engage in the creation of multimodal texts, and further that a classroom invested in the concepts of play would have students attempt to engineer rhetorical play experiences. But a lot of the trappings of making games seem to indicate that literacies and educational experiences outside of the purview of the FYC classroom are required: in order to specialize in just one facet of making a videogame professionally, for example, someone has to get a four year degree specializing in programming or computer-facilitated art design like 3D modeling. So the barriers to competency seem high, but they are not insurmountable, and actually the process of game design can be a fruitful and easy process that opens the doors to new literacies while also building off of the skills learned in a composition classroom. In order to further negotiate and understand how these skills can transfer, we first need to examine the relationship of the field of composition to the concrete task and abstract concept of design.

Scholars examining multimodality have long engaged with the concept of design and what it means for composition. In "The Design of Web 2.0" Kristin Arola puts forward a call to action and says that "composition teachers need to engage, along with our students, the work of design" (4). As early as 1994, the New London Group was conceptualizing composition as a nearly entirely remediated process where "Design" is used to describe forms of meaning: "Available Designs" are the commonplaces we work within, and composers recontextualize the Available Designs through Designing into new texts, called the Redesigned. Thus, the entirety of composition, multimodal or no, is actually a part of the process of design.

Other scholars such as Lauer and George also emphasize the importance of design, particularly as a natural consequence of analysis and as of greater importance than material

production. These writers seem to feel, as the New London Group does and as Murray says, that "design is just another word for composition" (334). One former member of the New London Group, however, goes even further in his discussion of design and its relation to composition. Gunther Kress, in his book *Multimodality*: *A Social Semiotic Approach to Contemporary Communication*, places design in a position of paramount importance to the communication process and says that "design focuses on an individual's realization of their interest in their world" (6). This is all a part of Kress's larger argument that multimodality can be studied, analyzed, and talked about through the lens of social semiotics, which Kress claims can aptly deal with the meaning present in multimodal works. By "interest" Kress is referring to the ways in which people select criteria and material to generate signs that respond to their particular communicative need.

Design is the process through which signs are created to serve the specific needs of their creators, and as such are "motivated conjunctions of form and meaning" (Kress 10). This interaction between content and form is one that is central to design as a facet of multimodality and has been commented on in various ways by different scholars. Some, such as Arola, Ball and Moeller, and DePalma and Alexander, point to the "fusing of form and content" as something both different from traditional conceptions of composing, where form is considered ancillary to the content of the work, and as central to how our understanding of multimodality functions. Geoffrey Sirc, in "The Still-Unbuilt Hacienda," makes a bigger claim about the need to "de-determine form and content" within texts, so that writing "can just be" (49). Sirc's proposition, to "de-determine" what many feel to be the fundamentals of composition, is a bold one, and it relates to his larger idea that English composition should be a Happening, or a spontaneous event with no predetermined outcome, more akin to what many would consider performance art than

traditional ideas of composing. Happenings, with their open-ended qualities and tendency to call upon non-discursive rhetoric, are a good example of a multimodal pedagogy in practice, though some scholars may contest their utility in the classroom, since Happenings by their very nature seem to resist thesis-driven or traditionally argumentative enterprises (which could be said of most if not all multimodal composing practices).

What all of this means for the specific task of game design is that composition and particularly multimodality is already concerned with the act of design, and so asking students to engage explicitly with design is less of an inherently unique task with no grounding in prior instruction, and more of a natural progression that requires leaning into specific literacies that students may or may not already possess as citizens in a digital world. By thinking of game design not as fundamentally different from the task of writing a paper, for example, but as connected through core concepts of design such as Kress's notion of interest (which is really another way of thinking about responding to exigencies) and Sirc's idea of Happenings (which connects clearly to open-ended scenarios of player choice such as in TTRPGs), instructors can clearly illuminate the path for students to see the connections between current and prior composing tasks and engage in the recontextualization of knowledge.

Katie Salen and Eric Zimmerman talk specifically about game design fundamentals in their textbook *Rules of Play*, which was cited in Chapter One for its definition of "game." Salen and Zimmerman divide game design into three schemas:

1. "Rules = the organization of the designed system
2. Play = the human experience of that system
3. Culture = the larger contexts engaged with and inhabited by the system" (5)

These three schemas have clear connections to multimodal and even traditional conceptions of composing: how we conceive of play is similar to how we conceive of the relationship between the text and its audience, cultural context is an explicit concern across composing environments, and our understanding of the way rules for a particular category of game function bears similarities to our understanding of genre conventions. It is this final connection, between games and genre, that I think provides a key to understanding how rhetorical game design leads to the transfer of knowledge.

In her chapter in *The Locations of Composition*, Amy Devitt discusses the nature of the relationship between genre knowledge and the transfer of knowledge, and how it often proves a difficult task. Devitt argues that positive instances of transfer occur not when students or workers transfer specific knowledge of one genre into another situation, even one with similar genre requirements, since every composing instance is unique; rather, transfer of knowledge occurs when writers take an awareness of the nature of genre and an understanding of how to analyze the particular situation across contexts, so that they can clearly form an idea of what a particular situation needs. Much like other composing tasks, games exist as members of different genres, with codified but flexible rules of play. Thus, the act of being able to analyze the best ways in which to create a specific play experience through rules, narrative, and interactivity, is fundamentally an act of genre awareness, and each time students engage in it, they are transferring knowledge from their prior gaming situations into their current composing ones.

As an example, for my final unit in my video games topics course, students engage in rhetorical game design through the Twine interactive fiction engine. Prior to giving students free reign over the Twine software, students play several examples of games created in Twine ("Twine game" being an accepted genre in the indie games community) such as Zoe Quinn's

famous *Depression Quest* and Kris Ligman's underground hit *You Are Jeff Bezos*, and engaging in critical discussion and evaluation of these games, so that they will have a nuanced understanding of the affordances and constraints of the genre of game, and thus what kinds of rhetorical experiences they can cultivate. The Twine interface itself uses a modified version of the Javascript programming language, and is relatively simple to pick up and construct simple branching narratives with, since all choice in the game is predicated with a single command, the off-setting of text options with double brackets. The language, despite being easy for base use, also allows for much depth and complexity through the use of things like coded "if" statements, so students willing to engage more deeply with the software can create complex and nuanced experiences. The specific assignment is intended to allow students to use the ideas of procedural rhetoric and interactivity that they have studied all semester through playing and composing around games and engage in near transfer for the creation of a rhetorically rich and interactive text themselves. Additionally, students create several paratexts as scaffolding during the process of game development, such as a storyboard, a game development pitch to convince their classmates as stakeholders to play the game, and a continually updated game development journal to encourage metacognition about the process of game development and interactive argument creation.

Through this project, I have seen incredible success in getting students not only to think critically about game design and digital storytelling, but to see them transferring the things they learned from looking at exemplars and talking about procedural rhetoric into their final products. A particularly successful example came from a student who struggled with analysis the entire semester: as they put it in their reflection on their game review, their first major project, "not everything has to have a deeper meaning all the time. Stuff can just be entertaining." While I

worked with this student in individual meetings, they remained resistant to the idea that games could carry important messages in their mechanics and story unless things were explicitly caked in overt symbolism, until they turned in their final project. Their Twine game was a story that explicitly referenced our previous discussions about how they felt stuff didn't have to be big and important: the narrative was a simple story about a group of friends going on a journey to satisfy a craving for smoothies. But the student turned this mundane narrative into a nuanced story about morality and paying it forward: as the friends are thwarted time and again in their pursuit of smoothies, they are presented with choices about how to treat the people around them, from the McDonald's employee telling them the machine is broken to an unhoused man asking for money for food outside a gas station. If the friends choose to treat people with kindness, their journey is made easier in small but meaningful ways; if they react in anger or disdain, they are ultimately unsuccessful in acquiring a smoothie. By building these choices into a superficially meaningless narrative, my student surmounted their challenge of finding meaning in game mechanics and story, and successfully transferred their knowledge of digital rhetoric into a project with a clear message and goal.

This transfer based on genre awareness can also happen in the opposite direction, from game design into other acts of composing, thanks to a phenomenon that Tina Arduini identifies as "gaming literacy" (89). A player's gaming literacy arises as they interact with and learning from the act of playing and, one can assume, designing video games, but has key similarities to developing other multimodal composition literacies, particularly in terms of digital gaming and navigating computer technology. As students become more fluent in gaming technologies to play and design games, they develop skills that can be leveraged to use technologies in other ways, such as web design and an increased sense of digital information literacy, as well as self-efficacy

with technology in general. Thus, the act of game design opens the door to much broader digital composing that can take place in the player's work and home lives.

Conclusions

Across this chapter I have demonstrated that the concerns of games and play have an inherent connection to broader acts of composing through the lens of multimodality, and showed how different uses of games in the classroom, as content systems and multiple means of authoring systems, can have an impact on transfer of knowledge both into and out of the FYC classroom. Through this, I hope to have further shown that play is not at odds with the composing environment, but rather a meaningful tool that can be used to achieve learning goals and promote retention and abstraction.

In the chapter that follows, I present a conundrum to the use of gaming in the composition classroom, which has thus far been positioned as a positive in terms of its usefulness for transfer. I will tackle the issues of metacognition and reflection, commonly viewed as essential to the process of transfer, and how they are at odds with the state of immersion that is viewed as a key part of a successful play process. In working to rectify this complex issue, I will set the stage for my final chapter, which will present a set of concrete pedagogical tools that can be used to further the work of this dissertation and take these ideas from the theoretical into the situated and embodied lives of instructors and students.

Chapter Four

Metacognition in the Magic Circle: The Problem of Immersion

Introduction

In the fall of 2018, I conducted a pilot study for my final project in a seminar about writing knowledge transfer. The goal of the study was essentially a precursor to this project: I wanted to demonstrate that using games in the writing classroom could foster the recontextualization of knowledge. Since it was a project that had to be completed in a single semester and could not be longitudinal, I decided to narrow my focus, and look only at Perkin's and Salomon's ideas of near transfer, where knowledge is translated between similar tasks. Specifically, I was looking at if students were transferring the knowledge from their in-class activities and low stakes writing into their large out of class project. I used a multi-week unit I had designed over the summer that aimed to teach students about multimodal composing and genre through the framework of a zombie apocalypse simulation, where students role-played as FEMA representatives tasked with responding to an ever-evolving crisis of the undead. I was working off the hypothesis, which would eventually turn into the focus for Chapter Two of this dissertation, that games were engaging, and that engagement facilitated transfer. For four weeks my students in a Composition I class wrote public statements, argued about making judgement calls for the good of the public, and worked on their multimodal final projects, a post-apocalyptic survival guide. While they did these things, I took field notes during class, administered surveys for self-reports of engagement and transfer, and interviewed select students as case studies. Last, I analyzed the submitted final projects for evidence of transfer from coursework activities.

If writing this dissertation now is any indication, I felt that the pilot study showed promise and that my ideas about games and transfer held at least some water. My initial data

indicated that students both found the learning they did as part of the game incredibly engaging and that they were effectively transferring what they learned in class into their final projects. There was, however, a distinct snag: Essentially all of the participating students, either in surveys or interviews, struggled to articulate either the things they had learned or the ways in which they were applying them in their work. In my writeup of the study, I posited that the trouble they had articulating their transfer was directly tied to the heightened engagement: they were having so much fun that not only did they not mind learning, they didn't realize they were doing so in the first place.

This finding posed a distinct set of problems moving forward: since so much of transfer, and in particular the type of abstracted, conscious, far and high-road transfer teachers want to facilitate as their students leave their classes and enter other disciplines or the workforce, relies on being able to point to a piece of knowledge and recognize that it's applicable in a certain situation, how can a technique that obfuscates the sites of learning (though encouraging metacognitive awareness is difficult in any context) be effective in fostering transfer to less clearly connected contexts? I presented these findings at a research conference the next year, and this particular question proved a sticking point for an intimidatingly successful colleague in the field, who approached me at a party later that night and said: "Your work is fascinating, but how on earth can you get around the lack of awareness?"

This chapter is in many ways a direct response to that colleague, whose enthusiasm for my project and desire to pick at this point spurred me into being dedicated to resolving this seeming contradiction in the use of games for transfer. This chapter thus examines two interconnected and yet seemingly opposed phenomena for the act of transfer: immersion, or the act of becoming absorbed in an activity to the detriment of other thought, often viewed as a

hallmark of a quality gaming experience; and metacognition, or the act of thinking clearly and reflexively about your own knowledge and skills and then applying them consciously, often (though not always) viewed as an essential component of successful knowledge transfer. Because of how games are valued as immersive experiences, it intuitively seems like, in order for a game to fulfill its goals as a game (ie, be engaging and probably fun), it cannot engage with the sort of thoughtful reflection and acknowledgement of one's actions that metacognitive activity requires. Conversely, it also seems like metacognitive activities in the writing classroom, with the requirement that the student must remove themselves from the activity and think about their skills, knowledge, and practices more abstractly, are antithetical to the in-the-moment ethos of most games. So how can games foster meaningful transfer?

The remainder of this chapter does the work of answering this question. I begin with an examination of both the phenomena of immersion and metacognition independently, to more clearly set up how I see these forms and methods of learning being enacted and to clearly demonstrate their benefits to students and writers. Then I complicate the intuitive understanding of the seemingly adverse relationship between games and metacognition presented in the above paragraph through showing how scholarship in games and transfer has already shown these concepts as mutable and not opposed. Finally, I discuss specific instances wherein games can engage productively with both immersion and metacognition toward fostering transfer.

The Magic Circle Revisited: Immersion in Gaming

Straining memory all the way back to Chapter One and my attempts to formally define "play," I discussed the work of Johan Huizinga in his book *Homo Ludens*, and particularly focused on a phenomenon he identifies that has commonly come to be known as "the magic circle." To recap, the magic circle is essentially a clearly demarcated play space, where the rules

and conceits of play create a space that is separate from daily life. While within the magic circle, players' actions are dictated by the rules of the game as opposed to those of polite society, and one of the cardinal sins of the act of play is when a player in any way steps outside of the magic circle and violates the sacred play space, ruining the illusion of the game world. Thus, it seems evident that the creation and maintenance of a magic circle is a key phenomenon to immersion in a game, and that without a magic circle, immersion is less likely.

The magic circle is a concept that has been taken up by various scholars of play and games, despite being perhaps originally a particular translation quirk (the phrase "magic circle" never actually appears in the version in translation I read for use in this work, though the concept is certainly present). It has also shown itself in rhetoric and composition contexts, with Rebekah Shultz Colby and Richard Colby arguing for the classroom space as a sort of magic circle in itself, since a classroom is "a space bounded by terms and class periods and defined by its own set of classroom rules and learning objectives" (303). The contemporary discourse surrounding the magic circle is, however, a little complex to dig into, because of the way two opposing trains of thought about the magic circle have structured themselves. As Eric Zimmerman points out in his article "Jerked Around by the Magic Circle," magic circle discourse is haunted by a specter: there is a plethora of dialogue, mostly in the form of conference proceedings and informal work on social media, that aims to deconstruct rigid notions of an ahistorical, arhetorical, and apolitical magic circle, where the circle removes the game and the act of play from its social and cultural contexts entirely. These scholars argue that the magic circle is a damaging and imperfect concept because it effectively removes play from the things that make play significant to its players. The problem, according to Zimmerman, is that the scholar or game developer who feels strongly that the magic circle is this all-encompassing act of isolation does not actually exist. In

being so enthusiastic about staking their claim in this longstanding piece of games work, scholars are unintentionally creating a strawman, or as Zimmerman puts it, “a magic circle jerk” (he claims that he’s using “jerk” as a noun to describe a type of person, and not as a verb to refer to similar and popular vulgar phrasing used to mean a wasted effort. I only partly believe him).

The magic circle, while helpful in providing a discrete space for consideration in the act of play, is still a concept that requires some negotiation in terms of how permeable the barriers of the game world are. Taking the hardline stance that no social or cultural context can seep into the game from the world outside is clearly an untenable position: not only are the actions of players always clearly influenced by their lives outside of play (whether in terms of making choices that reflect some part of their identity or in terms of taking action and expecting a specific outcome based on their general knowledge of cause and effect), but the game itself may be designed with the goal and intention of communicating specific values about things like proper behavior and how to succeed that have implications for the world outside the game. The magic circle works best not as implying a monolithic and impermeable barrier between the game and the rest of the world, but as a sort of semiotic lens or Burkean terministic screen: an overlay and important framework that helps to define how players see their actions, but not the only thing motivating and constraining action.

So, if the magic circle is not the end-all be-all of immersion in gaming, any discussion of the usefulness of immersion must contend with the idea that immersion is often a failed or flawed endeavor, and that even when immersion is perfectly achieved, it does not seal out a myriad of other considerations to the play experience. This conception of immersion as permeable works in favor of people attempting to use immersion to achieve external goals to the game, such as an educator wanting to use games to create sites of learning and foster knowledge

transfer, since the permeable barrier of the magic circle will lead to students more easily seeing the connections between their play and the work they do in other spaces.

Obviously, immersion is not a phenomenon unique to gaming, and psychologists have long studied what conditions are required for becoming immersed in a given activity and maintaining immersion over a period of time. One of these theories, Mihály Csíkszentmihályi's theory of flow (1990), has been taken up by the larger game studies community and examined for its implications for the act of play. As addressed in Chapter Two, "flow" is a state of immersion characterized by "voluntary effort to accomplish something difficult and worthwhile" (3). Csíkszentmihályi discusses the flow state as being similar to the colloquial sensation of being "in the zone" experienced by professional artists and athletes and equates it specifically with being an experience to cultivate joy and well-being. In order to achieve a flow state, a participant must achieve a specific balance between their skill level at the activity and how complex or difficult the task is. If the participant isn't skilled enough/the activity is too difficult, they become anxious and leave the flow state. Similarly, if they are far too skilled for a task and the action is simple, the participant is bored and does not achieve immersion.

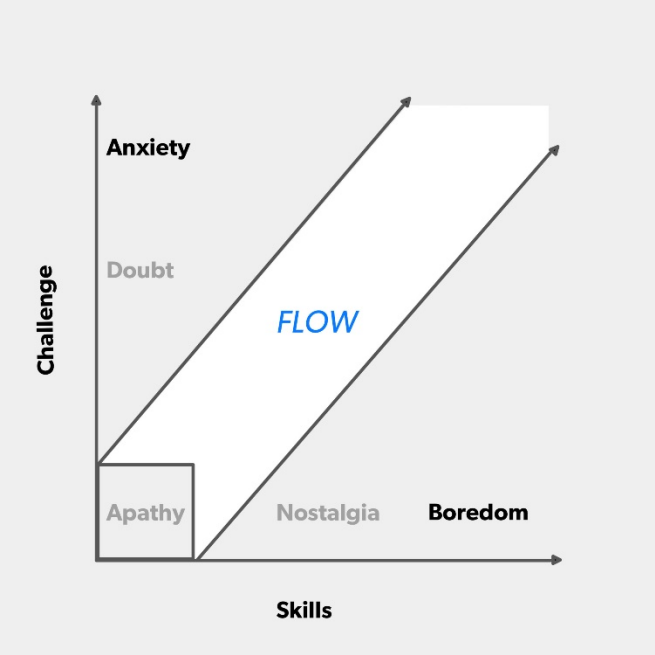

Fig. 1: A chart demonstrating when a flow state can occur (Skawflaw)

In Figure 1, the ability of a person to enter a flow state is indicated by a white channel that correlates to achieving specific balance between the x-axis of player skill and the y-axis of how challenging the game is for the player. The more skilled a player is, the greater a challenge they need to experience flow, and vice versa. If the player becomes too skilled without a commensurate increase in challenge, the player will fall out of flow into a state of boredom, and if the challenge outstrips the player's skill, they leave flow and enter a state of anxiety. Initial levels of skill and challenge are also both required for flow: when values on both axes are low, the player exists in a state of apathy.

Since gaming involves application of skill to achieve ends designed to present a challenge, gamers often experience a flow state like what Csíkszentmihályi describes. The concept has seen traction in popular games criticism circles and can be effectively used to measure the immersive properties of a game, as well as the challenging concept of "balance," or

how well a game scales difficulty to match how quickly players learn to master the game, but is not without its detractors. Independent game designer Sascha Moros (2018) has publicly discussed problems with the concept of flow, describing it as "inherently ableist" (Twitter). It is true that flow as it is currently understood requires having certain normative cognitive abilities, and that people with cognitive impairments that impact learning or experience symptoms consistent with Attention Deficit Disorder such as trouble focusing or being easily distracted can struggle with achieving the immersion needed for a flow state. This is consistent with Marie-Laure Ryan's (2001) discussion of immersion in *Narrative as Virtual Reality*, where she discusses that, despite immersion commonly being considered an activity antithetical to critical thought, being in a state of immersion actually requires a specific kind of mental effort to reach, and the more difficult the task is for the participant, the harder it is for them to become immersed in it (65). It is certainly short-sighted to view the achievement of a flow state as the optimal way to experience play, since doing so effectively gates people from participation through claiming their experiences are non-optimal and not true expressions of play potential. However, we must acknowledge that flow and immersion are significant phenomena for a lot of players, and that being immersed has consequences for play, as well as implications for what the player takes from the experience.

Similar to how flow has implications for the content of Chapter Two where I discussed engagement, scholars have specifically examined the relationship between immersion in a gaming environment and engagement with the content being put forward. Hamari et al. (2016) conducted a study wherein they examined how the use of challenging games in the classroom influenced learning, and they studied both how engaged students were, and how their responses, comprehension, and retention changed when they become formally immersed in the game. The

data intriguingly indicated that when students were engaged, learning increased, but that being immersed in the game through entry into a flow state did not offer any additional benefits than simply being an engaged participant (which is, in itself, a benefit). This means that immersion, while considered to be a hallmark of a good gaming experience, going the extra step from "engaged" to "immersed" does not necessarily contribute meaningfully to the experience of learning in itself. But this does not mean that immersion is a phenomenon that should be written off as not useful for educators. Christou (2013) has pointed out that, for a lot of gamers, immersion and appeal (a concept he introduces that has implications for engagement) are mutually constitutive: when a game is likely to be immersive, it is more likely to be appealing to players (and thus be more engaging since they express voluntary desire to play), and when a game appeals to players, they are more likely to be so engaged with it that they achieve immersion. This is potentially useful for educators because when crafting an educational gaming experience, they can use immersion as a benchmark for a successful experience: if an experience is immersive, it is both engaging (so learning will increase) and appealing (so students will voluntarily recall the experience as positive and meaningful, which may lead to recognition of transferable skills).

While immersion is a very common phenomenon for discussion in games studies specifically, it has also seen attention in both the fields of education and writing more broadly. In *Minds on Fire*, Mark Carnes describes a particular strategy in the history classroom of the use of "role-immersion games" to foster student engagement. These games, which involve students actively taking on roles as historical figures and preparing documents, speaking, and acting as these figures, are similar to the gaming genre of the live-action role play (LARP) which has players attempt to physically embody their characters in speech and action, instead of simply

dictating their character's actions as in *Dungeons and Dragons* or other table-top role-playing games (TTRPG); in a TTRPG, a player would say "my character swings their sword," while in a LARP, the player, perhaps in full costume, would literally swing a prop sword at a target. Carnes reports that these games, when used in the classroom, drastically increase engagement and learning, but also commensurately increase student labor, since students spend a much higher percentage of time outside of class preparing for the next session compared to a traditional classroom (5). Thus, immersion in the classroom can be a double-edged sword: while educators should obviously be pleased that students are enthusiastic about the course content, they should always be aware of how much they are asking of students, who lead rich lives outside of our classroom and must balance the work they do for us with other classes, jobs, families, and other communities.

While much has been done on the intersections of gaming and immersion, or gaming and writing, looking specifically toward how writing and immersion are conceptualized together as phenomena, the scholarship is a little scarcer. While many wirters on social media will colloquially discuss states of being close to a flow state when describing a successful writing session (such as a 2021 tweet from writer Ayshan Irfan describing being "in the flow" of writing as invigorating), the common conception of writing as being closely tied to metacognition (which will be discussed in depth in the following section) as well as Ryan's point that immersion is often thought to be a non-critical activity means that scholars can be loath to specifically consider the intersections of writing and immersion, which has implications for the use of immersion to teach writing through games. One of the most explicit discussions is Robin Hemley's book *A Field Guide for Immersion Writing*, where Hemley describes a particular kind of writing, life and travel writing, as being specifically immersive. Hemley identifies these

genres as immersive because of the ways in which they deal with both the writer's material existence and their identity: through their writing, they see "both the world and the self" (8). This presents an interesting take on immersion, since the thing that is being immersive is not necessarily the act of writing itself, but the content being written about, such as one's life or travels. It makes intuitive sense for the act of writing to be more inherently immersive when the writer cares about their content, which is why educators so often encourage students to pick topics that they independently want to engage with, but the idea that particular content based in the author's personal experiences has specific capacity for immersion is one that needs to be considered carefully for educators wanting to cultivate immersive engagement in the classroom when doing things like designing game-based assignments or activities. This connection can inform our understanding of how immersion in something like a game can affect the act of writing in, about, or in conjunction with that game.

As this section has demonstrated, immersion is a complex concept with both benefits and drawbacks when attempting to use the immersive properties of things like games to achieve external outcomes like learning or writing knowledge transfer through crafting experiences that are engaging to the point of immersion or in structuring writing around immersive content creation. The next section will further complicate these considerations by looking at metacognition, which appears intuitively opposed to an immersive state with its emphasis on conscious critical consideration of action both within and after the moment.

Metacognition

The final habit of mind that the WPA *Framework Success in Postsecondary Writing* says that collegiate writers need to cultivate is metacognition, which they define as "the ability to reflect on one's own thinking as well as on the individual and cultural processes used to structure

knowledge" (5). While the other habits of mind addressed by the framework were addressed in Chapter Two, metacognition is a complex enough phenomenon with deep enough implications for knowledge transfer that digging into it more deeply on its own is warranted. Metacognition is often thought of as a necessary component for the successful recontextualization of knowledge; Yancey et al design a teaching for transfer curriculum in *Writing Across Contexts: Transfer, Composition, and Sites of Writing* that has metacognition as a cornerstone, and many of the trappings of a metacognitive pedagogy, such as requiring written reflection, have become common in the composition classroom. But as with all pedagogical goals, simply applying a practice or assignment uncritically does not often lead to the desired ends. This section will dive into what metacognition is and how it happens effectively or not in the writing classroom with an eye towards fostering transfer, as well as bringing it into dialogue with the concept of immersion to attempt to resolve seeming conflicts between the two.

Prior to explicit discussions of metacognition, Kathleen Blake Yancey and Jane Bowman-Smith edited a collection in (year) called *Self-Assessment and Development in Writing: A Collaborative Inquiry* that focused on "self-assessment" as a metacognitive activity. Self-assessment, or the act of students evaluating their own performance and skill in their writing, can often be a part of metacognition and reflection, particularly in terms of having students consciously recognize things they did well and areas they recognize need improvement. In their own chapter in this collection, Yancey and Bowman-Smith assert that not only does self-assessment assign responsibility over the writing task to the student, but it increases the student's sense of agency over their status as writer, and thus works toward the development of positive habits of mind (170). This is supported by the longstanding argument of documents like the

WPA *Framework*, which posits metacognition as an important dispositional trait that students must cultivate.

In their chapter in Yancey and Bowman-Smith's collection, Hilgers, Hussey, and Stilt-Bergh present a history of the study of self-assessment and a review of current scholarship and put forward five conditions that must be met in order for self-assessment to see positive dividends. First, the process of engaging in self-assessment must be "systematic" and critical; it cannot be a recording of purely affective response. The act of self-assessment must also be part of a context specifically designed to facilitate self-assessment through things like incentives for reflection and additional training to work on identified skills (this is supported by other scholarship such as that written by Aaronson [1987] which argues that instructors need to specifically teach metacognitive strategies). The approach to self-assessment must also include the specific generation of assessment criteria and how to apply those criteria, as well as breaking down assessment of an entire writing task into smaller units to make them more manageable. Finally, the instructor wanting to foster self-assessment must consciously interrupt "typical behavior" in the classroom in order to engage in self-assessment at critical points where assessment is likely to be most useful (6). In these ways, self-assessment fosters the transfer of writing knowledge through fostering metacognitive activity like consciously thinking of the ways in which a work is succeeding in its goals or not, and offering opportunities for course-correction through altered behavior and reflections on prior knowledge.

When discussing metacognition, its important to clearly define what is specifically metacognitive and what is a related but not identical phenomenon. In their chapter for the volume *Contemporary Perspectives on Cognition and Writing*, Kara Taczak and Liane Robertson define three separate but overlapping acts: cognition, metacognition, and reflection.

Cognition is “the internal or external or social process of assimilating knowledge as a way to recognize what is happening in a particular writing moment,” or in other words, what happens at the site of original learning, where new knowledge is taken in and processed (215). Metacognition, on the other hand, is “the ability to mindfully monitor and consider why specific choices were made in a particular writing moment… and to be able to utilize that knowledge” (217). So while cognition itself is the act of taking in new knowledge and recognizing what is happening at the time, metacognition is about looking back at past action and consciously analyzing it, which is then used in a future action – in order for metacognition to occur, there needs to first be cognition and an active attempt at applying learning.

This raises some questions about the relationship between sites of learning and transfer: Can a site of learning be geared in advance toward both the future application of that knowledge in different contexts and the recontextualization of prior knowledge from earlier learning, or is the site of learning distinct, and fostering transfer is a separate action that relies on the original learning happening but is not immediately involved with it? For example, if a teacher leads a lesson on genre analysis and provides list of questions for students to ask when looking at a new genre, what are they doing, exactly? Are they providing one concrete instance of learning that students must take it upon themselves to use elsewhere? Or are they providing a doorway into a new skill that can be picked up and used easily in later life? Or, are they doing both simultaneously, through things like framing questions that can be moved between situations? It seems apparent that if the student does not understand the original lesson, the list of questions will go unused in their future, so original learning is required for transfer. But does understanding the application of the questions in the way it is first presented naturally lead to using that learning in outside contexts? This question has obvious implications for teaching for

transfer, because if the site of learning itself cannot foster transfer, then the facilitation of recontextualization requires separate scaffolding and perhaps more labor for both students and instructors, as opposed to a single cohesive activity that at once teaches, contextualizes, and demonstrates potential for recontextualization. This is, essentially, why metacognition is necessary—to provide sites and avenues for this recontextualization as a part of the learning activity.

The connections between reflection and metacognition have been further explored by other scholars, some of whom contest Taczak and Robertson's taxonomy. In her 2001 article for *College Composition and Communication*, Pat Belanoff ruminates on the etymology of the word "reflect": the word is composed of the prefix "re" meaning "back," and "flect," which means "bend," so the word together can be literally said to mean "to bend back" (406). To Belanoff, this means that reflection is not "an uncritical rendering of a duplicate in an image" or the thoughtless summation of a writing experience, but some sort of critical alteration of the original act in its reproduction (406). Thus, for Belanoff, reflection has ties to the multimodal concept of remix as discussed by scholars like Jason Palmeri, since remix is about taking knowledge from different places and meshing them together, and this model of reflection involves the alteration and reconstruction of the site of learning.

It does appear that a common tool in the classroom for metacognition accepts that the site of learning and fostering transfer are distinct: reflections are paired documents that are traditionally written after a large assignment, wherein the student thinks about the knowledge they used in writing, challenges they faced and how they overcame them, and how they can use this knowledge in the future. These documents, although they accompany the large assignment and deal with them quite closely, are still separate, with different goals and written at a different

time. Despite the common conflation of reflection as a central metacognitive task, Taczak and Robertson assert that the two activities are not synonymous: while metacognition is specifically about mindfulness when considering past action with the intent to utilize those actions again in the future, reflection is simply about recalling writing experiences to contextualize the task at hand, in direct conflict with Belanoff's definition. Thus, while reflection involves thinking about writing, it in no way necessitates that the thinking being done is critical. This is consistent with the finding of Chris Anson, who writes that when reflection is assigned in a classroom, students often write and think about the standards and expectations for the assignment instead of critical reflection about their use of writing skills (2000). The Sweetland Center for Writing at University of Michigan conceptualizes the difference between reflection and metacognition slightly differently: "Reflection is an act of looking back in order to process experiences. Metacognition, a type of reflection, is a way of *thinking about one's thinking* in order to grow" (Sweetland). This way of thinking about metacognition, as a form of but not the primary means of reflection, is useful to instructors considering assigning reflection, because they must ensure that they are doing so in a way to foster those particular metacognitive habits of considering one's own thought processes.

Taczak and Robertson also do not write reflection off entirely. When reflection is paired with critical thought, students can engage in metacognition and transfer:

> When students who are reflective writing practitioners enter new rhetorical situations, they can not only transfer what they've learned appropriately to a new context, but also teach themselves what they don't already know about what is needed to construct effective rhetorical responses in these new situations. (224)

Thus, reflection, when properly structured in the classroom and used before and after writing, can be a gateway to high-road and abstracted transfer, as well as the recontextualization and remix of knowledge to fill in gaps from the site of learning, a la Wardle's metaphor of transfer turning apples into apple pie; the transfer is present, but it looks qualitatively different from the original site of learning.

Robertson, Taczak, and Yancey also discuss forms of re-using prior knowledge such as assemblage and remix in their article "Notes Toward a Theory of Prior Knowledge and Its Role in College Composers' Transfer of Knowledge and Practice." According to Robertson et al, one of the important things about beginning the process of writing knowledge transfer is acknowledging and understanding that students also have "absent prior knowledge," or a lack of knowledge from a prior situation such as high school that aligns with their new collegiate writing tasks (Robertson, Taczak, and Yancey). And if students are aware of that lack of knowledge, they're more likely to be willing to tackle new challenges and re-see their knowledge in order to create new knowledge that applies to their current situation.

In terms of transfer, metacognition is often thought to be a key trait in the successful recontextualization of knowledge. In their study of paired courses and how knowledge is transferred between them, Winslow and Shaw found that metacognition was highly effective in supporting transfer, but that metacognition does not simply happen. In addition to their conclusion that "metacognitive practices support high-road and far transfer," Winslow and Shaw assert that "explicit discussions of transfer and metacognition support interdisciplinary thinking" (198) which is in line with much teach for transfer pedagogy such as Yancey et al. Interdisciplinary thinking via linking FYC with STEM writing in this study helped students avoid feeling as though their learning was siloed into one discipline, and thus that things from a

writing course could be applicable in the sciences. The findings also support Yancey and Bowman-Smith's claims about student responsibility in authorship, since "interdisciplinary transfer of metacognitive practices increases student agency" (198). Winslow and Shaw also point out, however, that metacognitive habits are difficult to build and must be practiced over time, which further indicates the importance of emphasizing them in the classroom (205). Thus, things like interdisciplinary thinking and breaking down the arbitrary barriers of particular classroom magic circles through explicit discussion of connections is key to students using their writing knowledge from FYC in their disciplinary endeavors.

While many scholars discuss metacognition as a cornerstone for the facilitation of knowledge recontextualization, not everyone feels this way, and according to some, it may not be essential for transfer. In her book *Agents of Integration*, Rebecca Nowacek argues that, while helpful, students do not need to engage in metacognition in order to successfully transfer and recontextualize knowledge. Nowacek asserts that most of the discussion of metacognition is couched in vague descriptions of what a metacognitive activity actually is, and that metacognition is actually a black box of varied cognition instead of a quantifiable action:

> The fundamental constraints and exigencies for transfer come not from the black box of metacognitive knowledge but from, among other sources, genres that shape and are shaped by the social and rhetorical interactions of individuals. The discursive space that individuals negotiate – that they are situated amidst and seek to make connections within – is fundamentally a "genred discursive space" (Bawarshi 2003, 14; Bazerman 2002, 17). Metacognitive awareness may assist in the process of transfer but is not necessary for transfer. (loc. 218)

Thus, according to Nowacek, an understanding of genre is much more important to transfer than any specific or directed metacognitive action. Genre knowledge must be meshed with new situations to create specific responses to exigencies; as Nowacek puts it, students are "agents of integration" in their classes, bringing their old and new knowledge together. Other scholars such as Larson (2000) and Beaufort (2007) agree that genre awareness is key to transfer but claim that applying genre knowledge in new contexts is itself a metacognitive practice. It appears, then, that what Nowacek identifies as not metacognition and instead a facet of prior knowledge, could in fact be part of an interconnected web of cognitive work that involves prior knowledge, a new site of learning, and recognizing future applications of the things done both in the past and present, all of which are essential components of transfer.

Potential Solutions

The chapter up to this point has done the work of establishing the importance of immersion and metacognition for the acts of play and transfer, and to begin to point to ways that they can be reconciled. This section is a culmination of those efforts and seeks to bring together theory and praxis that demonstrates not only that games can foster the metacognition necessary for transfer, but that immersion is not necessarily antithetical to the recontextualization of knowledge.

In his chapter "Seeing is Believing: Re-presentation, Cognition, and Transfer in Writing Classes," Marcus Meade describes teaching for transfer as the teaching of "a particular way of seeing, a way that comes as the result of malleable and transgressive cognitive boundaries" (231). In order to foster keeping those cognitive boundaries flexible and permeable, Meade recommends facilitating a practice of mindfulness, which combines the work of metacognition and immersion into a single activity: "mindfulness is the capacity to understand all the things

that make up a context, to be in the moment in a way that sees the past and future as joined in the present" (243). Practicing mindfulness in the context of a game would mean recognizing the presence of the magic circle and respecting it, but also being able to think outside the parameters of the game, into the world that built the game and the way that the knowledge built into it can be used elsewhere. Rather than being either metacognitive or immersive, being mindful is a fusion of both practices through conceiving of awareness and presence as an encompassing phenomenon that engages you in conscious thought: metacognition can itself be immersive. In asserting this, Meade is building off the work of Perkins et al, who bring forward the interconnected ideas of mindfulness, transfer, and agency: "mindfulness is associated with a sense of personal agency and efficacy as well as a belief in a constructed and conditional reality" (284). They contrast this with "mindlessness," which they claim is "a commitment to absolutes" (284). There are thus clear connections between mindfulness and other studies of transfer, such as Reiff and Bawarshi's ideas of boundary guarders (who deal in genre knowledge as absolute and unmutable and therefore "mindless") and boundary crossers, who engage with genre knowledge as transgressive in the sense of Meade's mindfulness. The discussion of conditional versus absolute reality also maps very well onto a discussion of the magic circle: the magic circle, be it a game, classroom, or otherwise, presents a highly constructed and conditional reality that players must "buy into" in order to participate and be engaged. The magic circle can be a mindful experience.

In keeping with Meade's concept of mindfulness as permeable and flexible, Belanoff also challenges the idea that reflection must be a sustained activity that occurs after the site of learning and says that reflection can be momentary and occur in the moment (414). Reflection and metacognition are colloquially thought of as activities akin to meditation: concerted mental

activity that require all of someone's concentration and work best over long periods of time. But if we accept that reflection can be a momentary thing, that metacognitive activity can be a simple "lightbulb" moment that occurs while the original learning is happening, then lots of possibilities open up for simultaneously metacognitive and immersive experiences, instead of assuming that metacognition must be a separate activity that takes place over a period of time after immersion. In fact, it is not out of the realm of possibility to suggest that a brief moment of metacognitive awareness, such as figuring out that you have to apply a new mechanic learned in a prior level in a new way to solve a particular in-game problem, can actually work to the benefit of the maintenance of immersion and a flow state while still actively fostering the recontextualization of knowledge. This idea is addressed by Phil Alexander in his article on gaining, using, and making knowledge in *World of Warcraft*, who refers to a "catalyst" he calls "epiphany" in his framework for how players learn new forms of play, where players experience a gap in knowledge, have the epiphany of how to recontextualize their current knowledge to solve an issue, and then develop this epiphany into new working knowledge (7). James Paul Gee also addresses this concept with his "Metalevel Thinking about Semiotic Domains Principle," wherein he uses the Nintendo videogame *Pikmin* to demonstrate how someone playing the game and learning about its particular environment, rules, and expectations (in this case, how *Pikmin* privileges exploration and critical problem solving) can translate those expectations into a different context, such as engaging critically in a science (or for our purposes, writing) classroom.

In terms of other games scholarship that works within these concepts, there is little as yet written that deals explicitly with the metacognitive power of games; however, while many scholars are not addressing metacognition directly, they are still describing ways that people

learn and think through gaming experiences that can be useful for this discussion. In his article "Technologies of captivation: Videogames and the Attunement of Affect," which was briefly mentioned in Chapter Two, James Ash discusses how the act of playing games is one of embodied cognition via players becoming "attuned" to the game and its expectations. But according to Ash, attunement, while being used in the same way Heidegger does to mean that people do not consider the "how"or "why" of actions they have mastered, also involves distinct activities of self-regulation to minimize negative emotions like frustration during play, which require conscious metacognitive effort to recognize and alleviate reactions that might prevent success (28). Thus, for Ash, entering and maintaining an attuned flow-esque state involves valuable metacognitive self-monitoring.

With all of this taken into account, I thus put forward the argument that games can be inherently reflective spaces that encourage metacognition both during and after the point of immersion. I have experienced various examples of this in my own time with games. For instance, in my free time, I am a Game Master for a tabletop role-playing game called *Monster of the Week.* The game revolves around the players attempting to solve a single mystery at a time while growing and developing their characters. In order to level up, players must earn experience so that their characters can learn new abilities and increase their power. One of the key ways players earn experience is through the successful answering of questions at the end of every session. These questions are all about letting players measure their progress through the game, and include things like "Did we conclude the current mystery?" and "Did we learn something new and important about the world?" While these questions seem straightforward at first (and often feel very straightforward to the Game Master, who designed the session and knows the literal long game), they are nearly always spaces for reflection on the part of the players. As the

players consider things like if they have actually concluded the current plot arc or if there is more to do, or if the knowledge they learned in the session is significant to their actions in the future, they are engaging in metacognition about the play experience they just had. They also, much to my chagrin, sometimes attempt to actively recontextualize the knowledge from the session and interpret it in a way that more effectively answers the end of session questions, because doing so will earn them more experience.

This can be applied to the writing classroom through explicit dialogue with students about their learning and how they see it connecting to other tasks. In fact, in my classrooms I engage in a daily metacognitive activity (stolen wholesale from my distinguished dissertation committee member Dr. Peter Grund) where I ask students at the beginning of class to recall five things we learned or did in the previous class session. As the items from the past are listed on the board, I ask students to explain the significance of these things so that they can contextualize their learning, and then I ask them how they think what they did last time is related to what they will do today, based on the reading and homework they prepared for class. When I specifically made the move to game-based learning, this activity came with me, but in a slightly altered format. Similarly to the "end of session experience" questions for tabletop role-players I referenced in chapter three, I now structure this activity as gaining "XP" (experience points) through making connections between prior learning and future activities. The more connections students make, the more XP they gain. XP can be used in many different fashions in a game-based classroom: it can be a largely ceremonial thing, similar to the "gold stars" of yesteryear classrooms, or it can be pragmatically tied to things like class participation credit or earning boons like extra credit opportunities if enough XP is earned. While XP and a numeric point value can be a valuable motivator, instructors should always be cautious that applying quantifiable mechanics do not

lead to shallower "gamified" experiences as opposed to rich and thoughtful ones that come out of games like role-playing experiences, wherein XP is a vital component. Similar to this idea, Rebekah Shultz Colby points out in her article on game-based pedagogy (2017) that students can use the act of creating a character through role-play can allow students to explore their writing strengths and weaknesses through the lens of the character, and how this can lead to productive reflection and eventual transfer.

Examples like this one demonstrate not only that games can be reflective spaces in terms of finding solutions to in-game problems, but that games can actively encourage metacognition as a facet of play, and immersion in the play act does not necessarily translate into mindlessness. Thus, the results of the study I referenced in the introduction to this chapter, while significant, are incomplete: games are not inherently less metacognitive because they are immersive, but as with any classroom activity, metacognitive strategies such as reflection must be consciously taught for and encouraged in students in order for the transfer instructors seek to occur in more abstracted, high-road ways.

The next chapter of this dissertation is the final one and presents a culmination of the theoretical groundwork of all prior chapters into a series of pedagogical materials tailored to the practices of game-based learning and the goal of writing knowledge transfer. While this dissertation does not present empirical data on the effectiveness of these practices, the goal of this work is to open the door to future studies from both new and established scholars who want to explore the ideas presented thus far.

Chapter Five

A Model Game-Based Learning Classroom

Introduction

Thus far, this dissertation has been a largely theoretical discussion, examining the intersections of writing knowledge transfer theory and game-based learning theory, though it has included specific classroom examples. This final chapter seeks to instill more concrete praxis into the discussion thus far, so that scholars and teachers have a template for taking up the ideas of the previous chapters and using them in their own classrooms and studies. Thus, this final chapter will not be a traditional written document but will be a set of classroom materials that can be used to create a game-based learning environment. These materials and the provided context will serve as a conclusion to this dissertation, by presenting avenues for praxis and situating the theory presented here to be taken up by other educators and researchers. These materials will be annotated, so that the rationale behind the language and the activities being proposed are clear. This chapter will contain several suggested syllabus policies, an assignment sequence, a sample lesson plan, and a "best practices" section to help teachers new to running a game-based classroom. These materials will not only demonstrate what game-based learning can look like in a writing-focused space, but they will employ the strategies identified by "teaching for transfer" scholars like Yancey et al, in addition to bringing to bear the specific concerns of prior chapters, such as dispositions, multimodality, and metacognition.

This is not a full course design, since I cannot design a course that would be appropriate for universities with different learning goals and course outcomes than the large midwestern research university I'm studying at. Instead, I see this as being an effective springboard that can be picked up and recontextualized for many different institutions, since it presents broad

examples of game-based learning in action that aims to promote transfer in the classroom. For some context, however, these materials are largely aimed towards an FYC classroom, and the assignments have goals of learning and transferring skills such as scholarly inquiry and cultivating rhetorical awareness, conducting rigorous and ethical research, and integrating sources into original writing in a sophisticated way.

The format and structure for this game-based classroom is, writ broadly, "Political Campaign RPG." This narrative motif does several things for the classroom: First, it presents a solid set of goals, characters, and motivations that the instructor can tweak to suit the learning needs of their specific course to foster transfer through dispositional creation, multimodality, and metacognition. The rest of this chapter will be concrete materials written as if for an audience of students, with footnotes annotating and contextualizing the materials for an audience of scholars and instructors, and some opening remarks for each section situating it in the broader goals of instruction.

Syllabus Policies and Language

Opening Context for Instructors

These syllabus policies utilize the language of games, in particular table-top role-playing games (TTRPGs), to structure a writing course that manifests the use of generative dispositions, multimodal composing techniques, and metacognition in student activity toward the goal of fostering transfer. These policies illustrate how using the language and mechanics of games provides an easy avenue to applying teach-for-transfer concepts in the classroom; it is not that game-based language is creating an opportunity for transfer in a policy where none previously existed – rather, it is that game-based learning presents a cohesive framework that makes opportunities for transfer more apparent. We can think of a syllabus as a sort of "rulebook" for

how to "play" a class, and successful rulebooks instruct players on how to win and/or get the maximum experience from the experience of the game.

Class Goals and Objectives (for Students)

When we research, what we're really doing is exploring: we are using the tools and skills we've honed over the years to uncover new knowledge and ideally use that knowledge productively to solve problems and address issues. So, the goals of researching aren't that different from a lot of the goals of a role-playing game (RPG), where you take on the role of a character in a fictional world, and your character has to investigate the world of the game in order to figure out how to interact with it. For this class, then, we're going to be treating the concepts of research and scholarly inquiry as part of an extended RPG that will take the course of the semester and will integrate the process of learning with the act of play.[1]

During your time playing the RPG and participating in this course, you will:

- Engage in effective practices for engaging in scholarly inquiry, such as how to frame a research question and find credible sources
- Learn how to identify credible sources, and integrate the sources you find into your own writing, to answer research questions and begin taking scholarly stances of your own
- Work on collaborative techniques for researching and writing in groups with your classmates

[1] To the Teacher: The point of sections addressing the goals of the class is to start doing the important work of selling the relevance of the class to students. So, for a game-based class, the work of this section is doubled: you're not only selling the content of the class, but you have to sell the activity of the game. By being explicit about the connections you see between the content of the course and playing the game helps students see why we're doing this.

- Continue to refine your experiences with revision of your written work by transforming assignments to meet specific goals and talk to audiences[2]

Attendance and Participation (Grinding)

This class, as with any game, requires active and engaged participation in order to achieve its goals. While we don't have a structured formal attendance policy in the sense of "this many absences earns a grade reduction," your regular attendance is a requirement for the class to function, since a game cannot be played without all players[3]. Other people in the class will be depending on your participation, so if you cannot attend class, it is not only prudent for you to contact me, to get any work you need to make up, but respectful for you to contact any classmates you have been working with.

In terms of active participation, this class will involve daily work that will serve to reinforce the skills you'll be using on the larger assignments. This work serves the same function as "grinding" in an RPG, or spending time practicing skills and gaining experience on minor enemies and problems instead of only pursuing the main quest. Grinding is a fundamental part of most RPGs, because without refining your skills through grinding (doing small writing in class every day), you will eventually run up against a part of the main quest (the larger writing

[2] To the Teacher: These objectives don't look inherently game-based, but that's because according to Yancey et. al, it's important for transfer to use explicit language about the learning goals. If students know exactly what they are supposed to take from a situation, they're more likely to recognize when it's happening and then be able to recontextualize that knowledge later.

[3] To the Teacher: Absences are an inevitable part of any classroom, and so striving for perfect attendance from all students is not a feasible goal. In order to maintain the conceit of play, present accountability measures for students who will need to be absent (likely for valid reasons): create shared spaces like Google Drive folders or chat apps where they can communicate with group members, and make as much course content as possible available in places like the LMS for the course, so absent students are not missing out on vital role-play information.

assignment) you don't have the skills and experience to tackle adequately.[4] Daily small assignments will be collected as "grinding" and graded regularly and individually (though you will often work with classmates on achieving grinding goals), so it's important to stay on top of attendance so you do not miss points.[5]

Collaboration (Parties and Raids)

Traditionally, players do not tackle RPGs alone: instead, they travel in a party of different characters, each of whom bring important individual skills to the table that they use to solve problems together. For this class, you will form such a party with a few of your classmates, and you and your fellow party members will work together to engage with the class-game in order to solve problems and progress. Throughout the semester, you'll be presented with several opportunities for collaborative work outside the classroom, called "raids.[6]" These raids will allow you and your party to work together and figure out your collaborative strengths and weaknesses and address them. [7]

Assignment Structure (Questlines)

This class is divided into four major arcs, where you'll be working toward resolution of the content you encounter through creating a final piece of researched writing. For each arc,

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[4] To the Teacher: Essentially, this section is doing the work of using game language to discuss the connections between the work we do in class and the larger assignments. Much like how levels in a game are supposed to prepare you for a boss fight, classroom activities are supposed to prepare you for completing the assigned writing.

[5] To the Teacher: This is also important as it relates to our earlier discussions in Ch. 2 on fostering self-regulation in students, since students themselves must be responsible for their attendance and for collecting and completing missed grinding.

[6] To the Teacher: The language of raiding is traditionally used in gaming spaces to denote a collaborative combat scenario, but in terms of this course, I think of a raid as similar to "raiding the pantry" for a snack: a focused group effort toward collecting resources – in this case, course skills and knowledge – for the benefit of the raiding party.

[7] To the Teacher: Through structuring collaborative raids as processes of conscious reflection and seeing what works and what doesn't, they serve both metacognitive purposes since they will prompt students to rethink workflow and as a way to enhance students' internal locus of control over their performance, since they will attribute responsibility for success to their actions.

you'll engage in grinding and raids to help you learn the skills necessary to complete the main questline. Each questline is divided into four individual quests, or assignments you need to complete in order to fulfill the questline. The four quests will have these broad themes:

> Quest 1: For this quest you will figure out what skills, knowledge, and items are important to dealing with later questions, and begin the process of acquiring them. Tasks may include things like responding to readings or gathering resources that will let you better approach later tasks, since you'll be armed with knowledge.
>
> Quest 2: For this quest you'll do some practice in the skills you'll need for Quest 3, and finish pulling together everything you'll need moving forward. Tasks may include generating research questions or thesis statements or writing annotated bibliographies.
>
> Quest 3: This is it! All your work has led to this point, where you're going to put your research to the test in a targeted piece of writing meant to address an issue or answer a question. You'll be expected to achieve a goal and address the needs of a specific audience.
>
> Quest 4: After successfully completing the rest of the questline, you'll need to take stock of the treasure you've gained from successful questing. This quest is one of reflection, where you think about what you have learned about writing and research and how it can benefit you in your future. [8]

Grading (XP)

When you play a game or learn something new, you gain experience that makes completing subsequent tasks easier because you become more skilled and powerful. Thus,

[8] To the Teacher: This assignment is where we can see the importance of metacognition to the act of transfer being put in practice.

instead of assigning traditional point values to assignments and having a running total of your current grade in the course, everyone in the class will start at Level 1, with 0 experience points (XP). XP will be earned with every grind, raid, and quest, and your level will increase throughout the course, until you reach your final level at the end of the semester, and your final level will correlate to the grade you receive in this course.[9]

Level and Rank	XP and Grade
Level 1: Apprentice	0-299 XP (F)
Level 2: Novice Adventurer	300-599 XP (F)
Level 3: Junior Guild Member	600-699 XP (D)
Level 4: Noted Adventurer	700-799 XP (C)
Level 5: Guild Leader	800-899 XP (B)
Level 6: Legendary Adventurer	900-1000 XP (A)

Revision (New Game +)

Revision is an essential part of how we learn, because it gives you a chance to apply what you gained from the experience of being unsuccessful. In games, there is plenty of revision: when you fail to accomplish a goal or your character dies, the game isn't over, and you're given

[9] To the Teacher: This method of assigning points comes from Lee Sheldon in *The Multiplayer Classroom*. While it's certainly different and involves a particular amount of finagling with any digital LMS, it presents the learning happening over the semester differently: not as discrete pieces of assessment that indicate adequate performance throughout, but as a more narrative progression of the acquisition of skills and knowledge. This method of assigning grades can be either results or labor-based, depending on instructor preference, though grading on labor would aid in students progressing through the levels more collectively, which could help a sense of collaboration. This might also be a difficult method to convince students to sign on to, since it doesn't present the same affective reward of maintaining a high grade throughout the semester, but discussing how they'll be able to track their development across the semester may demonstrate that this method allows for a sense of achievement as well.

another chance to do things differently.[10] In a game, you can always replay; the fail-state is not permanent. Further, sometimes you are largely successful, but you want to go back and try things differently anyway, to see if you can achieve even greater success. Thus, for this class, you can revise any Quest 3 (the largest and most intense quest in the questline) up until the final questline in the course, in order to earn more XP. In order to revise, you must demonstrate that you have read and understood my comments on the original quest through speaking with me as the instructor/Game Master.

Late Work and Accountability (Limited Lives)

Sometimes life gets in the way of being able to play the game, or to attend class and complete assignments. This is understandable and is not actually indicative of willingness to participate in the course or desire to do well. So, for this class you get an "Extra Life" that you can use at any time during the semester when completing coursework on time proves impossible. Simply email me before the date the quest is due and you will have an extra week to complete it, no questions asked. However, you can only use this once, so do so wisely.[11]

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[10] To the Teacher: While this revision is geared towards more successfully meeting the original course goals, students can engage here with concepts of multimodal composition such as remix in order to recontextualize knowledge.

[11] To the Teacher: These two sections (this one, and the one prior) are reflective of several things: first, they deal directly with the mutable nature of failure in gaming. When you fail to play the game correctly, you temporarily do not succeed, but neither is failure a permanent state as long as you consent to continue playing. Additionally, and personally for me as an instructor, these policies reflect what I feel to be necessary kindness that it is our duty to extend to our students, who are not only learning in our class, but have rich and complicated lives outside what they do with us, and if we do not respect that, we are doing them a disservice. These policies also reflect the fact that students are still learning the process of emotional and dispositional regulation, which may negatively impact their ability to perform in the course; allowing additional chances to succeed lets students more fully develop functional generative dispositions and self-regulate.

Class Civility (Guild Rules)

In order to participate in this game, and by extension, this class, you must agree to abide by the rules of conduct in accordance with not only your party, but the rest of your class as your gaming guild – a larger collaborative group of players who seek to help each other meet shared goals. The rules are as follows:

1. Any form of bigotry or discrimination will not be tolerated from any guild member.
2. All guild activities are open to all guild members, and no guild member shall be excluded by others for any reason.
3. Discussion should always remain respectful of all guild members' investment and should never devolve into aggressive conflict.
4. Guild members should always be respectful of each other's time and labor whether they are in a party or not, and treat their work with consideration.

Assignment Sequence

To the Teacher: A Note About Feedback

This assignment sequence is designed to present a continuous semester-long story that the students can become involved in. The specific motif of the role-play takes the form of a political campaign, wherein students are staffers working for a politician seeking to win an election. This scenario was selected since the role of a political campaign staffer building a platform reasonably lends itself to the goals of research and argument that the course seeks to meet. It can also be seen as less outlandish to students who are not initially sold on the idea of playing a game in class, since they're doing something "realistic" instead of playing in a high-fantasy setting. The

game also draws inspiration from Sara Lovett's forthcoming publication for the journal *OneShot: A Critical Journal of Games and Play*, for which she created a one-session political live-action role play, or LARP, meant to teach rhetorical listening and puts students in the roles of campaign staff, voters, and journalists, and has them writing in specific real-world genres to help them embody the role. In order to create a more cohesive experience and for ease of the instructor, all students in the RPG presented below will be inhabiting the same role instead of acting as different types of interested parties, though the investment in genres outside of contextless writing done solely for the classroom remains the same.

Typically, in a live tabletop RPG or LARP, feedback is given immediately by the Game Master (GM). However, in a class meant to give students composing skills, immediate feedback on written products is impossible. Thus, for this assignment sequence, I propose the following mode of styling feedback: First, present "in-game" feedback, where the instructor describes the consequences of their project for their role in the game and the characters they're interacting with. These consequences can't be super dramatic: the student cannot, for example, be fired from the campaign. Instead, structure in-game feedback to justify the amount of XP they earn for their work, through how thoroughly they've satisfied interested parties and met the requirements for successful play. Then, in a separate paragraph, present "out-of-game" feedback, where the instructor is not narrating as GM, but addressing their writing as a teacher. This will allow you to point out areas for improvement and provide concrete direction on writing that it wouldn't make sense for the other in-game characters to have knowledge of.

Questline 1: Political Campaign RPG Intro (Inquiry)[12]

Goals of the Questline

- To encourage your curiosity[13] about a certain topic. Try to be as open as possible while researching your topic; avoid preconceived notions or early assumptions.
- To practice finding and incorporating a variety of reputable and appropriate sources into your writing, being sure to assess them for credibility.
- To practice mixing formal research and a narrative style of writing.[14]

Quest 1: Tackling the Big Topics

You've just been hired as an aide for a political campaign. The aspiring politician is currently trying to determine their new platform and is looking for feedback on good causes to take up. Your first task is to compile a list of suitable potential causes, and then make a final suggestion about which cause is most worthy and productive. For this quest, you'll need to provide:

- A shortlist of four potential topics, with benefits and drawbacks of each listed (is one a divisive issue? Is one more pressing in today's climate? Is one a universally recognized need?)
- A final suggestion for the topic to be tackled, and a justification for why it is the worthiest and most productive topic. Remember that you are talking to a politician, who

[12] To the Teacher: This first assignment is intended to get students thinking clearly about good tactics for scholarly inquiry, such as forming research questions, and about how to begin integrating sources through paraphrase and summary, without necessarily using them to form a direct argument.
[13] To the Teacher: Noted as a habit of mind from the *WPA Framework*
[14] To the Teacher: This task allows students to engage with remix and access genre knowledge towards recontextualizing the results of their inquiry and prior writing tasks.

both wants to make effective change in the world and wants to be popular with constituents to get elected.

If your rationale for your topic is unconvincing, you will need to replay this quest until you succeed and convince the politician of the worthiness of your cause. [15]

Quest 2: Research Question

Success! The politician has agreed that your topic is a worthy one, but now they want a more targeted approach, as well as more information.[16] It's now your job to create a focused research question that targets some aspect of the topic that is in dispute. This question should do several things: It should give you a more targeted aspect of the topic, so that the politician has an angle to approach from, and it should be something that rational minds can differ on (so no questions of pure fact), so the politician can take a stand. Thus, the question should demonstrate a reasonable scope and have a nuanced answer that requires careful consideration.

Once again, if the politician feels that your question does not meet their needs, you'll have to replay this quest until successful.[17]

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[15] To the Teacher: In order to play this out as an RPG, you need to make the politician a Non-Player Character (NPC). This can be something that the instructor does on their own, but I actually think it would be really well-served if the creation of the NPC was a class collaborative effort: if the instructor asked the students to examine their notions of the archetype of "the politician": the goals, motivations, ethos, and temperament, and negotiated exactly what kind of character they're going to be working with, then a formal description of the politician can be generated. This will allow students to have a more nuanced understanding of their audience for this questline. Ultimately, of course, the interpretation of the character will be up to the instructor as Game Master, but the instructor should strive to remain true to the composite constructed by the class.

[16] To the Teacher: By having students directly use the knowledge from one quest in their next quest, these assignment sequences promote near transfer and what Perkins and Salomon refer to as the "hugging" and "bridging" of knowledge: consciously teaching so as to recreate conditions for both low-road and high-road transfer (28).

[17] To the Teacher: What a successful completion of the quest looks like can vary based on the GM's standards for the course. A failing grade on this quest is grounds for replaying, but whether a C is up to par is up to the instructor.

Quest 3: Putting Together an Info Brief

Your next task is preparing a short informational piece of writing that the politician will use to educate themselves on the topic at hand. Thus, your assignment is to collect credible pieces of writing on the topic that present perspectives and bring them together into a single work that strives to answer the research question. You will need to present each source fairly and show how they relate to the other sources, as well as how they address the general research question. If your work does not generate a definitive answer to the question, that is okay; sometimes things are very complex and it's more ethical to respect the nuance than to jump to conclusions.

Please bear in mind you are not going to be arguing for or proving your opinion about the topic; instead you will be responding to the question in ways that will help you better understand your interest through open investigation and will demonstrate the complexity of the issue. Bear in mind that this is a document that someone else is going to read in order to become more knowledgeable, so you need to make sure you're communicating facts and perspectives clearly. Also, you need to make sure that your writing is engaging and memorable, so that the politician can more easily get up to speed and remember the data being presented.

Requirements

- 3-4 pages double-spaced, formatted according to the samples we examine in class.

- Use of 3-5 outside sources. These should be the best, most credible resources you can find about your topic (ie, not Wikipedia but articles, interviews, other essays, surveys, and studies), but they should come from reputable websites and general knowledge sources.[18]
- Credit your sources correctly by attributing the information from your sources using the citation system of your choice.

Quest 4: Reflection[19]

After your campaign brief, you're being asked to fill out a self-evaluation of your performance so far. Write a 1-2 page letter address to the politician that answers the following questions:

- How well did you feel you addressed the creation of a research question? Do you feel like it had appropriate nuance and scope?
- How well did you feel you engaged with finding credible sources? And then how well did you work to integrate them together?
- What challenges did you face during this questline, and how did you overcome them? What were your biggest successes?
- How does this assignment relate to earlier writing you've done? What are your experiences with research, and how did you use that experience in this assignment?
- How can you see yourself using what you learned from this questline in other projects in this course? What about in other areas of your life? [20]

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[18] To the Teacher: Since scholarly research is an entirely different bear than inquiry broadly, I make the choice to begin them on researching via popular sources. This is more accessible for early scholars, and also gives them experience with the types of sources they'll encounter far more often in their lives than journal articles, including multimodal sources.

[19] To the Teacher: These reflective quests should be talked about specifically and clearly during course time, to establish why this an important task (to foster transfer via metacognition), so that students don't think about them as contextless busy work. I generally bring in an example reflection and have students read it over and discuss how they can see the writer doing metacognitive work and what benefits they assume come out of doing this work.

[20] To the Teacher: These reflective documents should not be assessed in the same way as the quests prior. A more "effective" reflection should not earn a higher grade, because it's difficult to objectively assess the depth of the

Questline 2: Polling the People (Collaborative Original Research)

Goals of the Questline

- To work as a party to create a product that demonstrates research and collaborative skills
- To begin thinking about the process of original research
- To further practice incorporating the work of others into your writing

Quest 1: Survey Questions

The politician's campaign is beginning to get underway, and they want to hear from their potential constituents about things that matter to them. You have been assigned to work with a group of your fellow staff to create and distribute a survey that will collect data on some topic of interest to the constituents. You and your party need to collaboratively decide on a topic that matters, pick a segment of the population to target (who is a key demographic for the politician? College students? Working moms?), and create a brief 5-8 question survey that will get data from the populace about their views on the topic.

Your party must submit your survey questions to the politician's senior staff to be assessed before you can distribute the survey, and if the questions are not deemed ready, you must replay the quest until successful[21]. After successful questions have been generated, you must actually distribute the survey to a meaningful sample size of the population (25-50 people)[22].

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impact a particular student's metacognitive work has on them based on a single document. I prefer to grade these on labor: if a student turns in a document of the appropriate length that addresses all questions, they get full points.

[21] To the Teacher: Since this survey will be distributed to a real-world audience of people, it's important that the questions be polished, ethical, and collect the data players are intending. Work with the students at discretion, being thorough about the process but also being respectful that too much critique at once may overwhelm.

[22] To the Teacher: This project includes the involvement of real-world survey participants and people outside the conceit of the game: players must actually select a demographic and distribute their survey. I've run successful survey assignments in multiple FYC courses, and what helps students most is helping them understand their own

Quest 2: Annotated Bibliography

While your survey is out being filled out by the constituents, you and your party need to collect some research on the topic, so that your survey data can be contextualized with the work of experts and can be used by the campaign. Each party member is responsible for finding one (1) scholarly source relevant to the survey and writing up a 250-word annotated bibliography entry on the source, to be compiled into a collaborative annotated bibliography. Further instructions on how annotated bib entries should be structured will be provided during class.

Quest 3: Collaborative Research Presentation

The results of your survey have come in, and it is time to present the results and the contextualizing research to the entire staff of the campaign. These presentations should present your analysis of the data you've gotten from the surveys (so not just the raw data, but what that data MEANS- why it appears that way and the implications for the campaign)[23] along with brief synopses of the annotated bibliography. You will not be graded on if you found "good results" but on the way you present and contextualize your data with the research.

Requirements:

- A 10-15 minute presentation
- Inclusion of all relevant data from the survey that is explained and analyzed for implications

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reach: what groups of people do they actually have access to in order to collect data? Through asking them to think about who they can get the survey to, they can then structure questions relevant to that demographic. This often means targeting "young voters" and "college students" for their surveys, since they have easiest access to these groups.

[23] It's important to give students groundwork in completing this step, which can be difficult without guidance. While you don't have to have students do a whole lot of formal coding, providing some readings about data trends or having some sample data that the class analyzes together as grinding is essential.

- Inclusion of four scholarly sources that are demonstrated to be related to the data
- Equal presentation time for all party members

Quest 4: Reflection

It's time for your second self-evaluation! Except this time, you aren't just evaluating yourself. You're also going to be commenting on the work of your fellow party members. Write a 1-2 page letter answering the following questions:

- How successful was the process of generating survey questions? How about distributing the survey?
- Did your group work together well to analyze the data from the survey and create a cohesive presentation?
- Describe the group dynamic, and how you saw your role within the group. Was division of labor fair? Was everyone agreeable? What were the challenges and successes of working together?
- What skills and knowledge did you already have that proved useful for this project? How did you use them?
- What skills from this project do you see yourself using late on in this class? How about in other areas of your life, such as a workplace?[24]

[24] To the Teacher: Evaluating this type of work comes with challenges, since students may report things like strife in collaboration or an unfair division of labor. While I use this space as a way for students to tell me about how they saw the collaborative process functioning and what they can learn from it, instructors may feel the need to take action if a situation was particularly non-egalitarian. However, before simply docking a student's grade, it's important to meet with students individually and talk more about how they saw the process of doing this work, because what one student interprets as an unwillingness to engage may have been uncertainty of expectation or a lack of faith in skill.

Questline 3: Preparing for the Debate (Scholarly Research)

Goals of the Questline

- Learn skills of scholarly research, including using databases and determining credibility
- Get further practice integrating sources into your own writing, particularly through synthesis
- Practice taking an informed stance on a debate, and supporting that stance with evidence
- Think clearly about multiple types of audiences, with different goals and values

Quest 1: Opponent Profile

It's time for the first debate between your politician and their opponent, and so your politician has to prepare to make their case about several important issues. But before you can begin researching what your politician will have to say on any matter, you have to figure out how they can differentiate themselves from their opponent. They don't necessarily have to disagree wholeheartedly on an issue, but if they agree, your politician has to present a case for why their nuanced understanding of the issue is better, and that they'll deal with the matter more effectively.

For this quest, you'll need to select an issue (different from the issue you constructed a brief about) and profile your opponent's stance on it. This stance should be something that you feel is reasonable – perhaps not correct or the best way of dealing with things, but something that a politician might conceivably hold as their platform and not outlandish nonsense. Write up around 200 words determining what the issue is, your opponent's broad stance on it, and their plan for engaging with the issue.

Since this quest is about research and coming into new knowledge, as you research you might want to alter your opponent's profile. I will allow one "retcon"[25] of the opponent's stance, provided you can defend the change in terms of it making sense for their character. If you do not create a reasonable and fleshed-out opponent profile, you will have to replay this quest until you succeed.

Quest 2: Thesis Statement

After you've done the work of creating your opponent profile, it's time to figure out where your politician stands on the issue. For this quest, you will generate an arguable, reasonable thesis statement that you will prepare to defend in your next quest so that your politician may argue their case on the debate stage. Please note that for you to be able to form a thesis statement that can be supported by research, you need to have begun the process of doing the necessary research. Thesis statements should be 1-2 sentences in length. If you do not create a thesis statement that is arguable and can be defended with evidence, you will replay the quest until you succeed.

Quest 3: Debate Brief

Now that you've figured out your politician's position on the topic, it's time to create another researched brief for them to read prior to the debate[26]. This time, however, you aren't just

[25] Short for "retroactive continuity" retconning is what happens when authors or players alter previously established game lore to better suit the current narrative. It's often used to fix plot holes or correct themes if the story ends up developing differently than originally planned, and contains elements of both remix (to bring together the original and altered narratives) and reflection (to come to conclusions about the logical path of the narrative).

[26] This quest deals fairly directly with teaching the beginnings of academic discourse but does so through an attempt to immerse students in their LARP, and thus make the process more engaging than all students might find traditional instruction. While students are doing the bulk of their research individually and outside of class, they will be doing scaffolded work to prepare them to use this research as part of their classroom role-play.

collecting information, but you're asserting and defending a stance on the issue. You need to conduct scholarly research and collect peer-reviewed journal sources that support your argument and synthesize them into a brief that is engaging an understandable to the politician, who may not be versed on the subject. Your goals for this are twofold: you need to create something that will demonstrate to voters that your politician is knowledgeable and qualified to deal with this issue and that their stance is reasonable, and you also need to anticipate the objections and rebuttals of your opponent, and address them directly in your brief.[27]

Requirements

- Conduct extensive research on an ongoing conversation held by a group of experts within one field or discipline
- Construct a thesis statement that takes a stance on the debate, and develop that stance throughout the brief
- Summarize and synthesize the academic conversation on that topic through paraphrase
- Include at least five academic sources

Quest 4: Reflection

Once again, you are asked to complete a self-evaluation. In a 1-2 page letter, answer the following questions:

- What were your preconceived notions or beliefs about the topic before you began researching? Have they been challenged or changed?
- What skills or knowledge did you already have that you've used effectively to complete this assignment, and how did you use it?

[27] By having students think directly about both ethos and audience, this activity builds further rhetorical awareness that can be generalized into other situations and contexts, including their public lives.

- What did you learn about the process of researching and integrating sources from completing this brief?
- What did you learn about constructing and developing an argument from completing this brief?
- How will the knowledge you gained from this assignment benefit you in future academic writing situations, your future profession, and/or your everyday life?

Questline 4: Final Campaign Ad (Revision into a New Genre)

Goals of Questline

- Work with revising as deeper content-level work and not as a purely sentence-level editing endeavor
- Practice with altering a work to reflect a new goal and a new audience
- Learning how to think critically about the benefits and constraints of different genres and modes of composing[28]

Quest 1: Annotating the Brief

You've just been told that your politician needs a last-minute energizing campaign ad to stir up voters. You've been told that you need to alter your first brief on gathering information on a project into a stance-taking, public-facing ad for your politician.

Your first quest is, then, to annotate your original brief, to decide what to keep, what to alter, and what to eliminate. Take your original brief and annotate the document to give notes to

[28] These goals are all directly reflective of a pedagogy intended to facilitate high-road transfer through having students abstract and consider their works from new angles.

yourself about plans for changing it[29]. You should create 8-10 notes for yourself. As you annotate, think about several things:

- The politician's original reaction to the brief
- The GM's notes on brief content and construction
- Your new goal and audience: This is no longer an informative piece, but an argumentative one

Quest 2: Revised Brief Plan

For this assignment, you need to write out a 1-2 page paper that explains the ways in which you will transform your prior brief. You should include the reasons you want to transform it, the new genre you plan to use, and how you will go about doing it.

Your plan should be 350-500 words. Your paper should answer the following:

- What real-world goal are you hoping to accomplish for your campaign?
- What new genre/medium will you use? What are the conventions of that genre/medium that you'll need to consider? The genre and medium can be anything you feel comfortable working in, but it cannot be another brief.
- How will converting your original writing to a new format change it?
- Who do you envision as the audience for the new project?

In your plan, be as specific as possible. Point out exactly which parts of your original you plan to change, and how you plan to change them. You should also note which parts of your original you

[29] This is creating a form of metatext, and in so doing is making students think metacognitively about their prior work because they must consider both old and new composing goals and tactics, and make rhetorically effective choices for the new task based on their prior writing.

will keep. You will be required to replay this quest until the campaign staff feel you have a sufficiently developed plan.

Quest 3: Campaign Ad

For this quest, you need to create a short, engaging, and argumentative campaign ad that will hopefully energize voters to support your politician. The ad can contain written text but should incorporate appealing visual elements for the audience[30]. You can create a paper composition, like a poster, flyer, or brochure, or you can create pieces that also use audio, like videos or podcasts. When selecting the genre and mode, think about who your audience is and how they'd encounter this piece in the wild: is this something that's easily accessible to them?

Requirements:

- Engages in successful content revision to transform the project from informative to argumentative
- Successfully speaks to a new audience
- Works well within the affordances and constraints of a new genre and perhaps a new mode

Quest 4: Reflection

That's a wrap on the campaign! While you wait to hear the results of the election, it's time for one final self-evaluation. In a 1-2 page letter, answer the following questions:

- How successfully do you feel you revised your brief into this new campaign ad? What were some of the points of success you felt you had?

[30] While this is the first composing task of the semester that can be thought of as truly "multimodal," students have been engaging in multimodal composing techniques such as remix for the duration of the semester, and thus this assignment should not represent a massive cognitive leap and can lean more heavily on prior composing tasks than some other multimodal composing tasks might.

- What skills and knowledge, from prior assignments in this class or from prior classes (or even other places), did you use to complete this assignment?
- What was the biggest challenge in completing this project, and how did you overcome it?
- How did you feel you specifically addressed your audience, through your choices in content and genre? Why did you make these choices?
- How do you feel you will use what you learned from this project in other areas of your life?

Sample Lesson Plan

The goal of this sample lesson, written for readers of this dissertation and potential classroom educators, is to get students to think about how to synthesize sources in their writing – how to bring different perspectives together in a thoughtful manner. Teachers often encourage students to think of synthesis as the authors they're working with being in conversation, so this activity gives that idea a more literal turn. Students will LARP (live-action role-play) and pretend to be one of the authors they're attempting to synthesize and engage in conversation with other students pretending to be different authors. This activity is meant to encourage deep and critical thinking about the perspectives of the sources being used, since students have to attempt to represent them through play. While this isn't a direct continuation of the larger Political Campaign LARP playing out in the assignment sequence, this is an indication that not every single class has to function in exactly the same way: games often contain "minigames" or instances of micro-play within a larger structure that follow their own rules, but still contribute in some way to achieving the goals of the larger game. Taking a break from the main LARP to do an aside LARP still works toward the learning goals of the game, in the same way that playing a thematically related digital game such as *Democratic Socialism Simulator* would open up what

"play" means in the classroom while still working toward cumulative learning outcomes. Breaking up the ways in which students play during class also allows for more directed movement from fostering low-road transfer between similar play sessions into demonstrating how skills apply in new contexts, while still existing within the broadly shared context of the course. What follows is a breakdown of how a synthesis LARP can be played over the course of a standard fifty-minute class session.

Before Class:

Students should be assigned four short pieces of writing, like news articles or op-eds, on a shared topic. The genres can vary but it should be clear that there is a theme. It's even better if there is some stark disagreement between some of the sources, but all should be credible.

Class Opening, Five Minutes:

Take care of any outstanding business, announcements, and attendance if taken.

Opening-Session XP, *Five Minutes:*

On the classroom chalk- or whiteboard, make a blank numbered list with five items on it. Call on the class to come up with five items from the last class session- they can be activities, points made, or key terms, but can't be things like "you told us the due date for the next assignment" – they must be related to the learned content. With each new item, ask students why what they brought up is important – how does it relate to their quests, or how does it tie into the work they did prior to coming to this class session? Get students thinking clearly about the connections. For each item and successful connection, add an amount of XP you feel is appropriate to the classes' grinding for the day.

Context and Setup, Five Minutes:

Explain the LARP activity for students: they must break up into groups of four and each student is responsible for role-playing one of the authors. Pass out the character sheets and briefly remind students of the Guild rules about civility.

Character Creation, Ten Minutes:

Have students fill out the following small character sheet to get themselves thinking about the character they are trying to role-play. Make sure there aren't two students in a group doing the same author.

Character Name:	**Title of Piece:**
Motivations for Writing: Why did you undertake this writing task?	**Goal of Piece:** What are you hoping your audience will get out of the piece? What change do you hope to cause?
Beliefs: What things do you strongly believe to be true? What things do you strongly think are incorrect?	**Disposition:** Based on the writing, what are your emotions surrounding the topic? Are you calm, or are you expressing strong feeling?

LARP, Twenty Minutes:

In their groups, have students engage in role-play as their characters. For the LARP, you should present them with the scenario that they have been brought together as members of a

think tank meant to address an issue that they have all written on. The goal of the LARP is to present a short collaborative statement about how to address the issue. Then have students discuss and debate as their chosen authors. Monitor the groups and make sure everyone is participating, but no one is dominating discussion.

Presentation and Discussion, Ten Minutes:

After the LARP is over, each group should present their final collaborative statement or, if they could not come up with one, address why they were unable to come to a consensus. After every group has presented, use the final minutes of class to ask how they think they can use this exercise in their writing. How can they take the idea of authors being in conversation and apply it to construct their own arguments?

Game Master's Guide: Three Best Practices for a Game-Based Classroom

In this section, I'm addressing some tips and practices gleaned from time spent engaging in games-based learning in the classroom, to help new instructors trying out play in FYC for the first time. These practices are not ironclad rules: there are exceptions where the instructor needs to be more directive and "break the fourth wall" of the game, and each classroom has an individual temperament and receptiveness to the act of play, so there will be unique challenges with each attempt at games in the classroom.

"Yes, and" your students

In improvisation, the golden rule is to "yes, and" your fellow participants. What this means is that when someone proposes something, even outlandish things (though it still must remain within the scope of feasibility and classroom safety), do not shut it down and opt not to engage with it. Instead of saying "no," say "yes" to the idea and then add onto it with your own

contribution to continue the narrative – "yes, and." This is an attitude you should also seek to cultivate with your students in their roles as players, so that they support their classmates more fully. Role-play and many gaming experiences are essentially structured improvisation for both players and GMs, which means that students as players have agency within the play space to contribute to the narrative and make choices that impact play.

While "yes, and"-ing can be difficult for instructors who like to carefully structure the classroom experience in order to reach goals, it's important to do so for several reasons: First, saying yes to the ideas of students, even if those ideas might alter the course of the class session, indicates a respect for the investment of the student as player, because it demonstrates that you as the instructor value their input, as well as increasing the student's sense of self-efficacy. Even if students pick up on something you did not necessarily intend and want to take the class in a slightly different direction, it's important as GM to remain flexible: just because the players did not come to your exact intended conclusion does not mean that they are not learning, and self-directed learning in this way can be extremely valuable. It is still important, however, that the instructor still ensure that the class meets the planned learning goals; while play can lead to unexpected learning moments and those should be encouraged, a balance must be struck between the players' creative freedom and the outcomes of the course.

Additionally, supporting the choices of the students playing the game increases the students' sense of agency over the direction of play, and agency is, as Baird and Dilger point out with their disposition of "ownership," directly tied to how easily students transfer material into new contexts (689). If the students can decide what to do with their knowledge in the classroom (and that they are in some ways creating or constructing knowledge alongside their teacher), they are more likely to feel that they can decide how to use the knowledge in other places.

Always be explicit about goals, including those for transfer

In the prior practice, I addressed that sometimes you need to "break the fourth wall," or in specific gaming parlance, "metagame," as the instructor in order to ensure that students are getting the intended content. This best practice specifically points out the need for metagaming in a game-based classroom, in order to communicate with students what the learning goals attached to play are. This is in line with Yancey et al's teaching for transfer curriculum, because as they point out, if students are aware of what they are meant to learn, they are more likely to recognize when learning is happening. Subsequently, after they recognize they've acquired the knowledge, they are more likely to abstract it later for use in different contexts. So, while the allure of preserving the immersion of a gaming experience is tantalizing, keep in mind that as Chapter Four points out metacognition and immersion are not actually opposing phenomena, and students can both play the game and think critically about what they're doing.

Offer options for sidequests and further exploration

One of the most beloved aspects of nearly all RPG experiences is the ability of players to choose what they engage with and pursue during their play. Some players in digital RPGs will spend hundreds of hours exploring the game world and completing "sidequests" or optional missions for XP while entirely ignoring the main story. While this structure cannot occur in a game-based classroom for pragmatic reasons – if we allowed all students to entirely pursue their own content, the instructor would become overwhelmed creating individualized plans that met course goals – instructors as GMs can still present opportunities for sidequests in the form of optional content for players to explore. Thinking specifically about the political campaign LARP of the assignment sequence, GMs might provide students with readings about the process of political campaigning, exemplars of political documents to analyze, and information about how

to become involved in local political campaigns and organizations. GMs can make calls appropriate to their own classes about if they want to offer XP for engaging with these sidequests.

Conclusion – Game-Based Futures

Over the course of this dissertation, I have attempted to assert a single theoretical thesis: That game-based learning provides meaningful avenues for fostering writing knowledge transfer. Through my chapters of defining and negotiating terms and examining intersecting phenomena, I have demonstrated that game-based learning geared toward transfer in the classroom can be an incredibly productive endeavor with incredible scholarly and pedagogical potential. And that is, ultimately, what this final chapter seeks to do – lay the groundwork for empirical studies and further theorizing that cement the efficacy of this work. Through writing these chapters, I have not only contributed to the body of pedagogical practices available to instructors teaching rhetoric and composition courses; I have done valuable work in furthering understanding of how transfer occurs and can be facilitated across sites of learning and text production.

In making these connections between bodies of theory, I have also challenged perceptions of the role of games in the field of Rhetoric and Composition from critics who feel that play has no place in higher education, such as those who engaged in the "Sparklegate" controversy surrounding the networking game C's the Day at a prominent conference. Through demonstrating that games in the classroom foster goals of the traditional classroom such as engagement and metacognition in innovative ways, I have proven that play can be an effective pedagogical tool, and that using fun to learn can produce very serious benefits.

This dissertation has also contributed significantly to the study of writing knowledge transfer, in several ways. The demonstration of how play impacts the formation of generative

dispositions and has consequences for students' affective responses to learning furthers an understanding of how emotion and habits of mind contribute to the recontextualization of knowledge and answers the call of Driscoll and Powell (2016) for more work on the impact of student emotion in the composing, learning, and transfer processes. Looking more specifically at dispositions, I've demonstrated how games foster beneficial senses of engagement and intrinsic motivation in students, which are crucial to initial learning and being able to transfer that learning later. This work also enriches the field's understanding of metacognition by looking at it through the lens of the magic circle and discussing how reflection and immersion are activities that can go hand in hand through cultivating practices like mindfulness. This dissertation has also moved the discussion of multimodal composition and its ramifications for transfer forward by looking at how games can be used as multimodal composing tools and artifacts of design.

Game-based learning is not a universal solution. Some instructors and students may find it not suited to their educational preferences in the same way that there are learning techniques I personally find ineffective as both teacher and student, so I am not suggesting a paradigm shift into game-based learning as a field. What this work is, then, is a presentation of a potential future for the writing classroom, much like others before me who have done work on classroom models such as community-engaged learning or client-based projects. In this future, teachers who want to explore the potentials of play for engagement, metacognition, and transfer in their courses will have a bevy of resources at their disposal for undertaking this work, and the support of a community of instructors who recognize game-based learning as one of many valid paths a course can take.

The work of this dissertation can fruitfully contribute to a bevy of future studies and research looking at the relationship between transfer and games in the classroom, such as digital

ethnographies of gaming and learning spaces or further exploration of how game design can be used for multimodal composing in a classroom. Looking towards my own future, as I hopefully take the next steps into my career as an educator, I intend to continue to use the work I have put forward here in my own classrooms, and formally study the effects of game-based learning on students. From these materials and theories I will build an entire game-based classroom, and observe students over the course of the semester. Then I will observe students as they move from my class into another writing intensive course, and conduct interviews and textual analysis to see how I observe transfer occurring, as well as how the students conceive of their transfer. It is my hope that as I move forward and begin to present this work to the broader community that more educators decide to undertake work similar to mine in testing these ideas, so that we can thoroughly examine my claims across different classrooms and learning models. In this way, I hope that my contribution to the field will be not just one of increased effectiveness or efficiency, but one of sustainability for the knowledge we impart to our students, and, perhaps most importantly, one of creating joy in the act of learning.

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