DEVELOPING SELF-EFFICACY TOWARD WRITING RESEARCH METHODS AND CLASSROOM PRACTICES THROUGH AWARENESS OF WRITING EXPERIENCES FOR HIGH SCHOOL STUDENTS

by

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DEDICATION

This project is dedicated to my husband, who is the reason I began this journey one year ago. Your belief in me helps me believe in myself.

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ABSTRACT

Self-efficacy research of students' participation with the writing process considers the factors of ideation, convention, and self-management, or rather, the research depends on the skills and techniques of the student writer. While there is much research dedicated to exploring variables of experience within these factors, such as gender, age, demographics, etc., there is very little research which considers the factor of experience as a whole dimension of each unique students' writing process. This study investigated the writing self-efficacy beliefs held by junior and senior high school students in relation to their associations with writing conception, and how writing experiences might contribute to how self-efficacy and conception are established. Scores of self-efficacy and ratios of writing conception were gathered using surveys. Then, using an ANOVA hypothesis test for significance, self-efficacy scores were analyzed based on conception of writing. Further, open-ended questions were also administered through the survey gathering responses to understand student writing experiences. In conjunction with these responses, student participants created storyboards of their lifelong writing experiences. These artifacts were coded using Krippendorff (2013) coding techniques. The results show a relationship between how students' self-efficacy scores differ based on their conception of writing. Further, the results of this study imply there is a relationship between writing experiences, conception, and self-efficacy. In particular, this sample revealed themes associated with collaboration in writing. However, the results of this particular sample are not the end goal or purpose of this study. Rather, it is to demonstrate the necessity for considering students' experiences with writing in each unique sample of self-efficacy toward writing research. Educational implications and further research are discussed.

INTRODUCTION

The Problem of Anxiety Toward Writing for High School Students

In my secondary English teaching position, with an almost unanimous tendency, my junior and senior students voice concern in their ability to write at the level they view needed for success on national standardized tests such as the ACT and for college preparation. As I have taught explicit writing techniques to aid in their writing development, I have wondered if their anxiety towards writing lies deeper than the simple act of putting pen to paper (or fingertips to keyboard). The problem to be investigated in this thesis project study is the effect of writing self-efficacy beliefs on writing conceptions, and the underlying perceptions and experiences which anticipate students' self-efficacy. If a relationship is articulated, not just between self-efficacy toward writing and writing conception, but fundamental reasons or experiences which determine this relationship, the results would reveal an important perspective note for students, educators, and parents. The means in which we craft the scholarly writer throughout their life-long development of writing technique might adjust to provide the platforms, feedback, and experience paralleled to higher levels of self-efficacy and writing performance. An intent to refocus our worldview of *why* we write may take center stage reflecting a perspective like Jean McNiff where "learning is for life, not just for college" (McNiff, 2002), but rather, *writing is for life, not just for college.*

Research Based on Student Experiences

In this way, the problems to be investigated in this study are (1) the effect of self-efficacy toward writing on students' conceptions of writing, and (2) the effect of writing experiences on students' self-efficacy toward writing and conceptions of writing. Following suit, the research questions investigated in this study are (1) how does writing self-efficacy differ based on perceived writing conception? and (2) do students' lifelong writing experiences significantly predict self-efficacy and conceptions of writing? It is anticipated there is a significant difference in at least one relationship between self-efficacy scores based on perceived conception of writing and that students will reveal patterns and themes which place significant effect of their writing experiences on their perceived self-efficacy and conceptions of writing.

REVIEW OF LITERATURE

The Foundations of Self-Efficacy Toward Writing and Writing Performance

Growth Toward a Multi-Dimensional View of Writing

Beginning in the 1980s, researchers began investigating the relationship between self-efficacy, or an individual's judgement on their own abilities to organize and perform, in correspondence to their scholarly or academic performances such as writing (Bandura, 1986,1997; McCarthy, Meier, & Rinderer, 1985; Pajares, 2003, 2007; Pajares & Johnson, 1993, 1996; Pajares, Miller, & Johnson, 1999; Pajares & Valiante, 1997, 2006). At the time, very few had explored the association between self-efficacy and writing performance. In the last three decades, researchers have spearheaded valuable studies scrutinized noteable relationships between the two variables (Bruning, Dempsey, Kauffman, McKim, & Zumbrunn, 2013; Shell, Colvin, & Bruning, 1995; Villalón, Mateos, & Cuevas, 2015; Zimmerman & Bandura, 1994; Zimmerman & Kitsantas, 1999, 2002, 2007). While significant research has been developed examining the connection between student confidence and student performance in academic areas such as writing, little inquiry has been conducted distinguishing underlying causes for the variance in self-efficacy among students. Limited research exists relating students' lifelong writing experiences to their self-efficacy perceptions.

Research on self-efficacy acknowledges at its core the role of humanity's beliefs in their own capabilities to produce or perform (Bandura, 1986, 1997). Furthermore, efficacy beliefs are fundamental to humanity's ability to adapt and change (Bandura, 1997) because "human behavior is the result of the interplay between this self system and

external-environmental sources of influence" (Pajares & Johnson, 1993). This influential element of self-efficacy to ultimately determine the way humanity maneuvers experiences, immediately resonates with academia. Self-efficacy beliefs perceived by students toward various content areas influence performance in these same content areas, (Pajares, 2003, 2007; Pajares & Johnson, 1993, 1996; Pajares, Miller, & Johnson, 1999; Pajares & Valiante, 1997, 2006) where for example, a student's self-efficacy towards writing will parallel their writing performance as well as other variables related to their writing performance (McCarthy et al., 1985; Pajares, 2003, 2007; Pajares & Johnson, 1993, 1996; Pajares, Miller, & Johnson, 1999; Pajares & Valiante, 1997, 2006).

The significant relationship between self-efficacy and performance began as research in the 1980s by researchers like Bandura, and further research and connection to the classroom commenced in the 1990s by researchers such as McCarthy and Pajares. Through two decades of work, the correlation is evident between writing self-efficacy and writing performance. As researchers entered the 21st century, the means in which writing self-efficacy was measured opened to the multi-dimensional nature of writing. By examining the ways researchers measure writing self-efficacy has evolved, we can construct platform development for research growth.

McCarthy was one of the first researchers to explore the role of writing self-efficacy on writing performance. She and her team specifically studied 19 skills of expository essay writing of college students. Students' self-ratings of their confidence on these 19 skills, which were comprised of primarily writing mechanic skills, was measured against their essay's performance (McCarthy et al., 1985). McCarthy's work

demonstrated a correlation between self-efficacy and performance, where the higher the students' confidence, the higher the writing performance, and vice versa. Researchers Shell, Colvin and Bruning followed McCarthy's 1985 work by focusing performance score measuring and self-efficacy score measuring on both mechanical skills of writing and task skills. In this way, Shell et al. developed research by examining writing as a two-dimensional endeavor- both task oriented and conventions oriented (Shell et al., 1995).

One of the leaders of writing self-efficacy research remains Dr. Frank Pajares. Since the mid 1990s to his death in 2009, Pajares collaborated with a variety of other researchers (i.e. Johnson and Valiante) to develop some of the most exhaustive research to date on the relationship between writing self-efficacy and writing performance. Through his work, the variables influencing self-efficacy including gender, writing apprehension, writing task, and writing skill, impacted writing performance (Pajares, 2007; Pajares & Valiante, 1997, 2006). Furthermore, his 2007 work expanded Shell et al. finding of writing self-efficacy in rather two dimensions of task and composition.

Another researcher working at a similar time frame as Pajares was researcher Dr. B.J. Zimmerman who also collaborated with other researchers such as Kitsantas and Schunk. Much of Zimmerman's work emphasizes the self-regulatory dimension of writing. The process of writing consists of generating ideas, planning, writing, revising, and expanding, all of which require a significant amount of self-management. Zimmerman recognized "[b]ecoming a proficient writer involves more than acquiring knowledge of vocabulary and grammar, it depends on high levels of self-regulation and

self-motivation because writing activities are usually self-planned, self-initiated, and self-sustained" (Zimmerman & Kitsantas, 2007, 51). Zimmerman articulated this relationship between higher self-efficacy of management and higher self-efficacy toward writing as a dimension of concern when analyzing student work (Zimmerman & Kitsantas, 2002, 2007). This correlation expanded the dimensions by which self-efficacy toward writing is studied, where self-regulation was now considered a factor of concern along with conventions and task.

The Three-Factor Model

Building off of Zimmerman's expanding of the writing dimensions affecting self-efficacy, Bruning, Dempsey, Kauffman, McKim and Zumbrunn developed the Three-Factor Model of writing self-efficacy based off of four assumptions about writing and writing self-efficacy. These four assumptions consisted of the awareness that (1) writing is a complex cognitive act generating high demands on working memory (2) writing development advances slowly (3) writers form strong impressions of their own writing experiences and (4) writers group their writing-related experiences into psychologically meaningful categories (Bruning et al., 2013). From these assumptions, the three dimensions defining the Three-Factor Model consisted of ideation (self-efficacy of semantics), conventions (self-efficacy of linguistics), and self-regulation (self-efficacy of self-management), where all three dimensions impacted students' self-efficacy toward writing, and further, their writing performance (Bruning et al., 2013).

Continued studies into the depth of writing as a multi-dimensional experience is evident in research such as Villalón, Mateos, and Cuevas 2015 study investigating if the

psychological approach to writing serves as a regulating factor for performance, and therefore if males and females tend to have differing conceptions about writing and writing self-efficacy beliefs. In turn, the study explores whether the psychological approaches to writing implicated the performance differences between genders. The primary purpose of the research was to determine if writing self-efficacy beliefs and gender predict writing performance, and if writing performance is controlled by students' writing conceptions (Villalón et al., 2015, 4).

Understanding the core of self-efficacy and researching its immediate role on the performance of writing has developed significantly since the early 1980s. However, both self-efficacy and writing remain multi-dimensional and evolving terrains for our current students. Even at the end of their comprehensive 2013 study, Bruning and team recognized "the present studies provide only minimal information about the sources of students' writing self-efficacy beliefs. As we move forward, however, we expect to tie measures of self-efficacy to students' writing experiences and to interventions targeted at specific dimensions of the writing process" (Bruning et al., 2013, 36). The experiences and development of the student writer may prove more fundamental in understanding the true relationship of writing self-efficacy and writing performance than we yet realize. In this way, considering the students' writing experience may be observed as glue that holds the Three-Factor Model, or any other method of studying student self-efficacy toward writing, together.

The Four-Factor Model: Predicting Self-Efficacy and Conceptions of Writing Through Lifelong Writing Experiences of Students

While research demonstrating a relationship between confidence toward writing and writing performance serves as a foundation to understanding the student writer, future research should move beyond these established discrete elements of writing. The different dimensions of writing currently function independently in research to examine their relationship with the whole self-efficacy perception of the writer. But what if these dimensions need to be thought of as a collective cohesive unit rather than independent elements? In this way, it can be assumed there are fundamental dimensions of the writing process which could prove necessary for further study such as the studies of Zimmerman, Bruning, and Villalón. It cannot be assumed any *one* dimension or area of focus in the writing process such as ideation, conventions, or self-management are solely responsible for variance in self-efficacy or performance. Rather, further investigation of the unique dimensions of writing, including the lifelong experiences contributing to the development of these dimensions, must be considered. This would progress research from the discrete elements of writing (ideation, convention, and self-management) as a multi-dimensional experience, to a wholesome view surrounding the ecology (Edbauer, 2005) of the student writer.

Almost every student at some point in their academic career could point out a teacher who turned them off to school. One of the main catalysts for why I decided to pursue an English degree in my undergraduate studies was due to a high school English teacher who told me (in front of the whole class) that I would ultimately fail in college after I showed up late the day we were intended to take the Montana Writing Placement

Test. Maybe it was spite, maybe it was luck, likely it was a combination of both, but when we were returned our placement tests, I was the only person in the junior class to score a 5/5. While this moment was a turning point for me in the pursuit of my career, how many negative experiences happen to students which eventually end up turning them off to school as a whole?

In Brené Brown's 2017 research project, *Rising Strong*, she elaborates on the fragile relationship teachers have through mentorship on impacting students' confidence by implementing growth or tossing a grenade. Our feedback, or lack thereof, has the simultaneous ability to serve as a destructive bomb to students' self-worth or build their self-efficacy through constructive feedback and praise where adoration is due. In Brown's research, she unfortunately found 85% of the men and women she interviewed for experiences of shame relied heavily on school scenarios as elementary and secondary students. In each, a teacher's shaming left a scar on the student's memory and insight of their creativity and ability as a learner moving forward (Brown, 2017, 77-97). Her discernment to this role mirrors my experience with my high school English teacher, but where this teacher's scars to my confidence actually fueled a fire for retaliation, which in contrast did end up shaping my learning for the better.

As learners, the ability to filter this kind of feedback to help craft our learning experiences for the better is essential, but takes practice: "Just because we didn't measure up to some standard of achievement doesn't mean that we don't possess gifts and talents that only we can bring to the world" (Brown, 2017, 83). And yet, my response to the stripping of writing self-efficacy may be more a rarity for secondary students. Would

most students, who experience a ravaging of their confidence by a teacher like I did, slip through the cracks to the pit of belief that *writing is for school and I am no good at it?*

The experiences of writing seem then to serve as a fundamental dimension of consideration in the research of student self-efficacy. The continuation of student self-efficacy research should investigate both the factors (ideation, convention, and self-management) and experiences of students' self-efficacy toward writing. While the dimensions of writing through the Three-Factor Model are valuable in understanding students' immediate self-efficacy approaches as a multi-dimensional approach, these dimensions fail to consider the role of past and developed experiences of writing, which may impact self-efficacy toward writing in a similar manner. Future research should consider *self-efficacy toward experience* as the fourth dimension of concern. This kind of research I propose would embrace the ecology of the student writer as the multi-dimensional approach of examining writing self-efficacy and performance in composition.

If relationships can be found between the experiences of writing through a student's life, both positive and negative, the implications for educators and parents could aid how we develop learners and writers. Such research could reveal an important perspective note for students and writing educators. Asking students to reflect on their own writing confidence, and what they believe is the purpose of their writing, asks them to step away from just reproducing to engaging. This same reflection could be applied to teachers as well. "As teachers play a fundamental role in developing and changing their students' conceptions, there is a need to investigate how *they* conceive of writing,"

(Villalón et al,, 2015, 32, [emphasis added]). How we develop students' perspectives on why we write and their confidence toward writing, may be just as important as the conventional aspects of teaching writing.

If the educational research community is to add the experiences students have surrounding their writing as a supplementary element in studying the self-efficacy of composition students, we must consider how to measure and collect data on experiences. The current factors of consideration can be studied as independent of each other and separate from the whole student. What I mean by this is ideation or convention or self-management can be taken as discrete independent factors of student writing success. A researcher can study the self-management self-efficacy of a student and contribute this to their performance. Yet, this seems to be the very issue in why these three factors fail to consider the whole student. If we instead consider the experiences of the student writer, the discrete elements of the factors now become entangled as the experiences surrounding ideation, experiences contributing to convention, and the experiences fueling self-management become interdependent and support or weigh down the branches of students' perceived self-efficacy toward their writing. Consider for example my experience with my junior English teacher. If a researcher were to consider my self-efficacy perception by discrete factors in relation to ideation, convention, or self-management alone, the researcher fails to see the whole picture of my writing self-efficacy as a student. This experience as a writer is not disconnected from these more formal factors. In fact, this experience was fundamental in the growth of my self-efficacy,

entangling my perception into a network of experience and production rather than just of ideation, convention, or self-management.

Considering the Ecology of the Writing Experience Through the 'Draw Talk' Method

Researching a network is more complicated than the precise measuring of independent elements. An ecology of organisms moves and grows and dies. There are aspects of the ecology that are independent, and many that are interdependent. The same is true for studying the ecology of a student writer. There is not one clear and easy method of analyzing the organism of their experiences, because not one student will have the same experiences or interpret the experiences in the same way. The educational research community must seek to embrace a method of study which considers every whole and unique student amidst their ecology of writing experiences. When the method of data collection seeks to provide a platform where the data can entangle, then we may begin to comb through the ecologies in front of us to find patterns and trends in how genres of experience impact the discrete factors contributing to self-efficacy such as ideation, convention, and self-management.

Exploring how students' writing experiences may impact or predict their self-efficacy and conceptions of writing, inquiry must begin at how research could accurately examine these experiences for patterns and trends. One way to collect data on the entangled ecology of student writers is through analyzing their drawings. Researchers Baroutsis, Kervin, Woods, and Comber explored how children learn to write in the wake of increased performance expectations on standardized testing by studying their writing

experiences through their drawings. These researchers consider the child's perspective engaged in 'draw and talk' methodologies as the lens for exploring their perceptions and experiences in learning to write. And further, the researchers found in the children's drawings that their perceptions and experiences (relational, material, and spatial) toward writing were evident.

The gap between reading and writing performance served as the red flag for Baroutsis and team, as can be seen in national testing, where students' writing performance is considerably lower than that of their reading performance. This gap they found significant in early educational development, but it only grew as students progressed through their academic years. Due to this concern in a widening gap and writing performance suffering for students, the researchers rooted their focus on addressing this concern by "listening to and gathering children's perspectives, particularly in early childhood," (178) through drawings:

> "It is through the act of 'drawing as they talk' that children are able to provide insight into their visualization and understanding of classroom practices. We take drawing as a powerful tool to gather- and hopefully begin to understand- children's perspectives of specific writing and learning-to-write practices, in various spatial and material contexts" (178).

In this way, these researchers found students' drawings were a means for effective communication of their writing experiences. I propose, not only that a fourth factor of experience should be considered in the model of studying student self-efficacy toward writing, but for research of this factor to begin with a 'draw talk' model.

Using drawings as a form of communication allows for interaction (Baroutsis et. al., 2019; Cox, 2005), the means to visually communicate ideas (Baroutsis et.al., 2019; Brooks, 2009), and the platform for interpreting meaning-making (Baroutsis et.al., 2019;

Brooks, 2009; Cox, 2005). In this way, drawing functions as a visual platform for students to create and express their perceptions and experiences. Especially for young children who remain at the beginning of their writing encounters and early in verbal communicative development, drawing serves as an avenue for understanding. While drawings offer much potential for exploring a student's perception and experience, their drawings are also "representations of their world" and therefore must be approached with the awareness that they are variable and "not neutral" (Baroutsis et.al., 2019, 179; Thomson, 2008). For this reason, in terms of understanding students' perceptions and experiences of learning to write and the writing experience, students' drawings in the Baroutsis and team's research were utilized as valuable to examine the way their drawings bring "shape and order to their experience" (Baroutsis et.al., 2019, 179) from their point of view. These researchers evaluated students' drawings by focusing through a lens of the drawing's purpose and perspective: "[R]ather than understanding drawings only as artefacts, we question the purposes of children's drawings, asking: 'What are the practices of learning and teaching writing which have produced these drawings?' and 'How have the children engaged in the activity of writing and learning to write?'" (Baroutsis et.al., 2019, 179). Partnered with their drawings, Baroutsis and team paired the non-verbal act of drawing with synchronous conversation among the students to help account for the variability in their representations.

As students drew, the researchers sat with the children and asked them to talk as they worked. Students talked about their drawing and therefore their perception of learning to write. Their data-gathering methods aligned with their methodology about

listening to the student participants of their study. In this way, they depended on the visual research technique of 'draw and talk' which gave opportunity to students to use both verbal and non-verbal means of communication (Coates and Coates, 2006; Wright, 2007; Hopperstad, 2010; Baroutsis et.al., 2019). The means of both listening to students' interpretations and allowing for the complexity of data presented in student drawings, these researchers opened the door for considering the woven and tangled layers of their perception and experiences central to accurate analyzation of the whole student writer. The results of this particular study represent the complexity that must be considered. The students' drawings did not simply represent their perception of self, the drawings represented the experiences and environment surrounding the perception of self. The drawings revealed ecologies surrounding the perception of self as a writer.

Due to the variability of students' drawings, pairing the drawings with the students' dialogue provided deeper understanding to the markings children use to articulate their thinking and perception. "Through drawing and talk, children provide us with important information about their classroom writing experiences from their perspective" (Baroutsis et.al., 2019, 182) as a form of a "constructive process of thinking in action" (Cox, 2005, 123). The drawings were examined with Krippendorff's (2013) frequency counts including the coding categories of representations of the writer, representations of collaborative writing, representations of the materials of writing, and the representations of the spaces of writing (Baroutsis et.al., 2019,183) both what was 'concealed' and what was 'revealed' (Matthews, 2003, 13) in their drawings. The 'talk'

portion of the case study was recorded and later transcribed to provide further insight to the children's writing perspectives.

Instances of representation in the 197 drawings are as follows in the four categories: 43% showed a representation of the materials of writing, 33% represented the writer, 12% represented collaboration during writing, and 12% represented the spaces of writing. In examining these four categories, the researchers found children had a relational preference with writing where the writer is seen as an active participant in the writing process. In representing the writer, most children did not show writing as a collaborative activity, but those who did incorporated peers, teachers and family. For spatial and material elements, students "predominantly represented through desks and chairs within indoor locations such as their classrooms" (Baroutsis et.al., 2019,191) and writing materials consisted of paper, books, and pencils. Some materials were expressed as larger-than-life scale which in effect "miniaturized the writer, evoking the possibility that some children perceive writing is an enormous task" (191). The students' ecologies represented more than their own idea of themselves as a writer. In fact, their perceptions demonstrate a heavy dependency on the spatial, material, relational, and emotional environment which surrounds them as a writer. Considering the fourth factor of experience is not a discrete element at all, but rather a complex and slow observation of the student amidst a network of relational and perceived space, as well as a changing participation with place. The experience of the classroom (or other writing environments) and the encounter of composition becomes a means for studying the identity of the

student writer, and therefore a wholesome understanding of their perception of self-efficacy toward writing.

Writing as a Representation of Students' Identity

The choices these students made in representing their writing experience (representing self, spatial elements, and material elements), demonstrate the means in which communicating experience is an effort in communicating a "representation of their world," (Baroutsis et.al., 2019, 179). The identities people generate for themselves are made of the various stories they tell and that others tell about them (Anzaldua, 1999; Compton-Lilly, 2006), and further, these identities we shape, mold our literacy practices of writing as it becomes 'a means for acting out the identities we assume' (McCarthey & Moje, 2002; Compton-Lilly, 2006, 57). Identity is not a situated characteristic that remains concrete in all places at all times. Rather, people present various identities or various ways of being dependent upon their surroundings including both social and environmental. In response, teaching and the environment of the classroom must value the discourse of fluid ways of being (Gee, 1999; 1990; Compton-Lilly, 2006). This adjusting of the identity to craft a *meeting place* (Massey, 2005; Comber, 2016) within the classroom requires the students and teacher to create meaning in the modification of language, thoughts, values, and actions reflective of the person dynamics the group surrounds them with (Gee, 1999; 1990; Compton-Lilly, 2006). In this way, the patterns of adjusting identity for students constructs a history of their literacy including their successes, competence, struggles, and performance. All the while, outside influences surrounding the *meeting place*, where identities have been adjusted significantly or

assumed, impact identity as well such as privilege, access, opportunity, race, class, gender, etc. External and internal, the identity and relation of the identity to the place of learning grips responsibility of forming the literacy identity for students (Compton-Lilly, 2006). The means in which educational researchers choose to investigate the writing experiences students have, which are rooted in the immediate and perceived relations with the spaces and materials surrounding that experience, significantly impact the way the research observes the literacy identity and its relation to writing self-efficacy, conception, and performance.

Viewing Our Classrooms through Relational Materialism

Perhaps then, understanding the depth of a students' perception of self-efficacy toward writing through their experiences must consider not only the experience itself, but the relationship to the non-human environment surrounding the experience. For example, if we consider my junior English experience, my memory strongly associates with the non-human elements of that moment. I remember one claim of exasperation my teacher reamed me for was coming to the writing exam without a #2 pencil. I only had a pen. A friend lent me about a two-inch long scrap of pencil that I wrote my essay with. I remember the frustration of touching both the lead of the tip and the metal bracket of the eraser simultaneously. I can still picture the U-shape of the tables in her room and how I had to excuse myself around students after my front of the room lecture to take my seat at the back middle. I can still feel the saturated fabric of my red sweatshirt as I chewed on the hood tassel to focus my embarrassment into tenacity on the page. This experience is still clear in my memory because of the non-human elements which surrounded me.

Perhaps then, a lens through *relational materialism* would serve as an effective approach for considering the human and non-human interconnection that further tangles the student writing experiences. Relational materialism, quite simply, is a branch of approach through materialism that considers a mutual engagement with matter between human and non-human, (Haraway, 1997, 2008; Barad, 1998, 1999, 2007, 2008; Grosz, 1994, 2005; Latour, 1996, 2005; Hultman & Taguchi, 2010).

In Hultman and Taguchi's research on relational materialism, they examine a series of preschool children engaging with their learning environment with consideration for the habitual anthropocentric (human-centered) style of observing. For example, one photo is of a young girl playing in a sandbox: "[T]he girl playing with sand is given a far greater value and is seen as superior to the sand, the bucket and the sandbox. She is active and the sand is passive. As a subject she acts out her intentions and competences" (Hultman & Taguchi, 2010, 527). In this way, the girl is an active learner where the learning is of her intent and the sandbox merely serves as an influence to her intent. "What happens if we look at the image thinking that not only humans can be thought upon as active and agentic, but also *non*-human and matter can be granted 'agency'? This troubles the notion of a distinct border and clear division between humans and non-humans, between the sand and the girl" (527). The girl (human) and the sand (non-human) both have agency and relation with each other in a relational materialism approach of observation and analyzation.

I wonder what might happen in educational research if we begin to consider students' writing experiences, or any academic experience for that matter, in this same

manner. The environment in which the experience takes place (spatial, social, and material) has agency and relation to the student's perception of the experience. Any method that aims to accurately collect data on the whole experience must consider the relational materialistic nature of the writing experience, which is perhaps why the Baroutsis et. al. (2019) study was successful in capturing the students' expressions of self and environment perceptions of the experience. The student did not just draw the self, they represented (and the researchers coded based on) their relation to the desk and the paper, the relationship of the human to the non-human within the experience. Considering this relationship helps the researcher to deconstruct the complexities of the ecology surrounding the student's writing experience and how it builds or destroys their writing self-efficacy. For example, in the Baroutsis et. al. (2019) study results, there was no pattern of students drawing their writing experience in relation to technology. However, consider how a study might change after the school closures of the 2020 coronavirus pandemic which forced students to stay home and many to engage with school and writing via an online platform. The ecology of experience around school at home and online will consist of different relationships between materials, socially and spatially, than the ecology of experience five months prior to the pandemic.

Writing is also active learning within the ecology of writing experience where the writer has direct intent. Consider the dimensions of writing as influence to the writer's approach in prior educational research: McCarthy considered mechanics, Pajares considered task orientation, Bruning integrated the influence of the writing task at hand, and Zimmerman indicated the influence of a writer's self-regulation during writing as a

fundamental influence. Of course, these influences have developed into the Three-Factor Model which consists of ideation (self-efficacy of semantics), conventions (self-efficacy of linguistics), and self-regulation (self-efficacy of self-management), where all three dimensions impact students self-efficacy toward writing, and further, their writing performance. However, in this research of the influences on writing, have we approached our perception no different than the relationship between the girl and the sandbox where the girl is active and space passive? Have we perceived the writer as active and the influences and experiences which generate the writing space passive? "[E]ducation research has problematized the humanistic notion of the child and learner as an autonomous subject, independent and detached from its environment" (Hultman & Taguchi, 2010, 525). While the dimensions of writing through the Three-Factor Model are valuable in understanding students' immediate self-efficacy approaches, these dimensions fail to consider the dimension of past and developed experiences of writing, as well as the material relationships within those experiences, which may impact self-efficacy toward writing in a similar manner. Future research should consider *self-efficacy toward experience* as the fourth dimension of concern through a relational materialist approach. This fourth dimension should utilize 'draw talk' as a means for preliminary research to find the patterns and trends of classroom community writing experiences.

This fourth dimension of writing, self-efficacy toward experience, must be rooted in a relational materialism perception. In this way, the experiences which shape the writer and develop the writing are observed as an active participant rather than mere influence to the writing performance and production of knowledge. I am curious, if we consider

place and space as producers of knowledge and as the foundational components to understanding the student writer's experience, how research might find a student writer's relationship to their place and space impacts their writing performance. In particular, the educational researcher should place focus on the place and space connection of the classroom community. And further, considering the recent situation and response of schools across the nation to move school online in response to the coronavirus pandemic, this relationship should consider both the physical and virtual elements of the classroom community as distinct and interwoven aspects to fully understanding the students' writing experiences. Analyzing for this association cannot be thought of as universal. Rather, the unique physical and virtual classroom community spaces that educators and students establish as their place to meet and learn is due to the complexity and variability of environment (social, spatial and material) and experience relationships among all participants.

Classrooms as a *Meeting Place* for Writing and Communicating

One focus text for place and space in the classroom is Comber's 2016 study, *Literacy, Place, and Pedagogies of Possibility*, in which she states, "[u]nderstanding how places and spaces are designed to work is key to young people engaging with the community, connecting with the environment and becoming advocates and actors for the rights of people and places. Schools can become active sites of practice for student citizens," (Comber, 2016, 28). The places and spaces students populate are the authentic realms our students have the opportunity to participate in, comment on, create critique of, and even implement change for. In a more simplistic form, *place* is thought of as the

material or the physical environment, while *space* constitutes the social and relational area around them. In many ways, our schools serve as a focal point for discussing the relationship between place and space. Place in Comber's relation to school are "constitutive of relations… Schools, as material places located in particular geographic sites...Schools are also places in the sense that they are purpose-built (or adapted) structures for educating children and youth. That is, they have the materiality of built environments that include purpose-built structures and landscaped grounds," (Comber, 2016, 7). Place is made then, of the geographic location, physical history, and cultural dynamics. Meanwhile, space in Comber's relation to school are "also social *spaces*; people enter into and leave and interact in the social spaces of schools and the areas around them. In these purpose-built places, people mix with diverse others and enter into social and educative relationships," (Comber, 2016, 7). The academic place of writing could be in a physical classroom engaging in a relationship with either paper or screen. The space would then be made of the complex relationships, materials, and experiences surrounding, perhaps even establishing, the perception of these places. The place and space of the classroom becomes a *meeting place*.

So then, back to the ecology of the writing experience and how this builds or destroys student self-efficacy toward writing itself. It might seem tedious, perhaps even excessive, for an educator to consider and reflect on relational materialism their students encounter within the facilitation of their writing activities, prompts, and assignments. However, consider the practical implications of focusing on such tuning. Through a focus on the places, spaces, material, spatial, relational, experiences (real or perceived) of

students surrounding their writing experiences, the educational researcher is able to gather a relational and wholesome understanding of how these elements generate the dynamic foundation to a student's self-efficacy toward writing, conception of writing, and ultimately its impact on his or her writing performance. Writing is a dynamic process which cannot be fully understood in the discrete elements of ideation, convention, and self-management. While these elements do help the educational researcher better understand the immediate writing performance, they negate the whole learner. Writing performance must account for the whole learner, and therefore must consider the ecology of lifelong experiences and relations a student acquires with his or her learning environment as meaningful contributions to understanding these relations.

For the writing educator, we are responsible for more than teaching composition. We have scaffolded writing activities and practice that aid in students' development of ideation, conventions, and self-management in their writing. My junior English teacher utilized the same scaffolding, but my experiences of writing in her classroom crafted me more as a writer than any of those practice activities. The writing educator does not simply facilitate how the student learns to write. The writing educator advises the experience of their classroom community whether in a physical place or virtual space. We commonly state amongst the teaching community that we need to "teach to the unique learner," but do we fully understand what we mean when we say this? Teaching to the unique learner beings with understanding what makes each learner unique. Knowing the lifelong writing experiences of our students can help us craft what experiences have been missing. Being aware of students' perceptions of their relationship to the social,

spatial, and material elements around them can help us navigate these elements, providing limitations or resources where needed. Staying tuned to the ecology of writing experience surrounding each unique learner ultimately can empower the writing educator to craft and facilitate writing instruction and process with the purpose of building the student's self-efficacy toward writing. We know the stronger the self-efficacy, the better the writing performance. Improving the writing performance of our unique learners can begin with an activity as simple as a sketch.

Putting It All Together

While self-efficacy research has developed drastically in understanding and studying student writing as a multi-dimensional endeavor, the progression of these research methods is in need of evolvement. The dimensions of self-efficacy toward writing in ideation, convention, and self-management must remain fundamental. However, the unique learners of classroom *meeting places* across the nation and their participation with the writing process must be met with a research method that reflects their diverse identities, communities, and experiences. In this way, self-efficacy research of student writers must consider how student writing experiences woven around their perceptions of confidence in ideation, convention, and self-management, have contributed to the students' established self-efficacy perception and writing conception. The expansion of how researchers embrace this expansion might begin with a 'draw talk' model which serves as a methodology representing the unique learner and their world, and engages a relational material view of the experience where Krippendorff (2013)

coding categorizes into both valued human and non-human elements of the place and space of the classroom *meeting place*.

Conceptual and Theoretical Framework

Self-efficacy toward writing and writing conceptions can be used as predictors for writing performance, (Villalón et al., 2015). Self-efficacy toward writing can be used as a predictor for writing conception (Villalón et al., 2015). The Three-Factor Model serves as a method for measuring self-efficacy toward writing in ideation, convention, and self-management, (Bruning et al., 2013). However, the student's writing experience must be considered as a means for better understanding self-efficacy, (Bruning et al., 2013). Our identities are made from the people, places, and experiences within, and our literacy practices are a means for acting out these identities, (Gee, 1999, 1990; McCarthey & Moje, 2002; Compton-Lilly, 2006). Considering the classroom as a *meeting place* is acknowledgement for the classroom as a community space established by multiple and varying identities and experiences that come together, (Massey, 2005; Comber, 2016). The *meeting place* of the classroom is an entanglement of experiences and relations, both human and non-human. Relational materialism is a method of examining this entanglement, (Hultman & Taguchi, 2010). A 'draw talk' method is an open-ended method for gathering the complexities of perceptions and experiences of students considering the human and non-human entaglements, (Coates and Coates, 2006; Baroutsis et.al., 2019).

THE PURPOSE OF THIS MIXED METHODS STUDY

The active research mixed methods study which composes the remainder of this thesis project is an exploration of how educators and researchers might consider the experiences of their student writers within their own unique classroom *meeting places*. It first established the relationship between self-efficacy toward writing and writing conceptions of students following the standard set by prior self-efficacy research. With this relationship assumed and established, it then investigates the experiences of the students in the sample through a modified 'draw talk' method. There are trends and themes revealed by this sample through this method. These themes and patterns provide implications for my unique classroom, and the future research for my students is discussed. However, the purpose of this study is not to establish these trends as the experiences of concern moving forward for self-efficacy research in all classrooms. Rather, the purpose of this study is to demonstrate how the distinct experiences of our students within our unique classroom communities must be considered to fully understand their self-efficacy perceptions and writing conceptions. The themes extracted from my students' experiences are not necessarily the themes of the population. We as educators are not faced with the task of teaching the population, only our unique classroom community. For which, we must better understand each of our *meeting places* by considering our students' experiences.

METHODS AND PROCEDURES

A Mixed Methods Approach

Methodology of the Mixed Methods Approach

This action research mixed methods study investigated the relationship of students' writing experiences with their self-efficacy toward writing and their conception of writing. This study utilized both quantitative and qualitative data to address a concern that presented itself in my teaching classroom among my students. Many of my students, despite explicit teaching and practice in supporting their knowledge and application in methods of composition, expressed anxiety that they do not craft writing proficient to meet the expectations of college classrooms and beyond. The objective of the study is to empower these students' confidence and perceptions of writing by studying the ways teachers (and parents) influence their writing experiences in the classroom and through assignments toward higher self-efficacy and epistemic views of the writing process.

This study utilized a survey made of three parts to gather both quantitative and qualitative data on students' self-efficacy scores toward writing as well as their conceptions of writing. Parts one and two of the survey were entirely quantitative in design and modeled after Villalón and team's 2015 survey methods. Part one was targeted at collecting a self-efficacy score of each student participant. Part two was targeted at labeling the student as having either a reproductive or epistemic view of writing, where an epistemic view implies a purpose for the writer to better understand their thinking and a reproductive view of writing implies focus on reproducing or

completing the task. Part three of the survey was entirely qualitative in design and consisted of opened-ended questions targeted at collecting questionnaire style responses on the students' writing experiences. The last piece of data collected was a storyboard artifact from each student. Each storyboard followed a provided template that broke lifelong writing experiences into age sections. Students provided both visual and textual responses in the storyboards. These artifacts were then coded using Krippendorff (2013) coding categories.

Considering the mixed methods approach of using both qualitative and quantitative data it is important to reflect on priority, order, and mixing methods. While the close-ended question responses from the survey were collected, organized, and reported first through an ANOVA test for significance, the prioritized data lies in the students' qualitative responses to their writing experiences. The ANOVA comparing self-efficacy and conceptions of writing was utilized as a foundation for the study. In order to analyze the way student's writing experiences influence their self-efficacy and conceptions, there first needed to be a reported relationship between self-efficacy and conception of writing. After a significant relationship between these two writing elements was established, then the emphasis of data could be dedicated to how experience influenced the relationship itself. While the survey and storyboard was designed to be administered as concurrently as possible, the student participants engaged in sequential order where they completed the survey (3 total parts) on day one, and the storyboard on day two. Analysis and "mixing" of the data attempts to connect the relationship of self-efficacy and conception with writing experience, (Creswell, 2005, 22).

Methodology and Procedure of the Quantitative Approach

The relationship between self-efficacy toward writing and writing perception for this study was designed as a quantitative approach through scores from a self-efficacy and writing conception survey. The survey was administered exclusively to my junior and senior students as active research to better understand my students' approaches to writing. The school is a local, private high school in Great Falls, Montana functioning with many of the same characteristics as a rural setting. The junior class consists of 26 students broken into two class periods of 11 and 15 students in each. The senior class consists of 40 students broken into two class periods of 18 and 22 students in each.

While completion of the survey was mandatory and completed in class time, participation in the research was entirely voluntary. Students were provided a consent form at the time of the survey and opted to either allow their survey responses to be included or not in the study (*see Appendix A*). Likewise, the principal and school board requested the permission of the parent/guardian as well, so a similar consent form was sent home with students for their parent/guardian to consider (*see Appendix B*). Only students who returned a signed parent/guardian consent form and opted in with their own consent were included as the analyzed sample for this study. The layers of consent restricted participation from the sample dropping the total student participant count from 66 to 26.

The sample of participants utilized for this study consisted of a total of 26 grade 11 and 12 high school students. The sample was representative of my classes as whole where 13 of the 26 students were male, and 13 were female. Likewise, 13 of the 26

students were juniors, and 13 were seniors. All of the 26 students attend the Catholic college-prep high school and live in or surrounding Great Falls. The sample was dominantly white and Catholic or Christian.

The survey utilized to gather the self-efficacy scores toward writing were modeled after the survey used by the Villalón et al. study. This questionnaire followed Bandura's Guide and asked students to estimate on a scale of 0 to 100 their confidence level, 0 being "I can't do it" ; 50 being "fairly sure of being able to do it" ; and 100 being "I'm sure I can do it." These estimates were of their confidence to complete a specific writing skill. Mean scores for each writing skill were calculated and reported, (Villalón et al., 2015, 16). The survey utilized for this study maintained the same 16 questions of Villalón's, however one adaptation was made consisting of the scale range from 0 to 100 to rather be 1 to 10 (*see Appendix C*). Students completed this portion of the survey as part one of the Google Form survey.

The survey also gathered responses from students to interpret their view of writing as either epistemic or reproductive. This portion was also modeled after the Villalón et al. study by presenting the student with two statements per item for a total of 8 items (*see appendix D*). For each item, one statement represented an epistemic view of writing and the other reproductive. Any student who selected a majority of epistemic statements was coded as having an epistemic view, majority reproductive the student was coded reproductive, and any student who equally answered (4:4) both epistemic and reproductive was coded as neither. Students completed this portion of the survey as part two of the Google Form survey.

Once students had completed the survey on self-efficacy toward writing, a total score out of 160 using the 1 to 10 scale for each of the 16 questions was calculated where self-efficacy toward writing survey scores ranged from 0 to 160 as a continuous variable. Students' perceptions of writing were also gathered in conjunction with their self-efficacy score where an epistemic view was coded as 1, reproductive as 2, and neither as 0, as a discrete variable. Of these students, self-efficacy scores had a mean score of 116.77 (M=116.77, SD=19.45). Range for the writing self-efficacy scores for the sample of 26 total grade 11 and 12 students is 58 to 154. These two data sets were then ran as a one-way ANOVA hypothesis test for significance.

Table 1. *Scores for grade 11 and 12 writing self-efficacy survey responses by conception*

	Epistemic View of Writing	Reproductive View of Writing	Neither View of Writing (equal E and R)
M	123.15	103.78	125.25
SD	16.65	20.83	10.40

This study used a one-way ANOVA to compare the scores for the grade 11 and 12 writing self-efficacy scores and the writing conceptions of students. The assumptions for a one-way ANOVA hypothesis test state the sample's observations are independent, and the populations must be normally distributed and have equal variances, or homogeneity of variance (Gravetter & Wallnau, 2017, p. 391-392). In this way, the continuous dependent variable is grade 11 and 12 writing self-efficacy survey scores and the discrete independent variable is the perceived writing conception of students as either epistemic, reproductive, or neither.

There is a significant relationship presented between self-efficacy scores and writing conception, however, only 26 of 66 students were able to be analyzed for the study sample. This small sample projects proneness to variability. Classification as emergent findings could be considered applicable for the results from this study, however, such a small sample presents too great a platform of unreliability for solid predictions for the population. Finally, all observations are independent among 26 students and there is equal variance between the two variables (Gravetter & Wallnau, 2017, 531-543).

Methodology and Procedure of the Qualitative Approach

The same sample of student participants was utilized for the qualitative portion of this study. The same mandates for consent were also kept in place. The first method for the qualitative data was collected through part three of the survey and responded to on the first day sequentially with part one and part two of the survey. This third part of the survey was composed of five open-ended questions which served as a questionnaire style of data collection. The five questions were presented as follows: *(1) What do you think makes a good writer? Do you consider yourself to be a good writer? (2) Do you enjoy writing? Why or why not? (3) What is your personal experience like when you sit down to write? How do you feel? What do you think about? What do you worry about? (4) What are your past experiences (early childhood through high school) with writing like? (5) Thinking about your past experiences with writing, what individuals were involved? How were these individuals involved in your writing experiences?(see Appendix E).*

The second method for collecting the qualitative data was through the creation of a storyboard artifact that represented the student participants' lifelong writing experiences. Each student was provided a template for the storyboard and encouraged to fill with text and visual representations through Google Drawings (*see Appendix F*). Following the survey responses, students created these storyboards of their writing experiences in various stages of their childhood to present writing careers. The completed storyboards were examined with Krippendorff's (2013) frequency counts including the categories of representations of the writer, representations of collaborative writing, representations of the materials of writing, and the representations of the spaces of writing (Baroutsis et.al., 2019,183) both what was 'concealed' and what was 'revealed' (Matthews, 2003, 13) in their drawings *(see table 2)*.

Table 2. *Krippendorff (2013) coding categories for 'draw talk' storyboards*

Category	Subcategory elements or items
Representations of the writer	Evidence of the depiction of a person Evidence of depictions other than people Evidence of a face/no face Evidence of facial expressions: smile, frown, or neutral
Representations of collaborative writing	No evidence of collaboration Evidence of collaboration in pairs or groups and with peers or adults
Representations of materials	Evidence of a book and/or paper (or not) Evidence of a desk and/or chair (or not) Evidence of writing implements (or not) Inclusion of writing representation (or not) Evidence of technology (or not)
Representations of the spaces	Evidence of an indoor setting Evidence of an outdoor setting Setting unknown

The ‘talk’ element of the ‘draw talk’ method study was collected through the written transcription of the questionnaire portion of the survey as well as what text was provided on their storyboards. Instances of representation in the 26 drawings are as follows in the four categories: 24% showed a representation of the materials of writing, 35% represented the writer, 27% represented collaboration during writing, and 32% represented the spaces of writing.

Validity and Reliability

Validity is the accuracy of a method’s measures of what it is intended to measure (Schopper et al., 1993; Connor & Gibson, 2003), while reliability is the consistency of the research findings (Kvale, 1996; Connor & Gibson, 2003). This study can be considered more dependable through usage of triangulation from different methods, which focuses on the relationship between self-efficacy, perception, and experience by utilizing three different research methods. These methods include close-ended questions on a survey, open-ended questionnaire style questions on a survey, close analysis of storyboard artifacts, and close analysis of text/written responses included with the storyboard artifacts and survey responses. Analyzing these different methods also relied upon both quantitative and qualitative means of organizing and reporting. Using the close-ended questions on the survey, an ANOVA was conducted comparing students’ self-efficacy scores with the three types of writing conception (epistemic, reproductive, or neither). Krippendorff (2013) coding was conducted on the storyboard artifacts which looked for frequencies in representations of the writer, representations of collaborative

writing, representations of the materials of writing, and the representations of the spaces of writing (Baroutsis et.al., 2019, 183). Lastly, close analysis of the open-ended questionnaire style questions of the survey and any text included with the storyboards was crafted observing what was both 'revealed and concealed' (Matthews, 2003, 13). In organizing these responses, frequently used words and phrases were recorded, common ideas and concepts were coded and categorized, and consideration for emerging themes were articulated. Similarly, patterns in what was expected but not expressed were also observed, recorded, coded, and categorized.

While the intention of triangulation of several different research methods was to ensure a valid and reliable research process and findings, it must also be acknowledged that there are likely factors beyond control which may have influenced the student participants' responses. Originally, this study was designed to be completed by students as active research in my physical classroom. In this research environment, the time of day the surveys (both close-ended and open-ended questions) and storyboards were completed would have been controlled and standardized. I could have limited external distractions, regulated the length of time provided to complete the surveys and storyboards, and maintained consistency in materials and resources used. However, due to the 2020 school closures in response to the COVID-19 pandemic, I was faced with the task of adjusting not only my lesson plans but my research methods as well for online learning.

I attempted to maintain the same intended regulation and consistency, however there are several factors which were out of my control that may have influenced the

student participant responses. The surveys were completed through our Google Classroom using a Google Form where students had access to the survey for 24 hours. There was no consistency in the time of day this survey was completed by students. I also did not set a time limit on how long they had to complete the survey. In this way, the time of day as well as the length of time to complete the survey were unregulated. Completion of the storyboards is similar, where students could access and complete anytime and any length of time during the 24 hour window. Another significant change in conducting the storyboard artifact research method was the change from physical drawings to the completion of the storyboards online using Google Drawings. While all students were provided the same instructions and template, there was a wide variety of colors, text, and pictures incorporated into the work.

This leads to what might be considered the most significant change in this study's design- how the 'draw talk' method was adapted for online student participant use. The original design of this study would have provided me the opportunity to verbally engage with students as they drew their storyboards in my classroom space. This approach would have more closely aligned with a true 'draw talk' method (Baroutsis et.al., 2019). When the schools closed, the place of my classroom was transformed into the space of virtual learning. I instead used the Google Drawing storyboard products as the *draw* portion of the method, and the written responses to part three of the survey (open-ended questionnaire style response) as well as any text included with the storyboards I utilized as the *talk* portion of the method. While this adjusted approach is closely aligned with a

‘draw talk’ method, the students are not synchronously and verbally expressing what they are representing as they draw it. This should be considered a limitation of the study.

Limitations

Providing students the opportunity to communicate their writing experiences in both a verbal and a non-verbal mode is in part what provides a ‘draw talk’ method with validity. The drawings, or in the case of this study the storyboards, represent the experience but there can be great variability in how the markings and representations are interpreted. “Although the end product was something tangible which could be viewed by other than those present, what those finished drawings could not portray was the thinking, talking, social interaction and mark-making sequences that formed a fundamental part of the process” (Coates & Coates, 2006, 222). By combining the visual representations with a verbal interview and conversation as the representation is being created, the researcher is able to more fully understand the thinking, expressing, and interacting elements of the experience being represented. The five open-ended questions of the survey and any text associated with the storyboards was implemented as the means of replacing the ‘talk’ portion in a mandated remote and virtual learning experience. While these methods provide space for further thinking and explanation from the student participants, it is also a non-verbal method. In this way, this study utilizes two non-verbal methods where a ‘draw talk’ method depends on the connections between a verbal and non-verbal.

Also, due to the remote places and virtual spaces of learning in the spring of 2020 in response to the COVID-19 pandemic, this study was unable to fully integrate the social

context of the classroom. A ‘draw talk’ method of data collection is implemented with a full classroom of students where conversation and interaction is open during the activity. The modifications of this method to Google Classroom restricted this social element. One theme this study highlights is the lack of expressed collaboration from student participants. This finding parallels Baroutsis and team’s finding of students not expressing many frequencies of collaboration in the writing process, (Baroutsis et al., 2019, 185-87). Due to this focus, it is imperative this study recognize the social restrictions of not just this activity, but the months of virtual learning these students participated in surrounding the study.

While the student participants did not directly communicate experiencing isolation within the methods and data collection of this study, they did express emotional frustration, fatigue, and anxiety informally as a response to remote and virtual learning in the same time period this study was conducted. This emotional reaction to social isolation was a common experience of individuals across the nation. Significant research connects social isolation and loneliness to poor mental health. In fact, suicidal ideation due to experiencing isolation became a major public health concern during states’ mandated stay-at-home orders. According to recent KFF polling data in response to the COVID-19 pandemic, “significantly higher shares of people who were sheltering in place (47%) reported negative mental health effects resulting from worry or stress related to coronavirus than among those not sheltering in place (37%),” (Panchal et al., 2020). It can be expected a similar effect on mental health parallels the experiences of the student participants in this study during this time. An increase of effect on mental health of these

participants should be considered a limitation for how they interacted and responded to the study methods and expressed their experiences with writing.

Further, consideration for trends and experiences of isolation during this time frame must be presented as a potential influence for these student participants, impacting their views of self-isolation and collaboration with consistent parties prior such as their teachers or peers. In this way, I also recognize my own personal experience with feelings of isolation as both the student participants' teacher and as the researcher conducting this study. I entered shelter in place as a response to Montana state's stay-at-home order on Wednesday, March 18th, 2020 and I opened the survey and storyboard templates for student participant completion on Google Classroom Wednesday, May 20th and Thursday, May 21st. During this time frame, I completed my work and any social interactions from a remote place and virtual space, no different from the experience of the student participants. In this way, I recognize not only these participants' influence on their perspectives of the writing experience and collaboration due to isolation, but also my own influence in my focus of analyzing the qualitative data.

Outside of the means in which I experienced isolation as the researcher and participants' teacher, there is also the potential my own biases and values impacted student participant response and/or my interpretation of my students' responses. As an educator and researcher, I argue for an increased effort in listening to the voices and perspectives of our students. I believe that in listening to our students, we might better understand their learning experiences, specifically relational and spatial, which influence their learning experiences. Ultimately, by listening to our students' relational and spatial

experiences surrounding the writing space, we can respond in the ways we as educators craft the writing ecologies of our classroom. These values establish my assumption that the classroom is itself an ecology that is ever changing, manipulated and built by the relationships, interactions, and experiences within and outside of the four walls. Furthermore, under my assumption that the classroom is an ecology, I believe our methods of instruction and means of practice as educators must continually evolve to the unique needs and perspectives of the students. The teacher facilitates the ecological balance (or not) within the classroom space. In this way, I bring a particular focus to the role of the educator when analyzing student participant responses as a way of better understanding the adjustments that must be implemented in teacher facilitation of the classroom space.

Lastly, the nature of action research within an educator's own classroom provides the implicit assumption that the researcher is closely associated with the study and the participants. This assumption is valid for this study. The 26 participants were my students whom I know personally and have relationships with. While all their responses were coded so I would not know what student was associated with what response, my interpretations of the responses nonetheless are likely impacted as compared to a study that utilized student participants the researcher is not connected to. For example, due to my personal relationship to them as their teacher, I also knew the stress and anxiety associated with the stay-at-home order created a potential impact on their responses due to the informal conversations and relations I had with them outside of this study.

RESULTS OF THE MIXED METHODS STUDY

Results of the Quantitative Methods

The analysis of variance indicated that there are significant differences among the three levels of writing conception $F(2, 23) = 3.77$, $p = 0.0383$. Results of a Scheffe post hoc test analysis suggest a significant difference between students with an epistemic view of writing (M=123.15, SD=16.65) and students with a reproductive view of writing (M=103.78, SD=20.83). The results of this ANOVA scenario indicated the assumptions presented by Villalón and team's (2015) study are worthy of further consideration, where the relationship between higher scores of self-efficacy toward writing associate with epistemic views of writing, while lower scores of self-efficacy toward writing associate with reproductive views. This study found a significant difference between the self-efficacy scores of students who view writing as epistemic and students who view writing as reproductive. The further research of the qualitative portion of this study considers the implications of how students' experiences with writing shape both their writing self-efficacy and their writing conception. If relationships can be found between the experiences of writing through a student's life, both positive and negative, the implications for educators and parents could aid how we develop learners and writers by building students' self-efficacy in effort to lead students toward epistemic views of writing.

Results of the Qualitative Methods

Both the students' self-efficacy scores and ratios of epistemic or reproductive views of writing function as a means for labeling the perceived experience of the writing process for the student. When pairing these scores with a 'draw talk' approach, two possible identifiers for how students' writing perceptions develop were identified. Both of these identifiers root themselves in the student's identity. The first significant identifier in student perceptions of themselves as a writer lies in how their writing represents and connects with their identity. The second functions around how collaboration from the surrounding adults of their writing space builds or deconstructs their perception of encouragement or support in their writing process, further establishing their own perception of themselves as a writer.

Revealed Results in the First Significant Theme

The third part of the survey revealed the focus trends and patterns in how students value the means by which their writing represents and engages with their own perceptions and experiences. This third part of the survey was composed of five open-ended questions which served as a questionnaire style of data collection. In responses to these five questions, *all* students responded with a need for their writing experience to be personal in order for there to be "passion" or "care" in their writing. In this way, the first focus theme of the qualitative data is defined through students' expression of how their writing represents and connects with their identity.

Students expressed two major supplementary themes within this first focus theme for their personal commitment to writing as either (1) they enjoy writing because it allows them an opportunity to express themselves, *expression of self,* or (2) they enjoy writing when it is on a topic or question they have personal interest or passion for, *topic of interest.* Whether students focused on needed expression of self or topic of interest in their writing experience, for both cases students focus on the need for their writing in application, growth, and experience, to be for the *self.* This need for representation and investment of the *self* in the writing experience parallels with a dominant expressed response to the first question. Students provided an emphasis on "clear communication to an audience" as a marker of a good writer. Further, in addressing the worries they have when writing, concern they would not make sense or the reader would not have clarity presented with consistency. In fact, 17 out of the 26 responses defined their major worry when writing as lack of clarity for the reader in their writing content or presentation. In this way, students presented concern in how their writing, as an extension of their own thoughts, ideas and feelings, would be received by others. Furthermore, students' perception and investment of *self* in their writing, as well as the reception of writing as a representation of their *self*, surfaced as an unmistakable and dominant theme.

Revealed Results in the Second Significant Theme

Following the survey responses and the first focus theme, the second theme students' expressed of how collaboration and encouragement from adult mentors constructs their identity as a writer was identified through the storyboard data. The completed storyboards, which utilized Google Drawings, were examined with

Krippendorff's (2013) frequency counts including representations of the writer, representations of collaborative writing, representations of the materials of writing, and the representations of the spaces of writing (Baroutsis et.al., 2019,183) both what was 'concealed' and what was 'revealed' (Matthews, 2003, 13) in their drawings. Instances of representation in the 26 drawings are as follows in the four categories: 24% showed a representation of the materials of writing, 35% represented the writer, 27% represented collaboration during writing, and 32% represented the spaces of writing.

For spatial and material elements, students primarily represented the writing experience indoors (34%) rather than outdoors (9%), and writing materials consisted of paper and books. There were only 3 students who expressed technology as a part of the writing materials and all instances of these 3 students occurred in the high school time frame of the writing experience. In representing the writer, most students did not show writing as a collaborative activity, where only 7 students out of 26 represented collaboration. Those who did, referred to peers, teachers and family. Correlating this representation of collaboration in the drawing portion (storyboards) of the data with the 'talk' portion (part three of the survey) of the data, 10 students out of 26 expressed collaboration with parents, teachers, and peers where the collaboration went beyond simply reviewing or editing their writing. Of these 10 students, 8 scored as having an epistemic view of writing and 2 scored as neither having an epistemic or reproductive view of writing. *None* of the students who scored as having a reproductive view of writing expressed collaboration in the writing process.

Of these 10 epistemic dominant students who expressed collaboration in the writing process, the people referred to were teachers and parents. The only other category of people mentioned were friends and/or peers. Considering teachers and parents, two major secondary themes of collaborative purpose were revealed within this second focus theme. First, both teachers and parents help in the editing and revision stage of the writing process. The second collaborative purpose of teachers and parents is encouragement and support. Students expressed that teacher and parent feedback "supported" their writing process, as well as "pushed" or "challenged" the student towards improvement. Students also expressed a desire of sharing the finished product of their writing with teachers and parents due to an emotional response of being "proud" of their work. Perhaps what strikes the most in feedback from others involved in the writing process is how consistently the theme of teacher and parent encouragement and support was expressed by students. The positive reinforcement from these adult figures and models seem to provide as much value to the student as the more formal guidance and critique. Especially considering that these students who expressed collaboration also scored as having an epistemic view of writing and higher self-efficacy, the emotional support and encouragement we provide our students seems to function as a dominant element to a successful writing ecology experience for an epistemic view.

The students' ecologies represented more than their own idea of themselves as a writer. In fact, their perceptions demonstrate how the spatial, material, relational, and emotional environment which surrounds them as a writer, is rooted within experience(s). With attention to this fourth factor of experience in this study, it is analyzed not as a

discrete element, but rather an observation of complex and dynamic students amidst a network of relational and perceived space, as well as their changing participation with place. The experience of the classroom (or other writing environments) in this study became a means for studying the identity of my student writers, and therefore an attempt at wholesome understanding of their perception of self-efficacy toward writing. For students who scored as epistemic viewers of writing and expressed collaboration within the writing experience, it seems their perception of self-efficacy toward writing is largely dependent on the encouragement and emotional expressed support of their surrounding adults of their writing spaces.

Concealed Results in the Themes

We find significance in considering how collaboration from these surrounding adults developed the epistemic views of writing and higher self-efficacy scores, but perhaps just as valuable is consideration for the 16 students who lacked expression of collaboration in their writing experiences. Most specifically, the 9 students who both scored as having reproductive views of writing and expressed no collaboration. Focusing on two of these individual responses, not only was collaborative work and growth of the individual self central, but a surrounding adult and mentor (the teacher) was expressed as a figurehead that limited the writing space for the student to explore and represent the self, and a lack of positive encouragement or support towards the student within the writing process.

Student 1 expressed writing as a negative experience, limited involvement and support from their teachers, and restriction in the freedom to write with *expression of self*

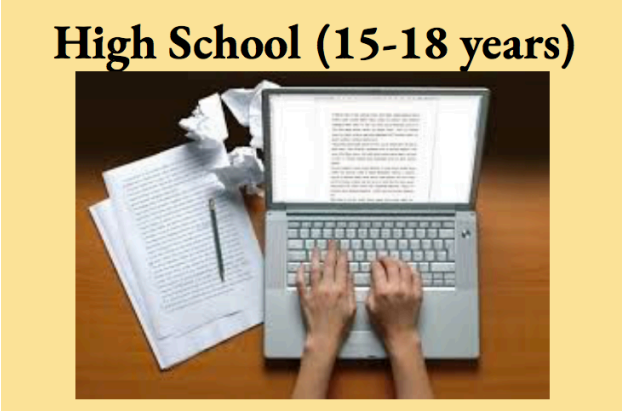
or *topic of interest*: "(Writing) was awful. The teachers were all so tough, we had to follow the exact rules they made us. We didn't have much space to write what we wanted." Certainly, we cannot make the argument that this student's writing perception and self-efficacy is dependent upon these teachers and their approach to teaching writing. However, it would also be inaccurate to presume these teachers' lack of encouragement and support, as well as their restrictions on self-expression and self-investment in writing did not impact this student. In fact, when asked about their past writing experiences, Student 1 seems to blame their negative experience with writing on the teacher.

Student 2 did not express a negative past writing experience so directly as Student 1, but they did respond with concern for the lack of space to explore and represent their *self* which was also limited indirectly by the teacher figurehead. "In most cases I feel as if I just write for my teacher attempting to put what I believe they want to hear onto the page. While at the same time there are instances when I just write for me as if thoughts from other people do not have much importance." Here, Student 2 outlines two separate approaches to writing. The first is a reproductive approach to writing that answers the question and completes the assignment for the teacher. Further, the writing product for this first approach to writing is crafted for what they believe the teacher wants to hear from them as their developed thoughts, ideas, and feelings. The second approach outlined by Student 2 takes on an epistemic focus that explores their own critical thinking and complexity of emotions. In this approach, the writing product is by the student and for the students' application, growth, and experience of *self* in their writing.

Unexpected Themes in the Results

There were also two surprises or unexpected themes and trends revealed in the data. The first surprise is the lack of expressed technology, especially in the high school years. Students primarily referred to books, paper, and writing implements when considering the materials used for writing. According to the Krippendorff (2013) coding used on the storyboard artifacts, only 3 of the 26 students represented technology as a material used in the writing process (*see figure 1 for an example of a student who did represent technology in the high school years*).

Figure 1. *Example of student storyboard response including technology*



All three of these students' storyboards represented a laptop as the technology used. This served as an unexpected trend within the data considering most students, especially during their high school years, type their papers and essays using a computer or laptop. This was even more surprising considering the time frame in which these student participants completed the storyboard artifacts. During the stay-at-home order of the 2020 COVID-19 pandemic, students were asked to engage with their learning in a near entirely virtual and online format. In this way, it was anticipated that many students

would represent technology, primarily through the way of a computer or laptop, for the high school years portion of the storyboard. Further investigation would need to commence to articulate why students distanced the virtual learning of the 2020 coronavirus pandemic from what they would consider as their writing experience. This potential distance students place between what they consider their writing experiences and the experience of school at home presents concern, especially considering the second unexpected theme of "aloneness."

The second unexpected trend was a theme represented visually and through text in the storyboard data of isolation or "aloneness" in the high school years portion. 9 of the 26 students represented "aloneness" visually through images, and 3 of the 26 students expressed "aloneness" through the text associated with the storyboard. Together, 12 of the 26 students (46%) expressed "aloneness" in the high school portion of their storyboard either visually or though written (typed) text.

Figure 2. *First example of student storyboard response of "aloneness"*

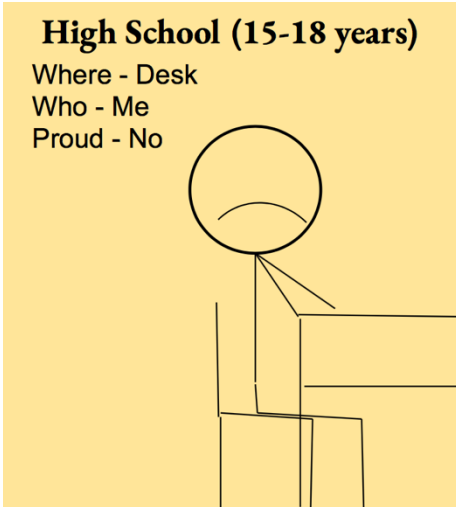
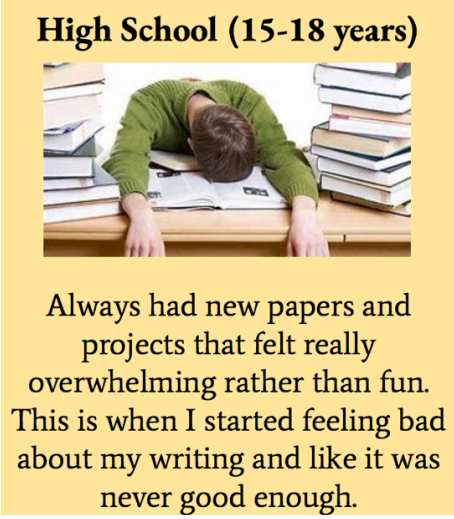


Figure 3. *Second example of student storyboard response of "aloneness"*



It perhaps may be valuable to consider this trend in the storyboards as parallel to the lack of representation for collaboration. In this particular study, writing was represented and responded to as a personal and independent task. Further, all students who scored as having a reproductive view of writing also represented a lack of collaboration. Due to this relationship represented through the qualitative data in this study, partnered with the quantitative analysis which found a significant relationship between self-efficacy score and perception of writing, the abundance of expressed "aloneness" presents concern. If low self-efficacy scores toward writing are associated with reproductive views of writing, and reproductive views of writing consistently associated with writing experiences that lack collaboration, a trend of feeling alone or isolated in a high school writing experience is worthy of further investigation for lowered self-efficacy trends or change in writing perception.

DISCUSSION OF THE RESULTS

Discussion of the Mixed Methods Study

Perhaps both major themes, the writing experience connection to student self-identity and identification of collaboration in the writing experience, bridge to a more wholesome look at the students' emotional interconnectedness with the writing experience. All students identified needing to connect to some element of self-perception either through self-expression in their writing or crafting composition on a topic of interest to them personally. Perhaps, collaborating throughout the writing experience would aid in the development of self-perception. Likewise, sharing their writing with their teachers or parents is collaborating due to a sense of self-pride, or the writing as a representation of their *self*. In this way, collaboration is an outreach for self-perception to be developed for the student writer. It would seem reasonable then to connect collaboration as a mechanism for developing the perception of the student writer's *self* to developing the self-efficacy toward writing for the student. In other words, for my sample, working with these students, as well as the space to work together, and providing them encouragement actually helps develop them into more confident writers and towards an epistemic view of writing. For as much as writing was labeled an identity maker and expresser by students in this sample, the dependency on others in the writing process is clear. It would seem that crafting identity for these students is built on collaboration and social space.

Through the results of the ANOVA in this sample data, there also is consistent conclusion with prior research that students with higher levels of confidence toward writing in turn tend to have an epistemic view of writing rather than reproductive. In this sample, two ways in which students can be guided towards developing an epistemic view through building confidence are by (1) giving students the space within the writing experience to connect with their identity through expression of self and choosing their own topic of interest, and (2) ensure collaboration from adult mentors in the realms of editing and revision as well as encouragement and support. When space and support from the teacher as the adult mentor was not provided, two direct examples highlighted the potential negative consequences.

Both Student 1 and Student 2 target how the teacher can restrict the writing space for the student to connect with their identity through expression of self and/or writing on a topic of interest. These examples also frame the writing experience as negative due to the role, and perhaps lack of support, from the teacher. In this sample, the teacher is identified by students as a strong influence on the writing experience, which furthermore impacts students' confidence toward writing and view of writing itself. How composition educators facilitate the writing space and experience for students directly seems to have an impact on self-efficacy. In this way, the factor of the writing experience is revealed through this sample as a valuable dimension of consideration when measuring self-efficacy toward writing.

This study also revealed a surprising trend of "aloneness" in the high school years. There is not enough evidence within this study to discuss a direct connection

between the theme of collaboration (and/or lack of collaboration) correlated to the trend of expressed "aloneness." Similarly, outside of recognizing the time frame of the COVID-19 stay-at-home order as a potential impact to results, there is not enough evidence to correlate this experience with the themes of collaboration (or lack thereof), "aloneness," and distance from material representation of technology. What can be summarized from these three unique elements of the data, is the necessary need in this study to further investigate the relationship of school from home experience with expressions of isolation and collaboration. If further research revealed a connection between these trends and the experience, how the learning space was structured could be adjusted as a direct response. In this way, this need to further investigate the COVID-19 experience of isolation on the writing experience in this sample demonstrates the dependency educators and researchers must have on experience as a factor of self-efficacy.

This study does not aim to make the collective argument that students who experience isolation or lack of collaboration are at risk of lower self-efficacy scores or reproductive views of writing. Rather, this study intends to document two findings. First, this study adds to the conclusions of other research which finds a significant relationship between self-efficacy and conceptions of writing. Due to this consistent result, future research must continue to investigate the factors of self-efficacy for students in order to focus our approach as educators to help craft epistemic views of writing.

Second, this study argues a missing factor of student self-efficacy toward writing which must be considered is that of writing experiences. The action research of my 26

student participants potentially correlating writing experiences of isolation and lack of collaboration with low self-efficacy and reproductive views is not necessarily the phenomenon of classrooms across the nation. While the experiences of my students expressed through visuals and writing encourage a focused instructional response and purpose for future research in my classroom, educational researchers should not necessarily investigate the same implications. The future research and instructional response I have as an educator is due to the unique learner experiences and classroom ecology I face and facilitate. There is not a single classroom ecology identical to mine and no unique writing experience of my students perfectly mirrored in another classroom. Rather, this study demonstrates the need for this dynamic factor of student self-efficacy in order to better understand the complexities of our unique classrooms.

Recommendations

Excellent educators across the nation are already and organically inquiring and responding to their students' experiences as a means for crafting their instruction. They invest extensive amounts of time, much of which is not contracted hours, meditating and developing their classroom culture and environment. These educators understand the four walls of their classrooms function as a *meeting place* where students of all backgrounds and learning styles come together to define and expand their identities. This study's recommendations to these educators are not to encourage their awareness of how their students' experiences impact the classroom. This kind of a recommendation would be redundant as a "preaching to the choir" document. Rather, this study is to bring

awareness to educators of how being mindful of their students' experiences might be studied and analyzed in order to improve teaching practices. For example, in my own unique classroom, I will respond to this study's results by providing more opportunities for collaborative writing based on the dominant theme in the qualitative data that there is a lack of collaboration in the writing process perceived by my students. I find this a valuable response to improve my teaching practices especially considering *all* students who scored as having a reproductive view of writing also expressed a lack of collaboration.

As educators, we are faced with a precedent responsibility of providing equity within our classrooms. Considering the craft of instructing composition, this must begin with an understanding of equity's establishment amongst our unique learners by responding to how self-efficacy has been built or depleted. In this way, a response to this study's findings would challenge educators to not only know the test scores and targeted learners in the classroom, but each of the perceptions of confidence toward writing and their conceptions of writing. By further investing time to track how their writing experiences have shaped their perceptions and conceptions, educators can then adjust the ways they teach. In the reality of modern classrooms faced with time crunches to get through units and prepare for standardized testing, this must be practical. Having a grasp of our students' self-efficacy, conceptions, and how their experiences have molded each, can begin with a simple index card at the beginning of the year to jot down their name, favorite ice cream flavor, and the space to express and sketch their perspective and experiences toward writing. A response to this study should build on the relationship

making and space creating intent already happening in the *meeting places* of our classrooms.

For researchers looking to continue the studies of student self-efficacy toward writing, we must always be considering how to accurately consider the whole student in our research. The work must remain rooted in the foundational dimensions of writing, as they still maintain the standard, including ideation, convention, and self-management. The valuable work of researchers who investigate how specific variables impact self-efficacy cannot cease either. We must continue to be cognizant of how gender, privilege, access, opportunity, race, class, etc. inspire intersectionality in our schools and classrooms. Without this specific awareness for these variables, an intent for equity may become lost. For researchers, this study serves as a catalyst for considering how the experiences of our students is the sticky and murky glue amongst these variables, writing performance, and self-efficacy. If research continues without concern for the unique writing experiences which help in representing the whole student, we deduce the student to yet another score in a pool of standardization. Data and the scores of our students are only useful if we can implement a response for improvement. Knowing the students' experiences is part of that improvement plan.

Future Research

My personal action research will focus on the impact of isolation due to COVID-19 pandemic stay-at-home order on writing experiences of my high school students' confidence and perceptions. My response as an educator should adjust to these

experiences and trends perhaps encouraging more collaboration from me as well as from peers. For other educators and researchers, understanding their students' self-efficacy should look to incorporate this fourth factor of experience as well. I would likely never have identified lack of collaboration in the writing experience as a potential threat to my students' self-efficacy that needs to be further investigated had I maintained only looking at self-efficacy of ideation, convention, and self-management. Experience as the fourth factor to consider in our classrooms is messy. In fact, this study demonstrates the complexity of this factor through its need for further research in order to more accurately determine if isolation and collaboration impact my students significantly. However, as facilitators of classroom ecologies, educators must seek to embrace the mess.

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APPENDICES

APPENDIX A

PARTICIPANT CONSENT FORM

SUBJECT CONSENT FORM FOR PARTICIPATION IN HUMAN RESEARCH AT
MONTANA STATE UNIVERSITY

Development of Writing Self-Efficacy of High School Students

You are being asked to participate in a research study investigating the relationship experiences around writing have on confidence toward writing and perception of writing. This study will help researchers and educators to better understand the role of students' experiences and beliefs toward writing tasks and how they might design writing curriculum and tasks to better support those student beliefs. You have been chosen because you are a participant in the high school's Junior or Senior English program. If you authorize participation, you will take three surveys- one informing your perception of writing, one informing your self-efficacy toward writing, and the third inquiring about your writing experiences. Results from all surveys will be coded and your identity will not be connected or traceable. You will also participate in creating a storyboard of your lifelong writing experiences. The results of your work likewise will be coded and your identity protected.

I want you to know that:

1. Your participation is confidential and voluntary.
2. You may choose not to participate or to withdraw your consent at any time without penalty. An alternative response crafting a narrative of a past writing experience will be provided as a substitute activity if the student chooses not to participate.
3. There is no compensation for your participation; NO direct benefits to the participant
4. The risks for participating in this study are minimal.
5. Your decision to participate/not participate in this study will have no effect on your participation or grade in the high school English program.
6. Your storyboard and survey responses will be kept confidential and secured in a locked cabinet or in a password protected computer. No one outside the investigator will have access to your information. Your privacy will be protected to the maximum extent allowable by the law.
7. In research papers or other public presentations resulting from this study, your name will not be used and any identifying characteristics or personal information that could be used to identify you will be deleted or masked. It is impossible that anyone would be able to identify you from any published report. Your privacy will be protected to the maximum extent allowable by the law.
8. If you have any questions or concerns regarding your participation in this study you can contact the primary researcher: Nicole Jarrett, nicole.jarrett1@student.montana.edu
9. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - Institutional Review Board, 2155 Analysis Drive, Montana State University Bozeman, MT 59717-3610 OR Dr. Mark Quinn at mquinn@montana.edu and 994-4707

Your authorization for this study is the completion of the statement below and sent back to me via your email:

I, _____, agree to participate in this study on _____ (date). I understand my participation is voluntary, my grade will not be affected by participation, and I may pull out my consent at any time.

APPENDIX B

PARENT/GUARDIAN CONSENT FORM

PARENT/GUARDIAN CONSENT FORM FOR PARTICIPATION IN HUMAN RESEARCH AT MONTANA STATE UNIVERSITY

Development of Writing Self-Efficacy of High School Students

You are being asked to consider the participation of your high school student in a research study investigating the relationship experiences around writing have on confidence toward writing and perception of writing. This study will help researchers and educators to better understand the role of students' experiences and beliefs toward writing tasks and how they might design writing curriculum to better support those student beliefs. Your student has been chosen because he/she is a participant in the high school's Junior or Senior English program. If you authorize participation, your student will take three surveys- one informing their perception of writing, one informing their self-efficacy toward writing, and the third inquiring about their writing experiences. Results from both surveys will be coded and their identity will not be connected or traceable. They will also participate in creating a storyboard of their lifelong writing experiences. The results of their work likewise will be coded and identity protected.

I want you to know that:

1. The student's participation is confidential and voluntary.
2. They may choose not to participate or to withdraw their consent at any time without penalty. An alternative response crafting a narrative of a past writing experience will be provided as a substitute activity if the student chooses not to participate.
3. There is no compensation for their participation; NO direct benefits to the participant
4. The risks for participating in this study are minimal.
5. Their decision to participate/not participate in this study will have no effect on their participation or grade in the high school English program.
6. Their storyboard and survey responses will be kept confidential and secured in a locked cabinet or in a password protected computer. No one outside the investigator will have access to your information. Their privacy will be protected to the maximum extent allowable by the law.
7. In research papers or other public presentations resulting from this study, their name will not be used and any identifying characteristics or personal information that could be used to identify them will be deleted or masked. It is impossible that anyone would be able to identify them from any published report. The student's privacy will be protected to the maximum extent allowable by the law.
8. If you have any questions or concerns regarding participation in this study you can contact the primary researcher: Nicole Jarrett, nicole.jarrett1@student.montana.edu
9. If you have questions or concerns regarding rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - Institutional Review Board, 2155 Analysis Drive, Montana State University Bozeman, MT 59717-3610 OR Dr. Mark Quinn at mquinn@montana.edu and 994-4707

Your authorization for this study is the completion of the statement below, and sent back to me via your email:

I, _____, agree to the participation of my student, _____, in this study on _____ (date). I understand their participation is voluntary, their grade will not be affected by participation, and I may pull out my consent at any time.

APPENDIX C

SURVEY PART 1 SAMPLE

Student Survey (1)

Below are 16 items. Independently self-score on a scale of 0-10, where 0 is no confidence and 10 is complete confidence. This survey will take 15-20 minutes to complete. Simply answer as honestly as you can.

I can think of many ideas for my writing. *

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

I can put my ideas into writing. *

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

I can think of many words to describe my ideas. *

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

APPENDIX D

SURVEY PART 2 SAMPLE

Student Survey (2)

Below are 8 items. Independently, choose the option you agree with most for each item. This survey will take 10-15 minutes to complete. Simply answer as honestly as you can.

Choose which of the two following options you agree with most. *

- While I am writing, I keep in mind who I am writing to or for.
- I finish writing a text when I run out of ideas, when I can't think of anything else to say.

Choose which of the two following options you agree with most. *

- When I reread my text, a better way of expressing an idea often occurs to me.
- When I come back to what I have written, words and spelling mistakes are what I mainly correct.

Choose which of the two following options you agree with most. *

- When I have to write a long assignment, I write several drafts.
- I just reread what I have written when I have finished the text.

APPENDIX E

SURVEY PART 3 SAMPLE

Student Survey (3)

Please complete the following 5 questions to the best of your knowledge and as honestly as you can.

What is your personal experience like when you sit down to write? How do you feel? What do you think about? What do you worry about? *

What are your past experiences (early childhood through high school) with writing like? *

Thinking about your past experiences with writing, what individuals were involved? Parents? Teachers? Friends? Other? How were these individuals involved in your writing experiences? *

APPENDIX F

STORYBOARD ARTIFACT TEMPLATE

Writing Experiences Storyboard **For each of the of the boxes, please attach an image and description to your writing experiences at that age. Elements to consider including for each box is <u>where</u> your writing experiences took place at that age, <u>who</u> was involved, <u>how</u> you felt, <u>what</u> you were worried or excited or proud (etc.) about.**	**Early Childhood (0-3 years)**	**Childhood (4-6 years)**
Early Elementary (7-10 years)	**Middle Elementary (11-14 years)**	**High School (15-18 years)**