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Getting Real: Examining the Effectiveness of Authentic Learning In the English/ Language Arts Classroom

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In the English/ Language Arts Classroom

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Dedication

I would like to dedicate this first of all to Michael Nelson, whose love and support got me through this. It has been a long three years, but Michael stood by me all along, bringing me tea, writing little notes of encouragement, every single day, reading my drafts, and being my sounding board. Michael took on all of the household chores, from cooking to cleaning, and everything in between, so I could dedicate my time and attention to this project. When I say that I couldn't have done this without you, I mean that. You are my rock and foundation, and I love having you by my side and on my side.

I also dedicate this to my parents, Jon and Helen Stafsholt, who encouraged and inspired me to learn, to grow, and to serve. They raised my sister and me to use our time, gifts and talents to serve others. They have demonstrated through their lived examples what it means to be truly good human beings, to be actively involved in service projects, and to be kind, fair, compassionate, and generous. My dad, Jon Stafsholt, served in the U.S. Army during the Vietnam War. His service and quiet strength inspired me to do this project. My mom, Helen Stafsholt, spent a career in health care, and went back to school as an adult to get her Master's of Science in Nursing. Her bravery in going back to school as an adult inspired me to do the same.

I also dedicate this to my daughters, Emma and Anna, who are some of the bravest people I know. Emma is graduating from UND the same weekend as I am, and I couldn't be more proud of her. She reminds me to have fun and to never take life too seriously. Anna inspires me to use compassion and passion to use my voice for good. They both inspire me to want to be a better person for them and to make this world a better place for the next generation.

I dedicate this to all of the students I have ever taught, past and present, which number in the thousands by now. Teaching has truly been the greatest passion of my life, and each student has taught me

something new about life and the world. It is because of you that I am inspired to make the world of education better for students to come.

Finally, and most importantly, I truly thank the veterans who have served in the military. You have already demonstrated what it means to give your all to something bigger than yourself. What an honor it was to work with some of the brave veterans from my hometown. I am humbled and grateful to be trusted with some of their stories.

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Abstract

To prepare students for the challenges of the future that cannot even be imagined, a paradigm shift is needed to change the focus of classroom to a more organic, learner-centered approach. The purpose of this study was to understand the heightened level of engagement with an authentic learning experience that goes beyond the walls of the classroom. It answers one question: Why does authentic learning affect students' engagement and motivation to learn in English/ language arts (ELA) classes? This qualitative, instrumental case study used an interpretivist paradigm with a combination of emic and etic lenses. The participants were mostly White high school seniors in a small town in Northern Minnesota. They interviewed military veterans for the Veterans History Project, to preserve their stories. They turned those interviews into biographical essays that were revised into polished drafts, given to the veterans, and archived on the Library of Congress website. Triangulation was achieved by collecting three types of qualitative data: student journals, field notes, including photographs and videos, and exit interviews of three students. The results of the study proved that authentic learning works in ELA classrooms. It also answered the question of "why?" When students can see that their work matters to someone else, that it has a purpose outside of the classroom, and that it makes a difference in the world, then they will be more engaged and more motivated to learn. The implications of this study indicate that it is imperative for stakeholders to provide teachers with support to provide authentic learning projects in their classrooms.

Keywords: *authentic learning*, *English/ language arts*, *situated learning theory*, *higher order thinking skills*

Chapter One: Introduction

Background of the Study

Every year, ninth grade English teachers pull out their dusty copies of *Romeo and Juliet* amidst groans of students. Almost certainly, students will ask, "Why do we need to learn this? I'm never going to need it anyway." To which the savvy teacher will have some well-worn answer, ranging from, "Because it's a classic" to "Because it's a good challenge," to "Because it's required." However, none of these answers fully satisfies the students' angst. What they are really asking is, "How is this relevant to my life/ to the real world?" "Why does this matter?" and "Why does it matter to me?" These are valid questions, and they deserve more than a pat answer.

Shakespeare's world seems so far removed from modern life that it seems irrelevant to contemporary students. After all, if only they would have had cell phones, the entire plot of *Romeo and Juliet* would have ended differently. Although, from the early 1600s until the early 1900s, Friar Lawrence still would not have been able to call Romeo to let him know that Juliet wasn't really dead. However, in the last one hundred years, we have gone from telegraph to telephone, Apple 2E computers to iPhone 14 pro max.

Technology is changing at a breathtaking pace, faster than schools can keep up with. The problem is that students today will be faced with future challenges that are not even imagined yet. Since we can't prepare them for the rapidly changing future, we can provide students with critical and creative thinking skills so they are prepared to be problem solvers on their own. "Critical and creative thinking skills (CCT) are needed in living life in this fluctuated or changing world" (Perdana et al., 2020, p. 478). Since the future cannot even be imagined yet, the best teaching strategy is going to be preparing students to be creative and critical thinkers on their own.

The traditional teaching model that has been used since Plato was a student of Socrates looks something like this: teacher lectures, students take notes, teacher asks questions, and students repeat back memorized answers. It is subject-driven and teacher-driven, with the teacher asking questions that have already been answered, and students attempting to come up with the correct answers. However, this model is outdated and needs to evolve with the times. Instead of asking students to answer questions that have pre-determined answers, why not ask students to solve authentic, real-world problems, using critical thinking skills and creative problem-solving strategies? Student-directed learning and authentic instruction put students at the center by letting them choose real-life problems to solve and real audiences to read their work. In the authentic assessment teaching model, "the role of teachers in learning is as a student facilitator" (Winarso, 2018, p. 7). The 21st century teacher's job is to provide authentic learning situations and assessments, teach the skills and strategies to help them be successful, and then step out of the way.

Winarso (2018) explored the use of authentic assessment to instill motivation and active participation in student learning. "Authentic assessment should be able to present real-world challenges, so students must use the relevant skills and knowledge" (Winarso, 2018, p. 2). In Winarso's 2018 study, students were given real-world problems to solve in order to demonstrate their mastery of the mathematical concepts. By having more student autonomy and real-life application, the hypothesis was that students would be intrinsically motivated, while still demonstrating mastery of mathematical skills. A major difference between traditional assessment and authentic assessment is the timing. In traditional assessment, the teacher generally provides instruction of a skill, followed by several opportunities for students to apply the skill, through math problems and drills, ending with a heavily weighted comprehensive assessment at the end of a unit. In contrast, authentic assessment is an ongoing process, embedded in the curriculum. It measures both the process and the results (Winarso, 2018).

Authentic learning and assessment is grounded upon the knowledge base of child psychologists of the past. Prior to Piaget's (1964) seminal research on child development stages, children were thought of as little adults, and education was the passive accumulation of knowledge, like sponges absorbing more water. However, Piaget (1964) posited that children actually think differently as they progress through the four stages of cognitive development. As children get older, they do not just acquire more information; they are actually able to process information differently. At stage four, the formal operational stage, teenagers begin to be able to use reason and logic, as they use experimentation to construct meaning. Piaget (1964) was opposed to the idea of learning as a passive process but believed that children actively construct knowledge through investigation and experimentation as they learn how the world works. This present study involves teenagers who are at the formal operational stage of cognitive development. Authentic instruction gives them the opportunity to construct knowledge through their own inquiry, as they use their ability to reason as they discern logical solutions to real world problems.

Psychologist Erik Erikson (1963) developed a theory of psychosocial development that occurs in eight stages throughout life. Successful navigation through each stage leads to a virtue that helps the individual navigate through the next stage. Teenagers are at stage five of Erikson's stages: Identity versus role confusion. In this stage, teenagers are experimenting with their role in society, and through this experimentation, they attempt to find their identity. Failure to successfully navigate this stage can lead to role confusion, which could lead to problems as they enter adulthood. Using authentic learning and assessments will help students who are in this stage of psychosocial development. Authentic learning and assessments give students opportunities to negotiate their role in a group, allowing them to experiment with who they are as individuals and as members of a group.

Vygotsky (1978) also emphasized the importance of social learning environments for children as they navigate new experiences. In essence, Vygotsky (1978) believed that children left alone have

limitations on how much they can learn, but when they are in the presence of "more knowledgeable others," in a "zone of proximal development," they are capable of much more. To illustrate this theory, Shaffer (1996) gave the example of a child attempting to do a jigsaw puzzle for the first time independently. Without any guidance, the child would become frustrated and possibly quit trying. However, if a parent or older sibling were to sit with the child and point out a few tips, such as finding the corners, followed by words of encouragement, then the child would be more likely to succeed. Vygotsky's theory of scaffolding challenges traditional models of teaching that focus on teachers disseminating information and students memorizing the facts and repeating them back. It requires a paradigm shift toward student-centered learning, as the teacher steps back and takes on a supportive role.

To apply these theories to authentic learning and assessment, students construct knowledge by working together with their peers in a social context. The teacher provides the scaffolding the students need by teaching them the skills, providing some guidance on steps to accomplish the task, and encouraging the students along the way. By working together with others, the student is able to construct knowledge much more effectively than trying to do so independently.

As an ELA teacher with three decades of classroom experience, I have noticed that students are more intrinsically motivated when they are working on a project that they have a personal vested interest in. For the past fifteen years, I have used Ken Macrorie's model of the "I-Search" paper rather than the traditional research paper. In this model, students choose a topic that has personal relevance to their own lives. The emphasis of the paper is on the process of the search, rather than the finished product. I have noticed a big difference in the investment of the students when they can put themselves into the paper. I have also noticed that when students know that there is a real audience for their work, rather than just the teacher, they take their writing to a higher level. In my college composition class, I encourage students to send their work out for publication. Knowing that they are writing for an audience that is bigger than just the

classroom has increased the quality of their work. Also, in an attempt to prevent plagiarism, I have students work in small groups to do a problem-solution analysis of a local problem that they identify. Again, the level of student engagement rises when they know that they are working on finding a real solution to a real problem. In all of these cases, I have anecdotal evidence of the advantage of using authentic learning and assessment in the ELA classroom. Experience has shown me that authentic learning and assessment works to increase student engagement, motivation, and writing quality. This study is an attempt to understand *why* it works.

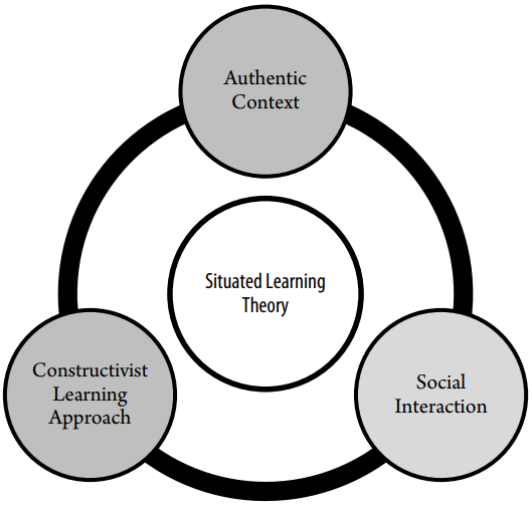
Theoretical Framework

Authentic instruction is grounded in the situated learning theory (SLT). The concept of situated learning is the child of Lave and Wenger's (1991) social learning theory and Vygotsky's (1978) socio-cultural learning theory. "Situated learning" is learning within a context, using the skills, knowledge, and background information to solve problems within a situational and historical context (Gage et al., 2020). Teachers in SLT classrooms encourage students to interact with each other to construct meaning by seeing different perspectives. "Learning best takes place within a context; thus, artificial and isolated school environments are incomplete as they fail to provide a context for learning. Situated cognition suggests that what is learned should be associated with the interests and needs of learners" (Gunes et al., 2020, p. 249). In the authentic learning model, which falls under the SLT umbrella, teachers help students construct knowledge by helping them connect the learning situation to their own lives and real-life events. The participants construct knowledge together, rather than individually, as they grapple with a problem and try to find a viable solution. Any one participant could be an expert or an apprentice at any given moment (Zheng, 2020). Lave and Wenger (1991) coined the phrase "Communities of Practice" for groups of people who share a concern or passion for something and who learn how to do it better through shared experiences. This approach leads to more meaningful, effective, constructive, and permanent learning than traditional,

textbook-based learning (Firat, 2008, as cited in Gage, et al., 2020). The key tenets of situated learning theory are constructivist learning within an authentic context through the use of social interactions (Bell, Maeng, & Binns, 2013). (See Figure 1).

Situated learning is a theory in which learning is based on relationships between people, students' participation in the communities of practice, and the intimate connection between knowledge and activities.

Figure 1: Key tenets of situated learning theory



(Green, Eady, & Anderson, 2018, p. 109)

Authentic learning and assessment is also grounded in the Self-Determination Theory (SDT). According to SDT, three psychological goals need to be met for growth and development: "autonomy, competence, and relatedness" (Wijnen et al., 2017, p. 174). Research has shown that when these needs are met, the students have greater intrinsic motivation to learn (Katz et al., 2009). Ryan and Deci (2000) found that humans can be either proactive and engaged or passive and alienated, or somewhere in between, based on the social environment in which they find themselves. Children, for instance, are naturally curious and fully engaged in whatever captures their attention. Social pressures sometimes force people to "grow out of" that natural state, and to lose that intrinsic motivation. To some extent, school is to blame. By the time teenagers get to high school, they have largely become passive and alienated. However, that natural

tendency toward curiosity is still there and can be tapped into if three psychological needs are met: autonomy, or being in control of their own learning, competence, or being given the skills necessary to succeed, and relatedness, or feeling that the topic of study is related to themselves and others (Ryan & Deci, 2000). When these needs are not met, as in a controlling environment with top-down authoritarian mandates, then the individual is not able to thrive. Authentic learning is one way to meet these needs so self-actualization can occur.

Authentic learning can take many forms, depending on the subject area and the learning goals. Three different types of authentic learning are: inquiry-based learning, problem-based learning, and project-based learning. At the heart of each of these learning models is the student, rather than the subject. The student is performing the inquiry, solving the problem, or doing the project. The function of the teacher is to facilitate the learning process by providing learning opportunities, setting up scaffolding, teaching background information, providing guidance and support, and modeling behaviors. "Motivation, as well as learner autonomy, is . . . believed to be one of the main determinants of success and failure" (Gunes & Alagozlu, 2020). Students need opportunities to feel that they are in control of their own learning in order to be motivated.

Statement of the Problem

The effectiveness of authentic learning and assessments has been studied extensively in subjects such as math, science, social studies, and language acquisition. However, very little research has been done on the effectiveness of authentic assessments in English/ language arts (ELA) classes. Although the skills of reading, writing, and communication that are taught in ELA classrooms are just as important as ever, students will not be motivated to learn if they perceive the work as just classroom exercises, rather than real, authentic, and relevant assignments. This current study plays a role in filling that gap.

Purpose of the Study

The purpose of this case study is to explore whether student engagement increases when students are given an authentic (real-world) project with a real audience and a real purpose outside of the classroom. Specifically, students in college in the high school (CIHS) composition classes interviewed military veterans and then wrote their stories in a biographical narrative, including both primary and secondary research. The main purpose was to measure the level of engagement in the students. Along with that main purpose, some secondary benefits arose out of the experience. For instance, the students gained some soft skills such as interviewing, interpersonal communication, and research writing, prior to doing the interviews. The interviews were recorded for further review and uploaded to the Library of Congress. Then the students wrote up the stories, including any research that was necessary to fill in the blanks. These stories were edited multiple times to become a polished, publishable-quality work to be sent off to a bindery for publication.

Qualitative data collection methods included students' journals before, during, and after the research study. Interviews were conducted of participants, using convenience sampling. A semi-structured interview method was used to guide the questions and maintain consistency. In addition, field observations were utilized, with a checklist of indicators of engagement.

Significance of the Study

The need to provide authentic learning experiences in all classrooms, including, but not limited to ELA classrooms, is as significant as the paradigm shift it is going to require: "As Reigeluth and Duffy (2008) pointed out, paradigm change must occur at three different levels, including teaching and learning, the school system's social infrastructure, and the relationship between the school system and its environment, to achieve a paradigm that is learning-focused rather than sorting-focused" (as cited in An & Mindrila, 2020, p. 142). Teachers cannot do this alone. First, teachers need to be convinced that they are not

shirking their duties by putting students at the center. Secondly, teachers need to be given the training and the support they need to implement authentic learning methods. Finally, an emphasis on the process of learning rather than test results needs to be embraced by all stakeholders.

Changing from a teacher-centered or subject-centered learning model to a student-centered authentic learning model across the curriculum is going to require a paradigm shift. While many teachers believe that student centered, authentic learning is the best for students, there are some barriers that inhibit its implementation. Winarso (2018) found that the biggest barriers for teachers were lack of time and the pressure to prepare students for standardized tests.

To prepare our students for the unforeseeable future, we need to shift away from the traditional model of education where knowledge is delivered to the students, and embrace a new model of constructivism, where knowledge is co-created between the teacher, the subject matter, and the students. Constructivism is defined as "a paradigm that hypothesizes learning as an active, contextualized, or constructive process" (Shah, 2019, p. 4). We need to ensure that students have the problem-solving skills that can translate to other, future problems, and the feeling of relevance that is sometimes lacking in traditional classroom settings. For many, this will involve a paradigm shift, and the change may happen gradually, one classroom project at a time. However, the only way to prepare students to be the future leaders, problem solvers, and creative innovators of tomorrow, is to stop dwelling on the past, and step into the future.

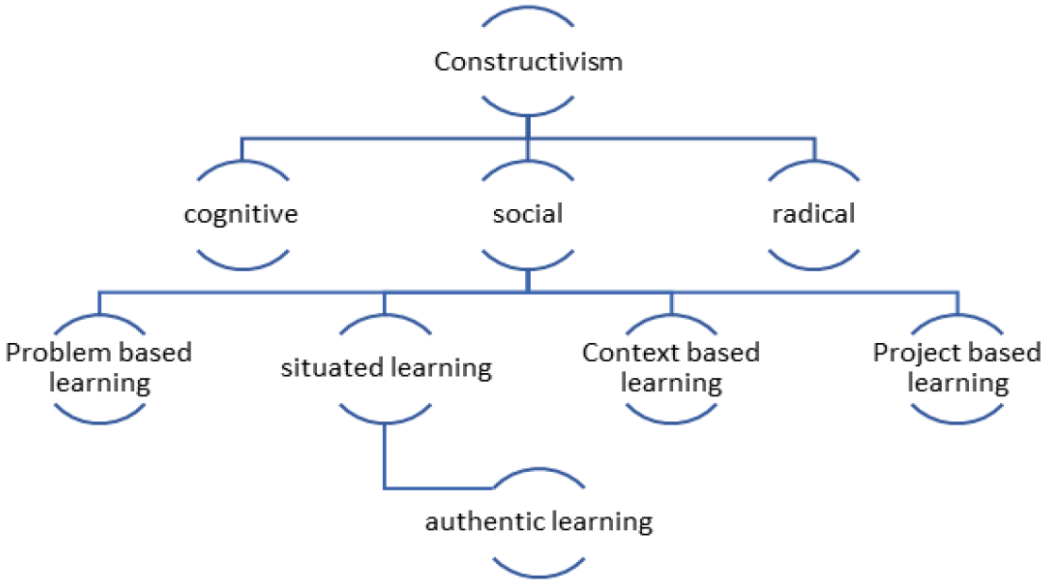
Research Question

- Why does authentic assessment affect students' engagement and motivation to learn in ELA classes?

Research Design

This study falls under the social constructivist interpretive paradigm (**see Figure 2**). Social constructivism is described as having "multiple realities constructed through our lived experiences and interactions with others" (Creswell & Poth, 2018, p. 35). Each participant had a different experience, since they were interviewing different people and coming to the interview with unique prior experiences, so no two students could have the same experience, even if they were to interview the same person. This study took place in a college composition class as a convenience sample. The authentic learning assessment was embedded into existing coursework as part of the composition curriculum. The case study methodology was an attempt to understand the phenomenon of student engagement and motivation when the students perceive the assignment and assessment are authentic. Triangulation of data collection from journals, interviews, and field observations ensured validity of the data interpretation.

Figure 2. Theoretical structure of authentic learning (Gunes et al., 2020, p. 248)



Assumptions

This qualitative case study relies on the constructivist theories of Dewey, Piaget, and Vygotsky. Ontologically, constructivist theorists believe that knowledge is constructed by individuals who have varied backgrounds and experiences, so knowledge itself is just as varied as the individuals who create it. Knowledge, therefore, is actively created by the learner, rather than passively received (see Figure 2). Students bring differing perspectives and unique prior knowledge and experiences to the classroom, and the teacher's role is to guide the students to discover new information, which the students weigh against their prior knowledge and expand upon it. Applying constructivist theory to this study, the students brought their own background knowledge of their lived experiences, coupled them with the knowledge they gleaned from the veterans they interviewed, and then created a written document that paired both of these into a brand-new document that could not have existed without this pairing. Essentially, the learners in a constructivist classroom become expert learners, and essentially "learn how to learn" (Bada, 2015, p. 70).

Epistemologically, this study used an interpretivist lens. For interpretivists, knowledge is not an objective reality that exists externally, but rather a negotiation that people construct between themselves and the world around them (Creswell and Poth, 2018). The emphasis is on observation of participants, as the researcher becomes part of the activity, rather than a separate, outside observer (Creswell and Poth, 2018). Since this study was conducted within my own classroom with my own students, I was naturally an active participant in the construction of knowledge. It was assumed that the participants told the truth in their journals and interviews. The interpretation of the field observations, student journals, and interview transcripts were all conducted through the lens of this researcher, so my own background knowledge and experiences were also added to the construction of new experiences and observations.

Definition of Terms

Authentic assessment. Winarso (2018) defines authentic assessment as methods of assessment

that measure the level of mastery of students' skills when faced with a real-world problem to solve: "Authentic assessment should be able to present real-world challenges, so students must use the relevant skills and knowledge" (p. 2). The authentic assessment is ongoing, rather than a test at the end of a unit and is used to measure students' mastery of the skills. Winarso claims that authentic learning and assessment are appropriate preparations for students to be able to become skilled problem solvers in the ever-changing modern world.

Authentic learning. Jeter et al. (2019) cite Newman and Wehlage (1993) in defining authentic learning: "student achievement is meaningful and significant rather than pointless and inconsequential" (p. 2). Jeter et al. further established four criteria for authentic learning: "construction of knowledge, disciplined inquiry, value beyond school, and student-centered learning" (p. 2). In authentic instruction, the students are at the center, and the teacher takes on the role of facilitator--rather than director--of learning.

Competency-based learning. Competency-based learning (CBL) focuses on the process of learning and mastery of skills, as opposed to the output of scores on tests or competition with other students. Schweder et al. (2019) applied achievement goal theory to the research question of whether teacher-directed learning (TDL), or competency-based learning (CBL), leads to performance- or mastery-based learning goals, respectively. They found that there is more of a positive correlation between CBL and mastery goals, effort, and engagement than there is with TDL (Schweder et al., 2019).

Direct instruction. Direct instruction is lecture-based. Teachers deliver information to students, which the students take as notes, and student success is assessed through quizzes and tests. Jeter et al. (2019) used direct instruction (DI) as the standard approach, "with the general assumption that DI is utilized in classrooms as a result of teachers, particularly novice, faced with navigating the

challenges of the profession" (p. 2). In their comparison between direct instruction classrooms and authentic instruction classrooms, they found that direct instruction generally requires fewer resources, less preparation time, and is often utilized when teachers are pressed for time and energy. It is also more focused on the content of the curriculum rather than the experience of learning.

Higher-order thinking skills: Higher order thinking skills (HOTS) include analyzing, evaluating, and creating. These skills are on the upper tiers of the hierarchy of learning skills, with remembering, understanding, and applying in the lower-order thinking skills. This is based on the original research of Benjamin Bloom's Taxonomy (Bloom, 1969). Higher Order Thinking Skills (HOTS) are an important measure of the quality of education. These skills allow students to analyze, criticize, interpret, hypothesize, argue, synthesize, and problem solve. To encourage students to go beyond mere memorization, authentic learning is one method. Several studies have shown the relationship between authentic learning and HOTS (Ichsan et al., 2019).

Inquiry-based learning. National Research Council has defined inquiry-based learning as being composed of five specific elements:

1. Students are engaged in a research question about a science topic
2. Students seek out and study evidence to form a hypothesis in answer to the research question
3. In response to the evidence, students make a knowledge claim in answer to the inquiry question.
4. Students test their claim against further investigation using multiple methods
5. Students present and justify their findings. (as cited in Costas et al., 2018)

Costas et al. (2018) describe this as an inductive, bottom-up, approach to reasoning, as opposed to a deductive, top-down approach. By nature, it is learner-centered rather than teacher-directed because students

are being asked to seek answers (or build an argument) rather than being taught a lesson (or premise) by a teacher and using classroom experiments to prove the validity of the premise.

Jeter et al. (2019) state that higher-order thinking skills are promoted through the use of disciplined inquiry. By asking students meaningful questions, teachers can model an inquiry-based conversation. As students take over leading the conversation, they will take on more of the leadership role: "Disciplined inquiry thrives when students lead conversations, including many voices and perspectives" (Jeter et al., p. 2). On the other hand, inquiry is inhibited when the teacher is the disseminator of information, and students are expected to merely repeat facts. In an inquiry-based classroom, the students are posing questions that there is no specific answer to, they lead substantive conversations to try to answer the question, and then they construct knowledge collaboratively as they reach consensus on the best answer.

Learner-centered instruction. An (2012) delineated five characteristics of learner-centered instruction (LCI): "personalized learning activities and support, social and emotional support, self-regulation, collaborative and authentic learning experiences, and assessment for learning" (cited in An & Mindrila, 2020, p. 134). LCI meets the needs of modern learners by providing a scaffold for them to develop problem solving skills, higher order thinking skills, decision making, and collaboration (An & Mindrila). Methods for learner-centered instruction can take different forms, including project-based learning, problem-based learning, and inquiry-based learning (An & Mindrila). In their 2020 study, An and Mindrila found that, although most teachers agree with the philosophy of putting students at the center of instruction, not as many of them were putting that philosophy into practice. An and Mindrila set out to discover what strategies K-12 teachers used to create student-centered classrooms and what barriers exist to the implementation of student-centered instructional pedagogy. They found that a variety of strategies were implemented, but the things that they had in common were opportunities for students to collaborate with others,

for students to set their own learning goals, and for the students to reflect on their learning (An & Mindrila). In the same study, An and Mindrila also found that most teachers who self-reported being learner-centered actually applied more of a mixed method approach, with some student-directed activities and some teacher-directed activities. For example, teaching a lesson first, and then having students do a project that demonstrates their understanding of the content. The major barriers to LCI were time constraints and large class sizes (An & Mindrila).

Problem-based learning. Problem-based learning (PBL) is one method of the learner-centered approach. Wijnen et al. state that problem-based learning models have three distinct phases: "the initial discussion, the self-study phase and the reporting phase" (p. 175). In the initial discussion phase, students in small groups meet to discuss and collaborate on a real-world situation or problem that needs to be solved. During the self-study phase, students conduct independent research on the topic. During the reporting phase, the students meet back together with their small group to discuss their findings and collaborate on solution/s to the problem (Wijen et al.). Problem-based learning helps students see the relevance of their schoolwork because students are applying their skills to solve real-world problems. Setiawan and Islami (2020), state "PBL is a learning model that presents learning material in the form of problems. PBL begins by observing an event, then looks for problems in the event, and solves the problem" (p. 3). Giving students real problems to solve presents them the opportunity to use critical thinking skills.

Project-based learning. Project-based learning (PBL) is a teaching method that can increase student engagement, as opposed to the traditional method of teaching. Rather than teacher-centered instruction, the instruction is "negotiated between students and teachers collaboratively and develops as ideas of students emerge and grow" (Almulla, 2020, p. 1). Students utilizing the PBL

approach work collaboratively to solve a problem, develop a product or plan, and then evaluate the project (Almulla, 2020).

Teacher-directed learning. Learner-centered instruction is often contrasted with teacher-directed instruction and direct instruction. Schweder et al. (2018) state that teacher-directed learning (TDL) goes back to the days of ancient Greece. This has been the common practice of educators for centuries. The practice of teacher-directed learning puts the teacher at the center. The teacher decides the curriculum, the method of instruction, and the assessments. This method has several advantages (Schweder et al., 2018). It provides uniformity, so all students are provided with the same instruction at the same time. It increases students' knowledge as the teacher shares their expertise. It is adaptable over time and can be monitored and adjusted. TDL focuses mostly on outcomes and competition between students. In the current state of achievement-oriented society, TDL is the favored approach (Schweder et al., 2018). Teacher directed instruction is the broad term that refers to any learning environment in which the teacher makes curriculum decisions about what students should learn, how they should learn it, and when. This may or may not include direct instruction.

Limitations

One limitation of this study is that it was limited to the experiences of one classroom in a small town in northern Minnesota, so it may not be generalizable to other classrooms in different geographic locations. However, the findings may be transferable to other classrooms in other settings. "Qualitative investigators, then, are less definitive, less certain about the conclusions they draw from their research. They tend to view them as ideas to be shared, discussed, and investigated further. Modification in different circumstances and under different conditions will almost always be necessary. These issues are often referred to as *transferability*" (Fraenkel et al., 2019, p. 392-3). By reading about the particulars in this case

study, other teachers may be able to glean useful information from it and apply those findings to their own classroom practices. In this way, the findings are not prescriptive, but descriptive. It is my sincere hope that other teachers will use this case study as an inspiration for their own authentic learning classroom projects, across grade levels, subject areas, and geographic locations.

Summary

So, to return to the ELA classroom in which the teacher has introduced *Romeo and Juliet*, to the chagrin of her ninth graders, how could she make this an authentic learning experience? Perhaps she could have the students do some inquiry into the causes and effects of teen suicide or present the problem of teen suicide and have them brainstorm alternative solutions or research help centers. Maybe she could have the students write a modern scene, using a contemporary setting, and create a Tik-Tok. Maybe she could have students read the comparative text *Romeo and Juliet in Sarajevo* and find similarities and differences. Maybe allow the students to come up with their own ideas? The point is that any topic, even one as old as Shakespeare himself, can be taught using relevant, authentic, timely learning opportunities and assessments. Maybe they are not as easy to correct as a multiple-choice test, but if we are going to prepare students to be problem solvers, creative thinkers, and innovators, then we have to give them the opportunity to practice those skills in the present, so they have the skills they need to face the future.

Chapter 2: Literature Review

Introduction and Background

When I first began teaching high school English/ language arts nearly thirty years ago, I had a lot of "shoulds" in my teaching repertoire. Students "should" read certain classics, they "should " write academic research papers, they "should" diagram sentences. That's the way that I was taught in high school and college, and, for the most part, that's the way all of the other English teachers taught. Never mind that the

students hated it. It wasn't until I was about ten years into my teaching career that I had an epiphany, brought on by a student by the name of Steve Soderberg. We had just finished plowing through *Wuthering Heights*, by Emily Bronte, which I loved, so I thought my student should love it. Steve came to class one day and asked me how much it would cost to buy his school-issued copy of the book. I told him and asked why he wanted to know. I wondered if he wanted to keep it because he loved it so much, as I do with favorite books. "No," he said, "so I can burn it."

This was a wake-up call for me. I was teaching students to hate reading. Inadvertently, I was teaching them that reading was boring, irrelevant, and incomprehensible. Maybe they "should" like the classics, but they don't. Instead, maybe I "should" provide reading material that is relevant to their lives and teach them to love reading, not hate it. This was the beginning of my journey toward authentic teaching and learning.

Similar to the epiphany that followed Steve Soderberg's symbolic funeral pyre, I began to notice a similar phenomenon in my composition classes. Whenever I gave my students the freedom to be creative, to problem-solve on their own, and to present their writing before real audiences, they surprised me with the amount of excitement and motivation they had. When they knew that what they were doing in school mattered, they worked harder; many times, going well over and above the expectations of the assignment. I have presented these projects to other English teachers at the Minnesota Council of Teachers of English spring conferences on and off throughout the years. I knew that I was on to something by having real, authentic projects and real audiences. I had many years and many examples of evidence that this worked. This unscientific observation led me to hypothesize that authentic, student-centered instruction has a positive correlation with student engagement and motivation. My curiosity led me to try to discover empirical evidence to understand why this was true. The purpose of the present study is to explore this phenomenon.

Authentic instruction is student-directed, with an emphasis on student choice, creativity, and problem solving. This is often contrasted with direct instruction, which is teacher-directed, with an emphasis on delivering curriculum efficiently and assessing mastery through the use of quizzes and tests.

This literature review begins by exploring and defining the related topics of authentic learning, learner-centered instruction, problem-based learning, inquiry-based learning, and project-based learning. For the purposes of this paper, "authentic learning" is considered the umbrella term under which the other terms are sub-categories. Authentic learning is often contrasted with teacher-directed learning, or direct instruction, which are also similar but not identical. Navigating under the assumption that higher order thinking skills of creativity and critical thinking are the ultimate goals of education, literature that demonstrates the relationship between authentic learning and higher order thinking was examined. Finally, the research literature regarding the relationship between authentic learning and student engagement and student motivation was reviewed.

Methods of Searching

I began my search for empirical evidence at the Minnesota State University, Moorhead Livingston library. Most of my searching was done online, but I did also make use of some of the education textbooks I already owned as well as some that I borrowed from the library. Using databases such as EBSCO host, ERIC, JStor, Springer, Researchgate, Google Scholar, and SAGE, I began searching for research articles that explored the phenomenon of authentic education and its effect on student engagement and motivation. Using such search terms as "authentic learning," "authentic assessments," and "authentic teaching," I soon discovered authentic education is grounded in the situated learning theory, which was most notably written about in 1991 by Lave and Wenger. This fascinated me because that was just about the same time that I started teaching. In many ways, the empirical evidence was growing in tandem with my anecdotal evidence.

I continued to narrow my search by piecing together the educational trends throughout history that have been building on one another over time. I looked up some of the giants of educational research such as Bloom, Piaget, Vygotsky, and Erikson, to try to discover the origins of authentic learning. I also used "self-determination theory" as a search phrase, because it seemed to me that one of the main motivators for students was their autonomy and freedom to choose. I used "learner-centered education" and "student-directed learning" to read about the value of putting students at the center. I continued to research different kinds of authentic learning, so I used keywords such as "problem-based learning," "project-based learning," and "inquiry-based learning." Most of the research studies that I found took place in science and math classrooms, so I added the search terms "English language arts." This, however, led to research studies that used authentic learning methods in language acquisition classes, whether English language learners or other languages. Since my project was specifically taking place in a composition class, I tried adding the keywords "composition," "writing," or "writing for real audiences." As a member of the National Council of Teachers of English, I knew that I would find evidence-based articles written by practicing ELA teachers about the value of real audiences for student writing, so I searched their collections. While scholarly application is interesting and relevant, I was also interested in practical application in actual classrooms.

As I scoured the reference lists of the research articles that I was collecting, I searched for names of researchers who were cited consistently, and then I searched further for other articles by those authors. Even after all of this searching, I had a nagging suspicion that I was missing something important, so I used RED, a repository of educational projects, theses and dissertations, and also ProQuest Dissertations and Theses Global to read some other doctoral projects on the subject of authentic learning. Reading through those, and especially their reference pages, I became reassured that I have reached the stage of saturation.

Theoretical Orientation for the Study

Authentic learning is grounded upon the constructivist paradigm of learning. S. Bada (2015) provides a definition of constructivism:

> Constructivism's central idea is that human learning is constructed, that learners build new knowledge upon the foundation of previous learning. This view of learning sharply contrasts with one in which learning is the passive transmission of information from one individual to another, a view in which reception, not construction, is key. (p. 67)

Shah (2019) put constructivist theory into historical context by showing the progression of thought throughout the American school system. For the first one hundred years of public education, students were taught to be quiet, subservient, and obedient. A more student-centered, democratic approach to learning started to come to fruition with J. Dewey's (1938) progressive education theory. Dewey believed that school should include socially engaging learning opportunities that are developmentally appropriate for children (Dewey, 1938). Previously, objectivists assumed that all of the students had relatively similar background knowledge, and that there was a body of knowledge that all students should know by the time they graduate. On the other hand, constructivism is "a paradigm that hypothesizes learning as an active, contextualized, or constructive process" (Shah, 2019, p. 4). In this teaching model, the student constructs knowledge, based on prior knowledge, observation, outside research, and collaboration with others. The learners are not looked at as blank slates, but as co-creators of the knowledge. The constructivist teacher, therefore, is a facilitator of learning, by providing project-based and inquiry-based learning opportunities.

Some of the misconceptions of constructivist theory are that it is purely student-centered, as if it were the direct opposite of teacher-centered teaching. In fact, Shah (2019) argued that it is a combination of both. The teachers bring their expertise, and they provide students opportunities to engage with the information to create new knowledge. Much of the resistance to constructivist theory comes from the fact

that teachers who were themselves taught by objectivist teachers (as I was) may think that they are not doing their jobs if they are not standing at the front of the room lecturing. Also, due to the 21st-century emphasis on high-stakes tests, teachers feel compelled to emphasize content, which is most efficiently delivered through teacher-directed, textbook-based instruction, rather than meaningful activities such as project-based learning or field trips (Sobel, 2014). Constructivist theory is misused when students are expected to teach themselves. It is also misused when teachers mistakenly convey to students that there are no wrong answers. Shah (2019) contends that constructivist teaching can be very effective if used correctly but can be destructive if used incorrectly.

Constructivist theory is often contrasted with objectivism. Objectivists believe that knowledge exists as an external reality and can be transferred from human to human, if the right learning conditions are present (Jonassen, 1991, Skinner, 1953). This is the basic tenet of direct instruction (DI), or teacher-directed learning. Chung (1991) defined constructivist educational design into four key elements:

(1) shared knowledge among teachers and students

(2) shared authority and responsibility among teachers and students

(3) the teacher's new role as guide in instruction

(4) heterogeneous and small groupings of students (as cited in Bada, 2015, p. 52).

As can be seen from the above four elements, the constructivist design is a shared creation of meaning between students, teachers, and peers. This emphasis on the contextualization of meaning-making aligns with the situated learning theory (SLT).

Situated learning theory

Authentic instruction is grounded upon the theory of situated learning (Herrington & Oliver, 2000, Gunes et al., 2020). "Situated learning" is learning within a context. In other words, students are taxed with using the skills, knowledge, and background information to solve problems within a situational and

historical context. According to Gunes et al., 2020, teachers in situated learning classrooms encourage students to interact with each other to construct meaning by seeing different perspectives:

> Learning best takes place within a context; thus, artificial and isolated school environments are incomplete as they fail to provide a context for learning. Situated cognition suggests that what is learned should be associated with the interests and needs of learners." (Gunes et al., 2020, p. 249)

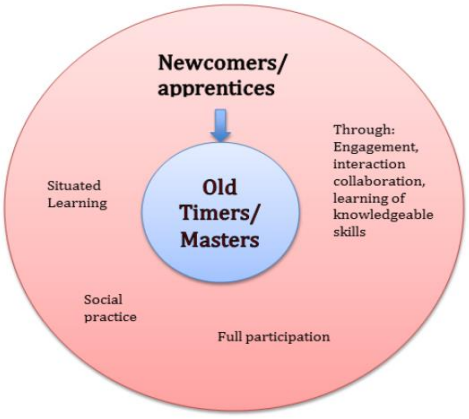
In the authentic learning model, which is grounded on situated learning theory, teachers help students construct knowledge by helping them connect the learning situation to their own lives and real-life events. This approach leads to more meaningful, more effective, more constructive, and more permanent learning than traditional, textbook-based learning (Firat, 2008, as cited in Gunes, et al. 2020).

In their original publication, "Situated cognition and the culture of knowing," Brown, et al. (1989) noted that teachers were relying on abstract concepts, using traditional methods of lecturing, memorization, exercises, and tests, with the assumption that students would be able to transfer that abstract knowledge into practical uses once they left the classroom. They noted the distinction between knowing "what" and knowing "how;" in other words, the abstract knowledge is the "what," which existed almost entirely out of context, and the formal concepts rarely had practical applications to real-world situations. The knowledge of "how," as they put it, or the practical knowledge that is embedded within the context of a real setting and problem was left primarily up to the students to work out for themselves. Brown et al. (1989) posited that embedding learning into social and physical contexts produced much better cognitive results than keeping education abstract or separating learning from doing.

Since this groundbreaking study, other researchers have proven the value of contextualizing learning within real settings and circumstances. Lave and Wenger's *Situated Learning Theory* (1991), is frequently cited as a grandfather teaching. Lave and Wenger (1991) coined the phrase "Communities of

Practice" (COP) to describe groups of people who come together to work on a problem that is of shared interest or concern. "In our view, learning is not merely situated in practice as if it were some independently reifiable process that just happened to be located somewhere; learning is an integral part of generative social practice in the lived-in world" (Lave & Wenger, 1991, p. 35). They further their explanation of communities of practice through looking at how the apprentices become masters through social practice and situated learning. (see Figure 3). The relationship between participants is always in flux, "for every one of the practitioners can be an apprentice or expert at a particular moment" (Zheng, 2020, p. 651). Thus, learning is defined by Lave and Wenger (1991) as such: "[learning] is mediated by the differences of perspective among the co-participants. It is the community, or at least those participating in the learning context, who learn under this definition" (p. 15). It is a holistic view of learning. Individuals actively participate with each other, cognitively, socially, and situationally. Learning is situated in a specific context of time, place, and participants. Each participant becomes "a different person with respect to the possibilities enabled by the complicated systems of relations" (Lave & Wenger, 1991, p. 53). In this way, the learning situation is unique, and cannot be exactly replicated.

Figure 3: Lave & Wenger's legitimate peripheral participation model



(Evans, 2019, p. 52)

The basic tenets of situated learning theory are as follows: constructivist learning within an authentic context, involving social interaction. In a classroom, the role of the teacher changes to being a facilitator of learning rather than a disseminator of information. Knowledge is not delivered by the teacher in neat, tidy units, but is constructed by the shared interaction that happens when students work together to solve real-world problems.

Experiential learning theory

Similar to situated learning theory is experiential learning theory, described most notably by D. Kolb (1984). Kolb's (1984) definition of learning is "the process whereby knowledge is created through the transformation of experience" (p. 38). The key tenets of Kolb's experiential learning theory are thus: abstract conceptualization, active experimentation, concrete experience, and reflective observation (as cited in Evans, 2019, p. 51). In a conference paper published in *Journalism Education*, M. Evans (2019) applied both theoretical models to the teaching of journalism by conducting two case studies in the United Kingdom. Both of these educational theories involve placing the students in real-world situations and letting them problem-solve on their own. The key difference is the emphasis on reflection in experiential learning. Evans (2019) suggested that a hybrid of experiential learning and situated learning may be warranted and suggested further research in the form of focus groups and semi-structured interviews.

Achievement goal theory

Authentic learning is also grounded in achievement goal theory. Ames and Archer (1988) researched students' perceptions of either performance- or mastery-based classroom goals (as cited in Schweder et al., 2019). Performance-based learning focuses on student output, such as grades and scores, encourages competition among students, and generally focuses on lower-order thinking such as memorization and repetition (Ames and Archer, 1988). Mastery-based learning is closer to authentic learning, where students learn for the sake of learning something new, they see learning as a process, not a

product, and they generally engage in higher-order thinking strategies (Ames and Archer, 1988). The consensus of researchers in the decades since Ames and Archer published their research is that mastery goals lead to higher student engagement than performance goals. Schweder et al. (2019) state "Decades of research has shown that students with a focus of mastery goal orientation show better learning strategies as well as the most beneficial motivation and achievement patterns" p. 604). Mastery goal orientation, grounded in the achievement goal theory, provided the historical basis for authentic learning models.

Definition of authentic learning

Authentic learning activities are ones that help students make connections between the classwork and the real world. "Learning can be effective and permanent when activities are similar to real-life situations" (Gunes et al, 2020, p. 248). Helping students see connections between real world situations and classroom activities does more than just make the learning relevant. It also prepares students to be able to adapt to the changing living conditions of the modern world. Steve Remington is a former classroom teacher who embraced the authentic learning model and went on to become an advocate for it as a public speaker, writer, and consultant. Like me, he had anecdotal evidence of authentic learning experiences in his classroom:

> I've witnessed many magical moments and marveled at my students passionately engrossed in their learning tasks. I'm not talking about the one-off lessons or activities that intermittently delight students, but I'm referring to those profound moments when all of my students functioned optimally, while immersed in rich, deep, prolonged learning. (Remington, 2018, n.p.).

Remington (2018) argued that authentic learning projects can be incorporated into any subject, with any topic. The determining factor of authentic learning is that there is a tangible product or specific, quality

outcome that is designed to interact with the community. There are many elements to authentic learning, as demonstrated in Figure 4.

Figure 4: elements of authentic learning

(Remington, 2018)

Zualkernan (2006) broke down the different types of authentic learning pedagogy as follows: problem-based learning, distributed problem-based learning, inquiry-based learning, role play simulation and game-based learning, case studies-based learning, critical incidence-based learning, and project-based learning (p. 201). After deciding on the pedagogy, the teacher should plan the architecture, which includes an interesting problem to solve, related cases for comparison, relevant information sources, cognitive construction tools, communication strategies, and social and contextual support. In other words, the role of the teacher is to provide a scaffold to support the students. The teacher should then consider the learning context, including the learning environment, social/ peer relationships, teacher personality/ style, the available resources, and so on. The learner should be able to describe what was learned and articulate any problems or challenges that were encountered. The question of relevance seems to be the one thing that determines the authenticity of an assignment.

Review of the literature of previous studies

Over the three decades of research studies that have been conducted in classrooms all over the world, it would be impossible to provide a comprehensive survey. Instead, I have selected representative research studies that demonstrate the following categories: qualitative studies, which rely on interviews, field observations, and journals, quantitative studies, which measure students' attitudes toward learning using pre-test and post-test surveys, and mixed-methods studies, which are a combination of both. The following descriptions are a sampling of each of those methods.

Qualitative research

H. J. Setiawan and N. Islami (2020) conducted a qualitative study on one high school physics class of 30 students in Rumbio Jaya, Indonesia. The data were collected using total sampling. The study was designed according to the spiral model, originally created by Kemmis and Taggart (2008). The spiral model consisted of four phases: plan, act, observe, reflect. During the planning phase, the learning tools, assessments, and observation sheets were prepared. During the action phase, the learning material was presented to the students. During the observation phase, students were observed solving problems and their behaviors were recorded on a student observation sheet. During the reflection phase, the researchers reflected on the weaknesses in order to improve for the next round. The research consisted of three cycles of problem-based learning (PBL) activities. The researchers specifically looked for student indicators of these critical thinking skills: "identify, define, enumerate, analyze, list, self-correct" (Setiawan and Islami, 2020). Between the first and second cycles, the observations indicated an improvement in all categories. Between the second and third cycle, again, the students improved in all categories. The researchers concluded that the PBL model does indeed increase students' critical thinking skills. Although this study was done in a high school physics classroom in Indonesia, the PBL model could be used in other subjects to increase critical thinking skills.

Mohammad Syaifuddin (2018) conducted a qualitative, descriptive study to analyze the use of authentic assessments in junior high school mathematics classrooms. Fifty teachers were randomly selected from across Malang City, Indonesia in 2018. Data from documents, questionnaires, and interviews were collected from all 50 teachers. Classroom observations were conducted of 20 of the 50 teachers. The questionnaires consisted of four yes/ no statements asking the teachers to self-describe their use of authentic assessments. Data were collected from classroom observations and lesson plan documents that sought yes/ no observations of authentic assessments in practice. Open-ended interviews were conducted and recorded for teachers to indicate the obstacles they faced in implementing authentic assessments. Syaifuddin (2020) concluded that most of the teachers in Malang City, Indonesia were using authentic assessments, and over half (54%) were doing so with very few obstacles. The obstacles that the teachers reported were lack of time and accuracy of the results. The teachers in Indonesia have been trained in using authentic assessments, so their implementation and lack of obstacles could be due to the training. The obstacle of limited time is valid, since authentic assessments take more time to implement and to grade. An accurate, detailed rubric is one way to remove the obstacle of accuracy.

Quantitative research

E.K. Nisa et al. (2017) conducted a quantitative study of 90 high school physics students from Tarik, Indonesia, in three different groups. The researchers used a pre-test and post-test design to measure the increased critical thinking skills before and after exposure to a guided inquiry learning model. After the research experiment, the students in all three groups were given the same post-test in the form of an essay test. All three groups showed a significant increase in critical thinking skills after being trained with the guided inquiry learning model. In addition to the critical thinking skills, the researchers also noted that students' social interaction and concept mastery increased as a result of the guided inquiry learning

experience, although those were not specifically measured by the tests. Nisa et al. (2017) cited previous research studies that did measure those skills, which supported their observations.

Hasrawati et al. (2020) sought to determine if students' problem-solving ability and learning motivation could be improved through the use of the problem-based learning model (PBL), compared to the conventional learning model. The study took a quantitative approach to testing the hypothesis that problem-solving skills and learning motivation are improved in PBL models versus conventional teaching models. The experimental pre- and post-test design studies the results of a control group of 35 conventionally-taught students and a study group of 26 PBL students. These students were chosen randomly from the entire 210 students of Jeumala Amal. There were two test instruments used: a test of students' ability to solve problems, and a questionnaire that measured students' motivation to learn. A pre-test was given to establish equal ability between the control group and the study group. A post-test was given to establish the amount of improvement after the instruction via PBL or conventional models. In both problem-solving ability and motivation, the PBL teaching model showed significant gains. Validity tests included the Independent Samples Test and the Univariate Analysis. The researchers concluded that problem-based learning can have significant, positive effects on students' problem-solving skills and motivation to learn.

Most of the existing research is on the effectiveness of authentic instruction in math and science classes. Jeter et al. (2019) studied authentic instruction (AI) specifically in the ELA classroom, using the 5E model: "engage, explore, explain, extend, evaluate" (p. 1). Jeter et al. (2019) acknowledged that the 5E model is primarily used in science and math classrooms, so their research was an important addition to the river of knowledge on the subject of AI versus direct instruction (DI) in other subject areas. The results showed that students in the AI instructional group had an increase in academic pressure and no change in classroom mastery. The DI group had no change in academic pressure and a decrease in classroom mastery. Regarding boredom, there was no change in the AI group and an increase in the DI group. In short,

authentic instruction increased academic pressure and decreased boredom in the ELA classroom, at least in this particular context.

Mixed methods

Wijnen, et al. (2018) conducted a mixed-method study of law students in the Netherlands to compare the effects of problem-based learning (PBL) with a lecture-based learning model. The research is grounded in the Self-Determination Theory, and aims to show how an authentic, problem-based learning environment would lead to authentic motivation. A quasi-experimental study was conducted to support the hypothesis that students in PBL courses would fare better than students in the lecture-based learning model in the categories of "autonomy, competence, and relatedness" (Wijnen, et al., 2018, p. 177). They also hoped the findings would show that students in the PBL courses would self-report higher levels of autonomous motivation and lower levels of controlled motivation, than students in the lecture-based control group. The students were made up of two cohorts of third year Dutch law students. To measure the students' perception of their academic needs of autonomy, competence, and relatedness, the researchers used a variation of the Work-Related Need Satisfaction Scale, which is a five-point Likert scale. To measure the students' perception of the type of motivation that they felt--autonomous versus controlled--the students were given a Self-Regulation Questionnaire (SRQ). The data were analyzed using Multivariate Analyses of Variance for validity. The results of this qualitative study showed no difference between the study group or the control group on the topics of autonomy and competence. The PBL students did self-report higher levels of relatedness than the control students in the lecture-based classroom. There was also no difference between the study group and the control group with the topic of autonomous motivation and controlled motivation. In order to understand this divergence between the hypothesis and the results of the study, Wijnen et al. (2018) did a second study, in which they conducted two focus group discussions from the PBL study group. The 13 members of the focus groups volunteered to participate in the focus group interviews.

Since the PBL classes were divided into tutorial groups, the feeling of relatedness was higher, but that was the only difference between the two groups. The authors recognized a limitation of the study was using third year law students, who may already be experienced students who are autonomously motivated. The authors suggest further research could include using different levels and subjects and doing focus groups of the control group as well as the study group.

Gunes, et al. (2020) conducted an explanatory mixed method study on the academic performance and attitudes of 5th grade social studies students in Kirsehir, Turkey. Quantitative data were collected from an academic achievement pre- and post- test and the Geographic Information Systems (GIS) Attitude scale. Qualitative data were gathered from semi-structured interviews of the students. The two sections of 30 students each were randomly selected and were both taught by the same teacher. The control group was taught using traditional, textbook-based methods while the study group was taught using authentic learning methods. Both groups were given the same pre-test and post-test. They were also given the same GIS attitude scale, which was a five-point Likert scale. The quantitative study was followed by a qualitative, semi-structured interview to measure the students' attitudes towards the topic. The authors found that the pre-test scores of both groups were relatively similar in both their achievement and their attitudes. The difference between the results of the pre-test and the post-test was much higher in the study group than the control group. A significant difference between the GIS attitude was found in the study group when the students' attitudes were tested before and after the study. The control group showed very little difference in attitude before and after the study. The interviews were coded and analyzed using content analysis. The researchers concluded that authentic instruction does have a positive effect on student achievement and attitudes in this social studies class in Turkey. According to Gunes, et al. (2020), very little research had been done previously on the use of authentic instruction in social studies classes, as it had mostly been

studied in math, science, and language classes. The researchers suggested that future research could explore the relationship between authentic instruction and curriculum skills.

The relationship between authentic learning and higher-order thinking skills

Higher order thinking skills (HOTS) include analyzing, evaluating, and creating. These skills are on the upper tiers of the hierarchy of learning skills, with remembering, understanding, and applying in the lower-order thinking skills, based on the original research of Benjamin Bloom's Taxonomy (Bloom, 1969). In fact, HOTS are more critical now than ever. "The development of the 21st century requires the existence of creative human beings who continue to work critically and creatively for the nation's progress" (Perdana, et al., 2020, p. 478). Even though it is well-established that higher-order thinking skills are desirable, the assessments that are still commonly used in schools are designed to measure cognitive achievement (Perdana, et al., 2020, p. 478). To encourage students to go beyond mere memorization, authentic learning is one method. In the construction of knowledge, students are encouraged to utilize higher-order thinking as they seek out new meanings and solve problems. This contrasts with lower-order thinking, which focuses on memorization and repetition (Newmann et al., 1995, cited in Jeter et al., 2019). Higher order thinking allows students in language arts classrooms "to engage in critical social justice literacy practices as they make text-to-text, text-to-self, and text-to-world connections" (Boyd, 2017, as cited in Jeter et al. 2019, p. 2).

Several studies have shown the relationship between authentic learning and HOTS. For example, Ichsan et al. (2019) state that "environmental learning in the 21st century is no longer talking about various concepts in the book but has turned to the study of current issues. One of them is Green Consumerism" (p. 308). In their study, students' HOTS were measured on 12 different items. Although the results of the test showed that students' HOTS skills were still relatively low, Ichsan et al. (2019) concluded that environmental learning must be HOTS based, since for students to buy-in to the concept of green living, they must be included in the development of creative solutions.

Ardiyanti et al. (2021) conducted a research study using an experimental class and a control class to determine the most effective way to improve HOTS and student motivation. The researchers used a quasi-experimental design. They used a pre-test and a post-test. The experimental class was taught using the "joyful learning model" (JLM), defined by Ardiyanti et al. (2021): "Joyful Learning is a learning process or learning experience that makes students feel pleasure in the learning scenario or learning process" (p. 34). The control class was taught using a traditional method. All of the students in the grade X class were part of the study, but a random sampling was used to determine which class was the control group and which was the experimental group. The JLM was the independent variable, and the HOTS and learning motivation were the dependent variables. To determine the level of student motivation, a Likert scale was utilized, with "indicators of student attention, indicators of confidence, indicators of willingness to learn, and indicators of cooperation" (Ardiyanti et al., 2021, p. 35). Although the results did not show a significant difference between the HOTS of the control group and experimental group, it was still higher in the experimental group, which utilized JLM. The researchers attribute this to the fact that this was the first time that any of the students had been faced with HOTS, so it was a relatively new concept. In terms of student motivation to learn, there was a significant difference in the control group and the experimental group. This testifies to the fact that students are motivated to learn when they can have fun doing so.

The relationship between authentic learning and student engagement and motivation

Gunes et al. (2020) studied the effects of authentic learning on student achievement and attitudes in social studies classes. Gunes et al. (2020) found that there was a significant increase between the pretest and posttest academic achievement scores of the experimental group, which was taught with authentic learning methods. The results of the attitude scores also increased between the pretest and posttest in the experimental group and stayed the same for the control group.The results showed that there was a positive relationship between student autonomy and students' attitudes. In the authentic instruction (AI)

experimental group, students were more active and less bored than students in the direct instruction (DI) control group, which was taught using textbook-heavy methods. The students in the AI group also performed better on tests than the students in the DI group. Gunes et al. (2020) concluded that authentic learning has a positive effect on both student engagement and student achievement.

Winarso (2018) conducted a study on the skills, knowledge, and attitudes of students who were given direct instruction versus authentic instruction in an 8th grade math course. Although this study proved inconclusive, the researcher still concluded that the students exhibited more intrinsic motivation in the authentic learning study group than in the control group.

Almulla (2020) designed a quantitative research study that tested the efficacy of the PBL teaching method on the following: "collaborative learning, disciplinary subject learning, iterative learning, and authentic learning, which in turn, engage students in learning" (Almulla, 2020, p. 1). The methodology used to collect data in this study was a questionnaire sent to 124 teachers who were already using the PBL teaching style. Almulla (2020) began with eleven hypotheses, hoping to establish the relationship between PBL and collaborative learning, disciplinary learning, iterative learning, authentic learning, and student engagement. The results of the structured questionnaires showed a significant correlation between PBL and all of the factors. Additionally, PBL was found to increase student engagement in learning. Teachers and students indicated a favorable attitude towards the PBL approach. Almulla (2020) suggested that future research could be done in establishing guidelines for teachers to incorporate the PBL approach across the curriculum, and across age groups.

Perceived challenges with authentic learning

The research supporting the effectiveness of problem-based learning (PBL) is well established. It is no longer enough to just teach the basic skills of literacy, math, science, and history. In order to prepare students for the unknown future, those skills, along with soft skills, or 21st-century skills, are required. These

skills involve problem-solving, critical thinking, collaboration, creativity, and communication skills. Problem-based learning, or PBL, involves learning based on real-world problems and projects in the classroom as a way to teach students not only the core subjects, but also 21st-century skills (Viro et al., 2020). Many educators would agree that problem-based learning engages students' intrinsic motivation to learn. However, there is a disconnect between teachers' belief in PBL and their actual practice of using it in their classrooms. If it has been proven through research that it is effective, and if the teachers themselves believe that it is effective, then why isn't PBL more commonly practiced in classrooms? What are the barriers that get in the way of utilizing PBL in actual classroom practice?

To answer these questions, Viro et al. (2020) conducted a study in Finland. The Finnish National Agency for Education had encouraged educators to implement PBL in their classrooms. Viro et al. (2020) used this as an opportunity to study some of the teachers' perceptions of PBL in math and science. The purpose of this study was to determine how teachers viewed PBL and the barriers to implementation that they encountered, to provide teachers with the support they needed. The researchers conducted two surveys, one on math and one on math and science. The surveys were a mixture of open-ended questions and Likert-style questions to get a broad picture of the teachers' perspectives on PBL instruction. The results of these surveys showed three most frequently-cited barriers to PBL implementation: inflexible schedule, lack of teacher training and confidence, and lack of resources (Viro et al., 2020, p. 27). The survey also indicated that the types of support that teachers most frequently requested were ready-made projects, with ideas, tips, and examples, advice from experienced teachers in PBL instruction, and specific training on PBL instruction and grading (Viro et al., 2020, p. 28). Generally, the teachers indicated that limited resources, time, and support were significant barriers to their use of PBL instruction. Although this study was limited to Finnish schools and limited to the specific subjects of math and science, the results could be generalized to apply to any classroom teacher who feels daunted by the barriers of PBL.

Similarly, Aksela & Haatainen (2019) conducted a study to understand the views of teachers toward the use of PBL in actual practice in the classroom. They conducted an online questionnaire of 99 active teachers, ranging from pre-school to secondary school. The data showed that the teachers generally found PBL to be useful in the following areas: student learning and motivation, collaboration and community building, student-centered education, and versatility. However, their study also showed that teachers faced challenges such as time management, technical issues, lack of resources, student-related challenges, and teacher confidence. The results of their study were consistent with earlier studies. The researchers concluded that attention needs to be paid to providing adequate support and training for both in-service and pre-service teachers in order to encourage the facilitation of PBL methods in future classrooms.

Teacher preparation in authentic learning and assessment

In recent years, situated learning theory has been implemented in many teacher preparation programs and other settings, with mixed results. As Herrington and Oliver (2000) noted, "While the theories that underpin the notion of situated learning are relatively easily explained, implementing these ideas in instructional settings can pose particular problems" (p. 3). Thus, situated learning theory is often celebrated in theory, but putting it into practice in real classrooms can be challenging.

The research article, "Preparing teachers for project-based teaching" by Grossman et al., (2019) depicted a modified Delphi study of 50 professionals who actively implement PBL in their classrooms. The purpose of this study was to examine the skills and strategies that these professionals implemented to make PBL a success in their classrooms. They found that these experts focused on four core practices. First, they found that high quality PBL experiences were solidly grounded in the academic discipline in which they were being utilized. Assigning students to do a project without the necessary academic background was not effective. Teachers need to prepare the students within the academic discipline, and then remain engaged with the students, pushing them to dig deeper in their analysis, synthesis, evaluation, and justification of their

claims. Second, effective PBL teachers created authentic and relevant experiences that connected the classroom with the world beyond the classroom walls. In addition to this focus on real-world authenticity, the experts also made sure to make the experience authentic to the students themselves, to who they are and what is important to them. Third, the expert practitioners focus on the iterative process: providing multiple opportunities for students to give and receive feedback, make revisions, and reflect on their own learning processes. Fourth, the experts focused on the collaborative process, by providing students the scaffolding they need to work well together. These teachers deliberately teach students skills such as negotiation within small groups. They model protocols, norms, or roles for individuals to follow within their groups, so the students can have a positive experience working together. The researchers concluded that without adequate training in PBL methods, teachers are likely to abandon the attempt and return to more familiar, didactic, methods of teaching. Grossman, et al. (2019) advocated for the need for schools to invest in high-quality professional development for betterment of future teaching and learning.

To further understand the role of teachers in PBL classrooms, the research of Morrison et al. (2021) sought to identify how teachers can support students' experiences in a project-based learning environment. These researchers identified three specific elements of teachers' supports and challenges: student-centered projects, 21st century competencies, and teacher-student relationships. The subjects of their study were teachers, students, and alumni. The context of the study was a project-based STEM high school. The researchers conducted interviews of the current students, teachers, and alumni to identify both the challenges and the supports of PBL. The results of the study showed that the students felt both supported and challenged by their teachers because the teachers' roles were partners in learning rather than the deliverers of content. This partnership between students and teachers created positive relationships and helped students feel more engaged in their learning. The researchers found important implications of this study. Teacher education programs need to prepare teachers to listen to the needs of the students and to build strong

relationships with the students as a first priority. They also found that it is necessary to provide pre-service teachers with detailed instructions on the methodology of PBL, so that they can implement it successfully. Finally, Morrison et al. (2021) recommended a change in focus in teacher-preparation programs to include opportunities for future teachers to experience PBL both as learners and as facilitators, so they have the skills and the experience to make the PBL classroom a successful reality.

Novak and Wisdom (2018) sought to find a correlation between the experience of using PBL as students in preservice training, and the attitudes and anxiety of these same students towards teaching elementary science. Specifically, Novak and Wisdom (2018) used the technology of 3D printing in a modeled science experiment in elementary classrooms on why things float vs. why things sink, using 3D printed boats. The purpose of the study was to identify the contributing factors to elementary teachers feeling low perceived self-efficacy and high anxiety toward teaching science. They used a pre- and post-test to measure the preservice teachers' perceived competence and their anxiety toward teaching science. Novak and Wisdom (2018) also asked the preservice teachers to reflect on their experiences of working in a PBL community through a reflective journal. Novak and Wisdom (2018) concluded that "Teacher education programs can benefit from introducing teachers to 3D printing technology to enhance their confidence with enacting STEM standards and improving their attitudes toward teaching science" (p. 425). This could be extrapolated to conclude that providing PBL experiences to preservice teachers may contribute to their confidence and self-efficacy in using PBL in their own future classrooms.

Tsybulsky et al. (2020) examined the thoughts, feelings, and emotions related to the PBL process. The researchers used grounded theory to examine two domains: the quality of the experience of PBL and the content of the experience. The participants were students in their first year of a teacher education college in Israel, from both Jewish and Bedouin backgrounds. Two methods of data collection were used: in-depth interviews and reflective reports. The data were analyzed individually by each researcher and then

collectively by both researchers in order to establish validity. In the quality of the PBL process, the research indicated four stages: frustration, coping with difficulties, success, and satisfaction. As a result, the researchers identified that it is important to provide support early in the process, without taking away the academic rigor, as the overcoming of difficulties is what later led to feelings of success and satisfaction. As for content, Tsybulsky et al. (2020) state that "the PBL process provides a deeply enriching experience, in terms of both cognition and affect" (p. 380). They concluded that providing preservice teachers with meaningful PBL experiences is important to the implementation of PBL methods in their classrooms when they become teachers.

Amesty and Paez conducted a 2018 study to investigate the effect of training and encouraging project-based learning methods on Venezuelan teachers' attitudes towards school-based drug prevention. They conducted a control-group comparison, in which an experimental group of teachers received direct training on PBL methods, while the control group did not. The subject that the teachers were expected to teach was the same with both groups: drug prevention. The participants in the study included 180 teachers from two Venezuelan states. Two measures were used: first, a questionnaire that specified demographic information on the participants; secondly, a pre- and post-test of the Teacher Attitude Toward Comprehensive Prevention, which included 20 items rated on a 5-point Likert scale, from *strongly disagree* to *strongly agree*. The study consisted of six phases: recruitment, pretesting, training of the experimental group, implementation, post-testing, and analysis. An analysis of the post-test data showed that the attitudes of the teachers in the control group remained constant, while the attitudes of the experimental group improved. Amesty and Paez (2018) concluded that "PBL may be a more efficient and cost-effective strategy to reach more children than typical. . . models of drug prevention" (p. 979). This study was limited to measuring the efficiency of using PBL on the topic of drug prevention in the specific location of Venezuela. However, this study is of interest to the current study because it specifically compares teachers'

attitudes between those who received training in PBL methods and those who did not. Furthermore, it measures the efficiency of using PBL as a teaching method versus using traditional methods.

King and Smith (2020) studied the use of PBL methods for in-service teachers in a graduate class to develop leadership skills in those same teachers. To demonstrate this method, a partnership between Miami-Dade school district and Florida International University was forged. In-service teachers in a graduate class at FIU were taxed with the project of planning and executing a teacher training, demonstrating how to teach math through problem-solving skills. The teachers first conducted research on successful professional development (PD) trainings and the use of PBL methods. Then they planned out professional development activities to be conducted at the Miami-Dade school. The survey of participants indicated that the PD was successful. The teachers who completed the project also reflected on their learning in writing. Overall, the effect of this experience not only demonstrated the effectiveness of PBL to the high school teachers who received the training, but it also bolstered the confidence of the teachers who led the PD training. King and Smith concluded that "What was most notable about our project was that teachers engaged in the authentic practice of leadership as they prepared for and led the PD" (p. 162). In this case, the positive results of the study were twofold. The teachers who attended the PD learned about the benefits of PBL, and the teachers who conducted the PD learned how to become teacher-leaders in an authentic, real-world project of their own.

Synthesis of the literature

The examples of research studies that I have gathered here are merely samples of the vast array of research studies that measure the efficacy of authentic learning methodology. Quantitative researchers have performed research studies measuring students' acquisition of knowledge by performing pre-tests and post-tests of students in authentic learning environments and comparing them with pre-tests and post-tests of students in direct instruction learning environments (Nisa, et al., 2017, Hasrawati, 2020, Jeter, 2019). It has

been found consistently that authentic learning does have a positive correlation with aptitude on tests. Furthermore, multiple studies have demonstrated that authentic learning also has a positive correlation with student engagement and motivation to learn. (Hasrawati, 2020, Gunes, 2020, Jeter, 2019).

Qualitative research has also been conducted on the subject of authentic learning environments. Setiawan & Islammi (2020) used student observations, field notes, and reflections to measure the impact of authentic learning on critical thinking skills. Syaifuddin (2018) used existing documents, questionnaires, and interviews. Ichsan et al. (2019) and Ardiyanti et al. (2021) studied the impact of authentic learning on higher order thinking skills and student motivation to learn by utilizing pre-and post-tests and field observations. Mixed methods studies were conducted by Wijnen (2018) and Gunes (2020). These also utilized pre- and post-tests, but they followed up with interviews of the students.

All of the aforementioned studies provide replicated evidence that when learning is authentic, relevant, real, fun, and connected with the community at large, students are more engaged in their learning, more motivated to learn, and exhibit higher order thinking skills. These findings are consistent with one another, regardless of the methodology, setting, age group, or subject matter. Although each individual study is specific to its time and place, thus not easily generalizable, there are enough studies that come to the same conclusion. Therefore, the consensus of all of these studies leads to the generalization that authentic learning and assessments do have a positive impact on student learning, motivation, and engagement.

Critique of current literature on authentic learning

The research literature included in this study employed quantitative, qualitative, and mixed-methods research approaches. The quantitative studies used pre- and post-tests and questionnaires to measure student comprehension and motivation to learn. The statistical analysis was in line with the recommendations of Fraenkel, et al. (2019). The statistical findings were presented in ways that were easy to understand and follow, utilizing charts and graphs as needed for clarity of understanding. The reliability and validity tests

were clearly stated and included in the research analysis. The quantitative studies all used a static-group pretest-posttest design (Fraenkel, 2019, p. 264), with researchers treating one class as a control group and another as an experimental group, to compare the results of two or more existing classes after being taught in direct instruction or authentic instruction methodologies, respectively. This was an effective methodology to demonstrate the equality of the two groups in question prior to the experiment, then to compare the cognitive growth changes in each group after the experiment. A limitation of this type of methodology is that it only measures cognitive performance, without providing a full explanation of why this change did or did not occur.

Another quantitative methodology that was used in these experiments included questionnaires to measure student engagement and motivation (Hasrawati, 2020, Jeter et al., 2019). These included closed-ended questions with Likert scales for easy tabulation. The benefit of these questionnaires is that they can be conducted relatively easily with large sample sizes. A limitation of this method is that it only tells a portion of the whole story. It does not tell the reasons behind the answers given on the questionnaire. If my research question were to explore why authentic learning methods work, then a more comprehensive and thorough study would be required.

The mixed-methods studies used the pre- and post-tests, but also followed these with semi-structured interviews of a random sampling of participants (Gunes, et al., 2020, Wijnin, et al., 2018). This methodology comes a bit closer to understanding why the respondents answered as they did, but still does not provide a deep understanding into the reasons behind the answers.

The qualitative researchers included in this literature review utilized case study methodology for the most part. The researchers used triangulation to provide credibility to their research findings. Gathering data from questionnaires, interviews, classroom observations, and lesson plans provided a deeper understanding of the use of authentic instruction in the classrooms in question (Syaifuddin, 2018, Setiawan & Islami,

2020). Tsybulsky et al. (2020) used a grounded theory approach, utilizing interviews and written reports. In this study, the researchers analyzed the data separately and then collectively, to provide validity and to avoid bias. Data analysis seemed to be in keeping with the recommendations of Creswell and Poth (2018). Data were coded and themes were identified by more than one researcher to ensure credibility and consistency.

The case study methodology is beneficial in gaining a deeper understanding of a particular phenomenon, which is why this is the best choice for my research question. A limitation is that case studies are, by nature, not generalizable, since they are limited to a particular group of people in a specific setting that cannot be exactly replicated. However, by publishing the research for others to read and make connections, the research findings have theoretical generalization, otherwise known as transferability. "It is the practitioner, rather than the researcher who judges the applicability of the researcher's findings and conclusions, who determines whether the researcher's findings fit his or her situation" (Fraenkel, et al., 2019, p. 392). In other words, the readers combine their prior knowledge and experience with the researcher's findings and transfer the research findings into practical usage in their own classrooms.

Gaps in the literature

After reviewing the literature, I was not surprised to find that the majority of research on the topic of authentic learning methods occurred in math and science classrooms (Nisa, et al., 2017, Setawian & Islami, 2020, Syaifuddin, 2018). As an English/ language arts teacher, I was specifically looking for research studies that involved my subject area. I did find a few research studies that took place in humanities classrooms, such as ELA or social studies (Jeter et al., 2019, Gunes, et al., 2020). However, these were very few and far between. The present study makes a positive contribution to filling this gap.

Another gap was that no one else seemed to have the same research question as I did. My research question was, "why" does authentic learning work? Quantitative research has already proven that authentic learning methods work. Pre- and post-test results in multiple subject areas, age levels, and different parts of

the world have shown that students who test equally on pre-tests fare better on their post-tests when they are in authentic learning environments, as opposed to conventional, teacher-directed learning environments (Nisa, et al., 2017, Hasrawati, 2020). Quantitative and qualitative research has also shown through questionnaires and interviews that motivation to learn, and student engagement increase when students are taught using authentic methods, as opposed to traditional methods (Hasrawati, 2020, Syaifuddin, 2018, Jeter, et al., 2019, Setiawan & Islami, 2020).

Summary

As Andrew P. Johnson stated regarding the constructivist learning paradigm, "Learning is an active process. It is not a passive process. . . . You cannot be learned. You cannot be learned at. Nobody can learn you. Instead, you must learn" (Johnson, 2019, p. 86). Constructivism puts the onus of learning on the learner, where it should be. Johnson (2019) goes on to state: "Real learning is meaningful. . . . meaningful learning makes sense and can easily be encoded, retrieved, and applied" (p. 87). Real learning is permanent, meaningful, and practical. This active, real learning is the basis of authentic learning methodology. The student constructs knowledge through interactions with text, peers, and professional instructors. Although experiential learning theory and achievement goal theory have strong connections to authentic learning, the learning theory that best aligns with authentic learning is situated learning theory. Authentic learning itself is not a theory, but a pedagogical choice for creating a real learning environment:

> The terms *approach* or *theory* should not be used for authentic learning. It would actually be more appropriate to use the term *model* for authentic learning. A variety of teaching strategies and methods can be used within the authentic learning model, such as presentation, invention, research, lecture, question-answer, discussion, case studies, demonstration, problem-solving, and individual, group learning, and out-of-class teaching techniques. (Gunes, et al., 2020, p. 248-9, emphasis added)

For learning to be authentic, it needs to be relevant both to the student and to the world outside of the classroom. That is why any number of teaching methods can be utilized, or any combination of methods, for an authentic learning model to exist. The real test of an authentic learning model is its perceived relevance to students' lives and its connection to the world outside of the classroom.

Authentic learning models can be utilized in any subject area, with any topic. All it takes is creativity on the part of the teacher, some willingness to give up some of the control, and freedom to experiment. Several studies have demonstrated the efficacy of authentic learning when it comes to student motivation and engagement (Hasrawati, 2020, Jeter et al, 2019, Gunes et al., 2020). Teachers, for the most part, embrace the idea of authentic learning (Viro, et al., 2020, Aksela & Haatinen, 2019, Novak & Wisdom, 2018). However, there are some very real and some perceived constraints to implementing authentic learning models in the classroom. These include such things as planning and preparation time, pressure from administrators and community members, and lack of training or practice (Viro et al., 2020, Aksela & Haatinen, Morrison et al, 2021). Grossman et al. (2019) concluded that providing high quality professional development in authentic learning and assessment made a big difference in teachers' attitudes toward and willingness to utilize authentic teaching and learning methods. In addition, providing opportunities for teacher candidates to experience authentic learning methods, both as learners and as facilitators, will increase the likelihood of those teachers making use of authentic learning in their future classrooms (Morrison et al., 2021, Novak & Wisdom, 2018, Tsybulsky et al., 2020, Amesty & Paez, 2018, King & Smith, 2020).

It must be acknowledged that utilizing authentic learning models does take more energy, time, and effort on the part of the teacher. Until those issues are addressed, all of the research in the world is not going to change the classroom practices of real teachers who are already overworked. Providing the support for

the professionals in the form of time, training, resources, and flexibility is imperative to ensure that students can have real, authentic learning experiences.

This review of research literature has validated what I already knew through experience. I knew that when students had real problems to solve, real audiences for their writing, and real projects to do, their engagement and motivation to learn increased. I have seen this happen time and time again. Authentic learning methods do work to build student motivation to learn, student engagement, and even student success. What I want to know is, *why* is this true? Even after all of the research studies that I have read, I feel unsatisfied with the answer to that question.

After careful deliberation about the research methodology that I wanted to use for this research project, I decided to use an interpretivist paradigm and utilize a qualitative case study methodology. While quantitative research was appealing in its ability to use hard facts and numbers and its large sampling size, it does not tell the whole story. I considered using mixed methods, especially because I could use a pre- and post-test and/ or even a questionnaire, before and after the experiment. However, this would only provide evidence *that* it worked, not *why* it worked, which was my research question. In order to answer this question, I chose qualitative research in the form of interviews, analysis of journal entries, field observations, and interviews.

My question was not, "Does authentic learning work?" It does. This phenomenon has already been demonstrated in various subject areas, age groups, and classrooms all over the world. My question was, why does authentic learning work, specifically in high school English/ language arts classrooms? This question provided the framework for the present study. The situated learning theory provided the lens through which this phenomenon was studied. The following chapter will describe and justify the methodology that was used in this research study.

Chapter Three: Methodology

Introduction

I remember being in my high school biology class studying the anatomy of a fetal pig and complaining loudly to my friends about the foolishness of having to memorize all these body parts, because "we were never going to need to know this in real life." Like most sixteen-year-olds, I thought I knew it all. In my teenaged opinion, it was futile, trivial, and inconsequential having to dissect a fetal pig and identify all of its parts on petri dishes for the big "pig test" that was a rite of passage in my rural high school. Little did I know that ten years later, I would be attempting to butcher a full-grown pig, using a library book for reference. I remember reflecting back on that high school biology lesson, thinking maybe Mr. Krusemark knew what he was talking about after all.

When students ask the question, "Why do we have to learn this? When am I going to need to know this?" they are not doing so to challenge the teacher's authority or question the relevance of the topic. At least, not entirely. It is a valid question that deserves a serious answer. In fact, explaining to the students "why" they need to know something is vital to the success of the lesson. As was seen in the survey of research studies that tested the effectiveness of authentic learning experiences on student engagement in Chapter Two (see pp. 24-57), studies from many different subject areas, age levels, and geographical locations found consistently that authentic learning experiences led to higher levels of student engagement. The question that this study intends to explore is, "Why?" Why are students more engaged when they have authentic learning experiences?

This chapter will define the purpose of the study and relate this purpose to the research design and case study methodology. The research study design will be described, including the procedures used for selecting the participants and securing consent. The procedures for data collection and instrumentation will be defined. The methodologies for conducting case studies will be explained, as defined by Creswell and Poth (2018). Finally, any ethical considerations involved in this study will be discussed.

Purpose of the Study

The purpose of this study was to determine the level of engagement when students were given an authentic learning experience that goes beyond the walls of the classroom, as described in Chapter One of this document (p. 10).

Specifically, students in a college in the high school (CIHS) composition classes interviewed military veterans and then wrote the stories up in a biographical narrative, including both primary and secondary research. The main purpose was to measure the level of increased engagement in the students and discover why that phenomenon occurs. Additionally, secondary benefits arose out of the experience. For instance, students gained soft skills such as interviewing, interpersonal communication, and research writing, prior to doing the interviews. The interviews were recorded for further review and uploaded to the Library of Congress. Then the students wrote up the stories, including research that was necessary to fill in the blanks. These stories were edited multiple times to become polished, publishable-quality work that was sent off to a bindery for publication. Students kept journal entries before, during, and after the project, which were collected and coded for indicators of their level of engagement and interest.

This study addresses two main purposes. First, it filled a gap in the literature about authentic learning experiences in English/ language arts classrooms. While the effectiveness of authentic learning experiences has been studied in many subject areas, age groups, and geographic locations, very few studies have been conducted in high school English/ language arts classrooms. Secondly, it attempts to answer the bigger question of *why* authentic learning experiences correlate with higher levels of student engagement. The answer to this question appeals to any teacher wishing to use authentic learning experiences to increase student engagement.

Results from this study replicated the findings of previous studies conducted to test the correlation between perceived authenticity and student engagement. However, this study takes it one step further by

addressing the very question that prompted my teenage angst, which is the question of "why?" Why does student engagement increase when students are given authentic learning experiences?

Because the purpose of this study was to determine why authentic learning experiences increase student engagement, a qualitative case study was conducted. While a quantitative survey or pre- and post-test could be conducted, it would fail to fully explore the reasons behind the those results. As defined by Creswell and Poth (2018), a case study is the study of a real-life case within a contemporary context to achieve in-depth understanding. Semi-structured interviews from a convenience sampling of participants allowed them to speak in-depth on their perceptions of relevance and how that influenced their engagement levels. Journal entries by participants allowed them to reflect on their learning. Field observations in the form of photographs and a checklist with indicators of engagement completed the research. The collected data was coded for themes that emerged regarding the students' perceptions of the relevance of the learning experience and how that affects their engagement and enthusiasm for learning. This case study used an interpretive paradigm that aligns with the social constructivist theory of learning in which individuals create knowledge through their experiences and perceptions. "Social constructivism posits that knowledge is constructed through interaction with our social world" (Johnson, 2019, p. 86). Social constructivism is grounded upon Vygotsky's (1978) sociocultural learning theory.

Research Question

- Why does authentic assessment affect students' engagement and motivation to learn in ELA classes?

Research Design

This qualitative case study was designed based on Merriam and Tisdell's (2016) and Creswell and Poth's (2018) descriptions for conducting qualitative research. Merriam and Tisdell (2016) described the focus of qualitative research thus: "Qualitative researchers are interested in how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (p. 37). Qualitative research uses a social constructivism, defined by Creswell and Poth (2018) as the presence of "multiple realities constructed through our lived experiences and interactions with others" (p. 35). Further explanation of social constructivism can be found in Chapter One (p. 11) of this document.

Creswell and Poth (2018) encourage researchers to start with the assumptions of qualitative research and to use interpretive frameworks that inform the study of the research problem, specifically addressing the meaning that individuals ascribe to a social problem (p. 42). The four philosophical assumptions are ontological, epistemological, axiological, and methodological (Creswell & Poth, 2018). Ontologically, qualitative researchers embrace multiple realities, including those of the researcher and the individual participants. Epistemologically, the qualitative researcher tries to get as close as possible to the participants, so knowledge is subjective. Axiologically, qualitative researchers put themselves in the scene, acknowledging that the stories voiced are interpreted through the lens of the researcher. Methodologically, the procedures are mostly inductive, emerging through the process and shaped by the researcher's perspective (Creswell & Poth, 2018).

The case study is just one type of qualitative research. Merriam and Tisdell (2016) defined a case study as "an in-depth description and analysis of a bounded system" (p. 37). A bounded system is bound by a specific time, place, population, and situation. In other words, even if this study were to be repeated, it would not be exactly the same because it will involve different people in a different setting, making it a unique "case." Case studies use a combination of "emic" (insider's) and "etic" (outsider's) lenses (Lindlof &

Taylor, 2011). "The combined use of emic and etic conceptual lenses yields a binocular--and thus multidimensional--view of culture" (Lindlof & Taylor, 2011, p. 95). Through the combination of semi-structured interviews, journals, and field observations, this study utilized both emic and etic perspectives. A case study is heuristic, in that it helps readers understand a specific bounded situation without having to be there themselves. As explained by Merriam (1998), case studies "illuminate the reader's understanding of the phenomenon under study. They can create new meaning, extend the reader's experience, or confirm what is known" (p. 30). Finally, case studies can have different intentions than other types of studies, whether that be to tell a story, evaluate a phenomenon, or test a theory. This case study's intent is instrumental. Creswell and Poth (2018) define an instrumental case study as bounded in a real-life context that is selected to illustrate a specific issue. In this case study, the context is situational and transitory, but the intent is to come up with a transferable conclusion that could be applied to other situations and contexts.

The present study demonstrates the common characteristics of a qualitative case study. Students in a college-in-the-high school composition class were presented with the authentic learning experience of interviewing military veterans, collecting their data, and writing their stories. The final drafts of the stories were presented to the veterans and published in an anthology. This gave the students a real audience for their writing. The students' perceptions of relevance were measured through semi-structured interviews and journal entries, in which they reflected on their learning experiences before, during, and after the project. Throughout the process, the researcher gathered field notes, utilized a checklist of observable actions, and took photographs to document the process. The purpose of this study is to understand the phenomenon of student engagement correlating with authentic learning experiences.

Procedures

Participant Selection

As both the researcher and the teacher of a college-in-the-high school (CIHS) composition class, I used convenience sampling to select the participants. According to Fraenkel et al. (2019), "a convenience

sample is a group of individuals who (conveniently) are available for study" (p. 99). The sample group is conveniently available, since it is a class that I already teach. The authentic learning assignment corresponds with the course's existing learning outcomes, so it would not create an unnecessary burden on the participants. The students who took this composition class met the criteria of at least a 3.0 grade point average that is a prerequisite to the class. It is an elective class, so students had chosen to take on a rigorous writing course. Although all willing participants were included in the data collection of the journals, field observations, and photographs, the researcher selected three representatives to do semi-structured interviews. Merriam and Tisdell (2016, p. 101) recommend that interviews be conducted until a point of saturation occurs. However, since this study is limited by time, using a purposive sample of three participants who have the greatest variation in initial perceptions is the most likely to provide a representative sample of the larger population.

Students in the CIHS composition class were seniors in high school, aged 17-18 years old. Most of them had taken Pre-College English in eleventh grade, although it is not a prerequisite. All of them have had three years of high school English. One of the requirements for participation in the class is a 3.0 or higher overall GPA. This limits the study to people who are willing and able to handle the academic rigor and workload of this project.

Protection of Participants

Because this research study was conducted in a public high school, I first sought permission from the superintendent and the school board. Since some of the students were under the age of eighteen, parental informed consent forms were be sent out. The students themselves were also asked to sign an informed consent form. This document explained the rights of the individual to freely participate and the right to withdraw their participation at any time. It explained that they may be recorded or photographed, and that all data collected would be destroyed upon completion of the study. Student participants and their parents were

free to ask questions at any time during the study. The identity of the participants and the participating school was de-identified to protect the privacy of the participants. Students who chose not to participate would not be penalized in any way.

Expert Review

The semi-structured interview questions were vetted by Dr. Michael Coquyt, Professor of Learning and Leadership at Minnesota State University, Moorhead. Dr. Coquyt has twenty-three years of experience in the E-12 setting, as a high school teacher, high school principal, and superintendent of schools. He is part of the core faculty at MSUM for the EdD program.

Data Collection

Once informed consent had been obtained, data was collected from a variety of sources. Students wrote journal entries before, during, and after the study, which were collected and coded for indicators of their level of engagement in the project. Students were taught interview protocols, read some sample biographies, and conducted secondary research prior to the interviews. Once the appropriate scaffolding was in place, they conducted interviews with military veterans to gather their stories for a biographical essay assignment. While students were participating in these interviews, field notes were taken by the researcher, along with photographs and a checklist of student engagement indicators. Finally, upon conclusion of the project, a semi-structured interview was conducted with a selected group of three students, using convenience sampling. For the semi-structured interview, the questions were developed using an interview protocol, and the same questions were used for all participants. These semi-structured interviews were conducted face-to-face and also recorded and transcribed. Unlike a structured interview, follow-up questions were used for clarification, and casual conversation was used to build rapport with the participants (Creswell & Poth, 2018, p. 167, Merriam & Tisdell, 2016, p. 110). While this is not part of the research study, the essays were collected into a self-published volume.

By using a variety of methods, such as coded journal entries, field observations, photographs, and semi-structured interviews, triangulation of the data was achieved. Lindlof and Taylor (2011) define triangulation as "the comparison of two or more forms of evidence with respect to an object of research interest" (p. 274). Two methods of triangulation were used: using multiple methods of data collection and using multiple sources of data. This increased the internal validity and credibility of the study (Creswell & Poth, 2018, p. 259; Merriam & Tisdell, p. 244).

All data collected were stored on a password-protected computer that remained in the possession of the researcher. All data files were destroyed upon completion of the study.

Timeline

September-October 2022	Conducted a pilot project in Composition 1011
April 2023	Attained Independent Review Board (IRB) approval for a research study involving human participants.
June 2023	Defended research proposal at MSUM
July, 2023	Sought permission to conduct this study from the superintendent and the school board
August/ September 2023	Sought community volunteers by contacting the local Veterans Services Officer and writing a letter to the local newspaper.
September 5-11, 2023	Prepared students by teaching writing skills and having students complete introductory writing projects.
September 12-19 2023	Prepared students by teaching interviewing skills and proper etiquette specifically for speaking with veterans. Students conducted practice interviews.
September-November 2023	Students wrote in journals with prompts that measured their level of engagement/ interest in the project before, during, and after the project
October 2-6 2023	Interviews were conducted at a neutral location, a local coffee shop.
October 12, 2023	Students met with peer writing groups to review their preliminary drafts and provided feedback to one another.
October 16, 2023	Students submitted a first draft of the story to the lead teacher.

October 19, 2023	Students met with peer writing groups to review first draft revisions and provide feedback.
October 23, 2023	Students submitted a revised draft to the lead teacher.
October 26, 2023	Students met with peer writing groups to review second draft revisions and provide feedback.
October 30, 2023	Students submitted a third draft to the lead teacher for review.
November 20, 2023	Students submitted a final draft of the story.
November 21-22, 2023	Researcher conducted 3 student interviews to measure level of engagement after completion of the project.
December 2023	Researcher coded the journal entries and interview transcripts, measuring for student engagement.

Data Analysis

Because multiple data types were collected from multiple sources, the analysis protocols varied according to the type of data. First, a definition of what is considered "data:" "The qualitative researcher. . . is likely to be searching for understanding, rather than facts; for interpretations rather than measurements" (Briggs, et al., 2012, p. 386). The intent was to understand why student engagement increases within an authentic learning environment. The data analysis process followed Merriam and Tisdell's (2016) methodological model for case studies. Each type of data will be explained below, including the type of analysis that was used.

Journal entries were made by students on a weekly basis throughout the course of the study. Journals were done on Mondays, beginning September 25, October 2, 9, 16, 23, and 30. The purpose of these journals was to check in with students' levels of engagement and to allow the students to perform their own metacognitive reflections on their learning process. Journals were collected and coded through an inductive, open-coding process. The researcher looked for emergent themes that indicated student engagement in each of the five collections. To preserve anonymity of the participants, the journals were

collected electronically through a Google form, with no name, email address, or other identifiers. Inductive themes were coded as they emerged from the data collection.

Field notes were taken by the researcher in the form of daily observations of student behaviors in the classroom. The researcher took handwritten notes, photographs, and video clips of the students in the classroom. The researcher made use of the Student Engagement Walk-Through Checklist, created by Jones (2009) for the International Center for Leadership in Education (see **Appendix A**).

Finally, upon completion of the authentic learning experience, three participants were interviewed using a semi-structured interview process. These interviewees were selected using convenience sampling. These interviews were conducted face-to-face at a time and place that was mutually convenient. The researcher recorded a video of the interview for later transcription. The researcher used hand transcription of the videos for accuracy and data analysis.

Creswell and Poth (2018) describe the data analysis process as a spiral, to depict the cyclical nature of going from data collection to analysis, and back to data collection as needed (p. 186). In that way, the data collection and analysis occur in tandem, as theoretical interpretation emerges inductively through the process.

Instruments

Instruments in this study included individual laptops that the students used to write their biographical stories. Students provided their own laptops. The students and teacher made use of Google docs and Google classroom for providing feedback electronically. The journal entries were conducted through Google forms to allow students to remain anonymous. The researcher made use of a camera for the purpose of taking photos and video clips during the field note-taking process. The researcher also used a camera to record the semi-structured interviews. All data were collected and stored on a password-protected laptop that was in the sole possession of the researcher.

Role of the Researcher

In qualitative research, the researcher is also considered a primary instrument in the process of gathering and analyzing data. (Creswell & Poth, 2018, p. 43, Merriam & Tisdell, 2016, p. 16). In this capacity, the researcher must practice reflexivity, by making biases and prior experiences known (Creswell & Poth, 2018, p. 44, Merriam & Tisdell, 2016, p. 16),

Previous Knowledge and Bias

In this specific research study, I take on the role of researcher as well as the lead teacher. As a teacher with thirty-two years of experience, I have seen the value of authentic learning environments. I have taught the CIHS composition class for twenty-two of those years, and I have used variations of this particular project for thirteen years. In fact, I presented at the Minnesota Council of Teachers of English spring conference about my experiences having students interview veterans and write their stories. I have seen students get excited about the process, invest themselves into making a quality finished product, and take pride in their accomplishments. My professional curiosity led me to conduct this research study to find out why the level of student engagement increases when students have authentic learning experiences and real audiences for their writing. As the daughter of a Vietnam veteran, I have a special affinity and interest in veterans and their stories.

Qualifications

My training and experience conducting interviews consists of formal classes through the Doctor of Education program at Minnesota State University, Moorhead. Within this program, interviews used for field research were supervised and guided by course requirements.

Many years of experience teaching writing and an MFA in creative nonfiction made me confident that I could help the student participants reach the level of confidence in their writing skills to write a publishable-quality biographical story.

The authors that I consulted to design this study include Creswell and Poth (2018), Merriam and Tisdell (2016), and Briggs et al. (2012). These authors explained the interview protocols, transcription methods, field note-taking protocols, coding procedures, and data analysis, among other things.

Ethical Considerations

The ethical framework of Creswell and Poth (2018) was utilized at each step of this research study, including the planning stage, the data collection stage, and the analysis stage (p. 55). Prior to conducting the study, IRB approval was obtained from the Minnesota State University, Moorhead IRB board. I sought administrative and school board approval before moving forward with any data collection.

A letter of informed consent was developed and distributed to both the student participants and their parents. This informed the participants that they were free to withdraw from the study at any time without penalty, it explained the purpose of the study, their role as participants, and it disclosed that no harm would come to them. It also stated that their roles as participants and the research site would be kept confidential. During the data collection stage, I followed ethical practices of using clear and transparent language, reporting all findings, and maintaining confidentiality. Data were stored on a password-protected computer and were destroyed upon completion of the study.

Summary

It goes without saying that teachers are always trying to help students connect their classroom experiences with the "real world." Some subject areas, such as math and science, seem to have an easier time connecting with the real world than other subjects. As was seen in the literature review in Chapter Two of this document, many research studies have been done to test the connection between authentic learning and student engagement in science and math classrooms. The purpose of this study was to add another layer to the existing data by incorporating an English/ language arts classroom in a study of authentic learning. To

take it one step further, I attempted to understand why student engagement increases when they were given authentic learning experiences.

Because its main purpose was to understand why this phenomenon occurs, a qualitative study was the most appropriate design. A combination of data from journal entries, field observations, and interviews were collected to try to glean a bigger picture of the situation. This combination added triangulation to the data to increase its validity and reliability. This qualitative study was bounded by a particular time, place, and individuals, making the case study the most appropriate methodology. Merriam and Tisdell's (2016) design for case study applications in educational settings were used for guidance.

Convenience sampling of both the location of the study and the student participants were used. As a teacher in this high school with many years of experience, choosing the students that I already taught was the most convenient, while still being representative of students in general.

Data analysis followed the spiraling process as outlined by Creswell and Poth (2018). Data from journal entries before, during, and after the research were open-coded, as well as field notes and observations, and the exit interviews.

Participants in this study and their parents were given informed consent forms, detailing the rights and safeguards of the participants, including their right to confidentiality and their right to quit the study. The details of the data collection and privacy were explained. Permission from the school officials was sought prior to beginning the study. Through my training in the doctoral program at MSUM, I have learned the ethical protocols for conducting research using human subjects. I was careful to refrain from bias by asking open-ended questions, reporting any contradictions, and maintaining confidentiality and accuracy in analyzing the data. I secured IRB approval from the Minnesota State University, Moorhead IRB board prior to continuing my research.

The following chapter will include the details of the research study. The research methodology of Creswell and Poth (2018) will be explained. Also, the research study's data and analysis will be provided.

Chapter 4: Findings

Introduction

When I taught my daughter how to ride a bike, I did not sit her down and assign chapters out of a textbook, quiz her on her ability to remember what she had read, and then assign her an arbitrary letter grade. While that may seem laughable, is that not exactly what we have been doing to students when teaching them how to write? Read from a textbook, do exercises and quizzes, write a five-paragraph essay. A clever student can easily learn how to play that game, going through the motions to earn the grades, but not really learning anything. Certainly not how to write with power, with passion, and with voice.

It has been established that student engagement relates to student achievement and motivation to learn. Critical thinking skills and creativity are among the higher order thinking skills that teachers aspire to teach, but often, the lower order thinking skills of recalling facts are the items on tests that are easier to score, and thus emphasized in practice. In other words, it is easier to give a multiple-choice quiz on how to ride a bike than it is to actually teach them to ride the bike.

Purpose of the Study

The purpose of this study, as described in Chapter One of this document, was to study the effects of an authentic learning experience on students' engagement and motivation to learn. The study was conducted to further understand why students' engagement and motivation to learn improve when they were given authentic learning experiences.

This study filled a gap in the literature regarding authentic learning. While there were several studies conducted in the last thirty years regarding the effectiveness of authentic learning in science, mathematics,

and language acquisition classes, there were very few studies that used English/ language arts classrooms to study the effects of authentic learning on student engagement and motivation.

Researcher's Role

As the teacher of the college composition class that was used for this study, I took a participatory approach to the research. I have been teaching high school English for thirty-two years and teaching this particular composition class for twenty-two of those years. Over the course of a career of motivating students to write, I have amended my approach, trying to find ways for students to feel engaged in their writing, to feel like it matters, and to feel like they were making a difference with their words. To be honest, it is drudgery to read stale, dry, voiceless writing. Unfortunately, that is primarily what students learn how to do in school. When they are young, their writing is full of voice, enthusiasm, and life. By the time they get to twelfth grade, however, they have learned to protect their young hearts from the angry red marks they have received from well-meaning teachers. One of the primary tasks that I must do in composition class is to teach the students to unlearn everything they have been taught about writing. I teach them to trust in their own voices, trust their audience, and take chances.

Another reason I have tried to make my assignments unique is because it is more difficult for students to plagiarize. If the assignment is unique enough, or engaging enough, the students won't want to plagiarize. I have designed many unique assignments with this ulterior motive. As a side benefit, I have noticed that when students are engaged in their writing, they not only don't plagiarize, but they also write much better, their writing voice is engaging, and the essays are enjoyable to read.

Anecdotally, I have noticed this over the years, and intuitively leaned more towards authentic writing assignments. I have presented my students' work numerous times at the Minnesota Council of Teachers of English conferences, including multi-genre research papers, community action research papers, and biographical research papers, demonstrating the assignment and presenting student work as examples.

Teachers from around the state have asked for copies of my assignments or made adaptations to use in their own classrooms.

While I knew that giving students assignments that had real-world applications led to more engagement and better writing results, I did not fully understand why that happened. As I have researched the phenomenon of authentic learning and student engagement, it seemed to make more sense. I designed this study to draw a logical connection between the research that I have read about in books and the practical application of it in my classroom. In other words, I was seeking to answer the research question: *Why do students' engagement and motivation to learn increase when they are authentically engaged?*

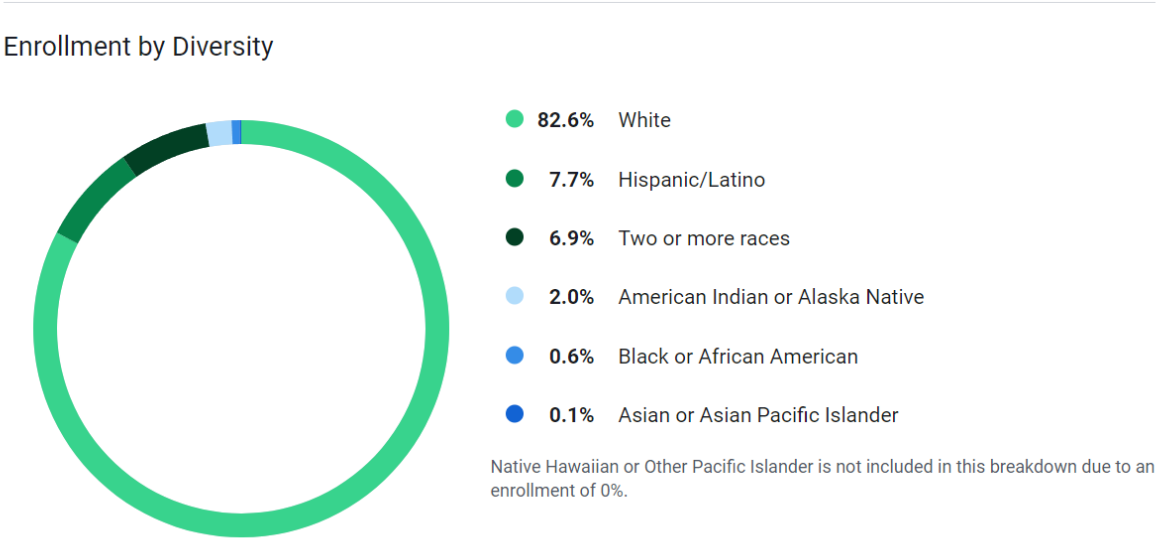
Description of the Sample

The sample used in this study consisted of twenty-four high school seniors. These students were part of the College-in-the-High School (CIHS) composition class, taught by the researcher, Tanya Miller. A prerequisite for the class is an overall 3.0 grade point average or higher, so the students have demonstrated their capability of academic rigor. The class is made up of sixteen female and eight male students. All but one of the students identified as White, with one Native American student. The study took place in a small town in Northern Minnesota.

Our small school has a total of 481 students in the high school. It is a fairly close-knit community, with many families remaining in the area through multiple generations. Hunting and fishing are popular activities all year long. This part of the state is mostly wooded, with some agricultural crops of potatoes, corn, beans, and wheat. Situated in the lakes area of Northern Minnesota, the biggest industry is tourism. In the summer, the town is flooded with tourists who come to the 1,596 lakes in this county alone. The many resorts, restaurants, and other recreational facilities rely on the student workers in the summer months. Virtually every student in the high school has at least one part time job, while some juggle several jobs or work a full-time job. Although many well-to-do people visit this area on vacation, the residents themselves

are mostly from lower-middle class families. According to the school district's homepage, 30.5% of students are economically disadvantaged, as indicated by the number of students enrolled in free and reduced lunch programs. The students in this school are predominantly White, as can be seen by the graphic in **Figure 5.** Overall, only 1.3% of the students are English language learners. It is a relatively homogeneous group, with a strong work ethic and conservative values.

Figure 5: Enrollment by Diversity



The students in this study were high school seniors in 2023. The same group of students responded to the 2022 Minnesota Student Survey as juniors. Of the respondents from this school district, only 28% of males and 53% of females in 11th grade indicated on the survey that they cared about doing well in school. See **Figure 6.** Another way to describe "caring about doing well in school" is "student motivation to learn."

Figure 6: 2022 Minnesota Student Survey for the X School District

		Grade							
		5th		8th		9th		11th	
		Male	Female	Male	Female	Male	Female	Male	Female
		%	%	%	%	%	%	%	%
During the last 30 days, how many times did you get sent out of the classroom for discipline?	None	80%	84%	69%	89%	84%	94%	91%	96%
	Once or twice	18%	6%	31%	7%	9%	4%	9%	4%
	3 to 5 times	2%	6%	0%	4%	7%	1%	0%	0%
	6 to 9 times	0%	4%	0%	0%	0%	0%	0%	0%
	10 or more times	0%	0%	0%	0%	0%	0%	0%	0%
How often do you care about doing well in school?	All of the time	45%	63%	25%	46%	32%	44%	28%	53%
	Most of the time	43%	33%	48%	43%	41%	39%	37%	32%
	Some of the time	13%	4%	25%	11%	18%	17%	32%	13%
	None of the time	0%	0%	2%	0%	9%	0%	4%	2%

In that same 2022 Minnesota Student Survey, only 46% of males and 62% of females in eleventh grade at this high school district agreed that the things they learn in school are "useful." **See Figure 7.** Another word for "useful" could be "authentic." However, 99% of the males and 100% of the females said that if something interests them, they try to learn more about it. If we interpret that as student engagement, then it seems to mean that these students feel engaged and motivated to learn when they are interested in the subject.

The same students who took that survey in eleventh grade in 2022 were in the study sample as seniors in 2023. This study measures the students' motivation to learn when they are given an authentic learning experience. While it is not exactly an equal comparison, since the 2022 survey included all of the 105 students from that grade level, and the students in this study make up only 24 of the total population, it will still shed light on the students' perceptions of engagement when given an authentic project with a real audience.

Figure 7: 2022 Minnesota Student Survey for X School District

How much do you agree or disagree with each of the following statements?		Grade							
		5th		8th		9th		11th	
		Male	Female	Male	Female	Male	Female	Male	Female
		%	%	%	%	%	%	%	%
If something interests me, I try to learn more about it.	Strongly agree	34%	25%	19%	20%	30%	40%	46%	34%
	Agree	64%	75%	73%	72%	64%	57%	53%	66%
	Disagree	2%	0%	8%	9%	4%	3%	2%	0%
	Strongly disagree	0%	0%	0%	0%	2%	0%	0%	0%
I think things I learn at school are useful.	Strongly agree	27%	20%	6%	9%	16%	1%	9%	6%
	Agree	66%	65%	54%	52%	48%	72%	46%	62%
	Disagree	4%	16%	33%	37%	27%	19%	32%	28%
	Strongly disagree	4%	0%	6%	2%	9%	7%	14%	4%

Research Methodology Applied to the Data Analysis

The methodology chosen was a qualitative case study. A case study, as defined by Creswell and Poth (2016), is "an in-depth description and analysis of a bounded system" (p. 37). This case study was of a group of students who were given an authentic learning situation in a composition class. It was bounded by time and space, meaning that even if this particular assignment were repeated, it would be with different students and in a different time setting, so the results would not be the same.

Convenience sampling was used, as the participants in the study were students in Tanya Miller's CIHS composition class. "A convenience sample is a group of individuals who (conveniently) are available for study" (Fraenkel, et. al 2019, p. 99). As both the researcher and the teacher of the class, Miller was able to explain the study and invite the students to participate. Participants were given a letter of informed consent, which was also sent home to the parents of the students, since some of them were under the age of eighteen. Twenty-four students agreed to be part of the study. The letters of informed consent were signed and returned for safekeeping.

The study used three methods of data collection to achieve triangulation (Fraenkel, et al. 2019, Creswell & Poth, 2018). These three methods consisted of anonymous journal entries by the students, field

notes, including photographs and student engagement walk-through checklists, and finally, exit interviews of three of the participants.

Participants were asked to reply to a series of weekly journal questions to gauge the students' level of engagement with the project and to check in to see what supports they needed. I had intended only to do this three times: before, during, and after, but it turned out to be a good way for students to communicate any problems they were having without fear of judgment, so I used this tool more frequently than initially planned. The responses were kept anonymous, with no record of names, email addresses, or any other personally identifying data. These were recorded and kept confidential on a password-protected laptop in Miller's sole possession.

Another gauge of student engagement was the photographs and field notes that I took as I observed the students in their work. I also had printed out copies of the Student Engagement Walkthrough Checklist (see Appendix A). I invited members of the staff at my high school to come and do a walkthrough of the classroom and fill out the checklist. I did a few myself, but to avoid researcher bias, I requested input from others. I have collected these checklists and compiled the data.

Finally, I did exit interviews from three of the participants. I had originally planned to select the students based on their responses to the initial journal questions, but since I collected those anonymously, that was not an option. Instead, I used convenience sampling again, choosing three of the students who were also in my study hall.

The qualitative data analysis occurred in tandem with the data collection, according to the recommendation of Merriam and Tisdell (2016) and Creswell and Poth (2018). An inductive preliminary analysis was conducted using open coding, in which key phrases were highlighted and noted (Merriam & Tisdell, 2016, p. 201). Themes began to emerge as data were coded.

Creswell (2007) describes this as a data analysis spiral, in which "the researcher engages in the process of moving in analytic circles rather than using a fixed linear approach" (p. 150). Through the process of interacting with the data, coding, and interpreting the data, certain themes emerged inductively and were noted by the researcher. Creswell (2007) notes some debate over counting codes in qualitative research, as counting indicates a quantitative measurement of something that is not necessarily quantifiable (p. 152). With this in mind, although I have counted the frequency of certain comments, it is merely as an observation that led to the satisfaction of saturation being reached.

Presentation of the Data and Results of the Analysis

I will be presenting the data in chronological order since that is the most logical format for this project, since it was conducted in three phases. I will use the categories of Before, During, and After to describe the data in chronological order.

Phase One: Before (August-Sept. 2023)

Before the project even began, I reached out to the Minnesota Humanities Commission (MHC) to see if they would be interested in partnering with me on this project. I was not sure what to expect, so I was pleasantly surprised to receive a positive response, indicating that they were interested in such a project, since it fit in with their mission statement: "To spark positive change by increasing collective understanding of ourselves, our communities, and our histories through stories and experiences," as published on their website. Instead of filling out a grant application, which would be competitive, they said they would simply provide the funding for some of the needed items. I created a budget and itemized the foreseeable expenses.

To kick off their series, "Examining Military Service From the Margins," the MHC had planned to host a dinner and poetry reading by Jessi M. Atherton, a veteran who served during Operation Iraqi Freedom. The MHC felt that this project fit with our joint missions. They even offered to pay to bus the students down to the cities, to attend this event at no cost to them. Unfortunately, the date of the event

happened to fall in the middle of our fall break, so it was not practical to bring students. Instead, the MHC offered to pay for my mileage to attend, along with my father, a Vietnam veteran, who is also a writer. Atherton read from her book, *The Time War Takes* (2023). It was a positive experience, and we were able to meet several members of the MHC staff to discuss the project.

In addition to paying for the mileage to attend this event, the MHC also agreed to pay for the USB drives that were needed to upload the videos to send to the Library of Congress. They also agreed to pay for the publication of the book, once we got it done, through the Minnesota publisher, Bookmobile.

Before the project began, I reached out to the local Veterans Services officer, to see if he could help me find volunteers from the veteran community who wanted to be interviewed. At first, he was enthusiastic, but later dropped out, saying that it was too difficult to find willing veterans, and he did not want to be responsible for that part of it anymore. This was a setback, to be sure, but I came up with a Plan B, which was reaching out to the local newspaper to run a story on the project and seek volunteer participation.

The project was first introduced to the CIHS composition class on September 25, 2023. To seek community involvement and garner some interest and participation from local veterans, a reporter from the local newspaper ran an article on the front page. I described the Veterans' History Project, which is a nation-wide project in which participants interview military veterans, record the interviews, and send them to be archived in the Library of Congress. There are specific requirements that need to be met in order for these interviews to be recorded successfully. Consent forms must be signed by both the interviewer and the interviewee. A data sheet must be filled out with biographical information, a log of the audio-visual recording must be included, as well as a USB drive with the actual video recording that must be 30 minutes or longer. In addition to those requirements, the students would also include a transcript of the interview and a biographical essay that they wrote about the interviewee.

After this initial description of the project, the students were given letters of informed consent to take home and read, sign, get parent signatures, and return.

To help them understand the Veterans History Project, I had the students watch two videos from the VHP archives and write a half-page reaction to each one. The purpose of doing this was to show them what an interview could look like and prepare them to do their own interviews. This also made it real to them that their own interviews would be viewable to the public, just like these were.

On October 2, 2023, I collected the first journal responses (See **Table 1**). In this, I asked the participants to respond to two prompts: 1. Describe how you feel about the upcoming Veterans History Project and 2. What challenges do you foresee with this project? The responses to the first question were collected as data for this project. The answers to the second question allowed me to gauge the students' needs and provide the necessary support to make the project successful.

Table 1: How do you feel about the upcoming Veterans History Project?

Key phrase	Number of respondents	Code
• "I am very excited to tell these people's stories." • "I am excited about doing something new and different than what you usually do." • "I am super excited to do it as we get to learn about the veterans in our community." • "I am very excited. I think it will be a fun project with an important end goal." • "I'm actually super excited to interview someone. I'm especially excited because it's my grandpa." • "I'm excited and believe that it is going to be a fun and enlightening project."	8	Excited
• "I'm a little excited and a little nervous." • "I'm a little excited and a little nervous. . . It's something that is unique and different than other assignments that teachers give you. • "I am nervous but excited about the upcoming Veteran's History project." • "My feelings about the VHP are excited to be a part of this as a class, nervous to interview someone, as I tend to be an	5	Nervous and excited

introvert, and also happy, because this project is really cool and unique and something that is heartfelt."		
• "I feel a little nervous knowing I have to talk to someone I don't know over a video, but I think it's a cool project. I'm a little worried I won't be able to capture their memory exactly how they want it to." • "I'm a little stressed about it. I don't really like interviewing people that I don't know well." • "With this project, I am very nervous. I want to make sure I turn in quality work. . . . I am also very anxious because I am kind of shy towards new people."	5	Nervous
• "I don't really know how I feel yet." • "I'm not really sure how I feel about it yet. . . I think it could be fun though." • "I'm not really sure how I feel yet, but I think it could be interesting." • "I don't feel much emotion about it. I think it will be fun to learn more about people and the different situations that they've been through during the good and bad times. I also think that it could be a lot of time and effort put into it, but it'll be a good thing."	6	Ambivalent

The problems that the students listed as foreseeable included the amount of time it would take, having trouble scheduling the interview, finding someone to interview, getting the veteran to open up, and lack of interviewing skills. This was helpful to me, because I was able to make some adjustments to help the students feel more comfortable. I made arrangements with the local coffee shop owner to allow the students to interview the veterans in their back room. I told students that they could be excused from class to conduct the interviews, so they didn't have to do it after school, which alleviated some of the concerns about scheduling meeting times and locations. I was also able to pair up students with veteran volunteers, so they didn't have to find their own person to interview. Finally, we spent time in class going over the interview questions on the Veterans History Project website and conducting practice interviews with their peers. I went over a list of interview tips that I got from the Minnesota Humanities Commission, and I provided reading material to the students on what "not" to say to combat veterans.

Figure 8: Students conducted practice interviews with their peers.

I gave the students the second journal prompt one week later, on October 9, 2023 (See **Table 2**). At this point, they still had not conducted their interviews yet, but they had learned more about the project, learned interviewing techniques, and they had either selected or been assigned a veteran to interview. Again, I asked two questions, of which the first was the one that I used as data for this project: "Now that you know a bit more about the Veterans History project, how do you feel about participating in it? The second question was for me to gauge the students' need for support: "What can I do to support you in this project?"

Table 2: Now that you know a bit more about the VHP, how do you feel about participating in it?

Key phrase	Number of respondents	Code
• "I am excited! I think that this is something very important to document and I'm glad to be part of it!" • "I am excited for it and I think that it will be fun to learn more about the veteran's experiences. It will be good for me to push me out of my comfort zone by doing in-person interviews." • "I am excited! I think that this is something very important to document and I'm glad to be a part of it!"	7	Excited
• "I am excited to interview them, however, I am still a little nervous because I want to make sure that I do a good job of telling their story."	6	Nervous and excited

• "I'm excited to learn more about these veterans and their stories. I am only a little bit nervous as to what to expect, but I think these will turn out great. It's a great time to learn and grow as a person to get out of your shell."		
• "I am just scared that I won't get their full story. I think figuring out a time will be difficult. Talking with strangers makes me a little bit nervous." • "I am quite nervous to interview a veteran I think it is the coolest thing to be able to hear about their experiences and have them open up. . . but I am still nervous.	5	Nervous
• "I think it will be a cool experience. I don't really have any reservations about it. I think it will be fun." • "I'm looking forward to the interview and the overall project now that my worry of not having a veteran is put to rest."	4	Confident

The second question that I asked was, "What can I do to help support you in this project?" The responses I got mostly indicated that they felt confident in their ability to do the project, but that they would like clear guidance of the expectations, some morale boosters along the way, and time in class to do the work. These were all good to know, and I made sure to provide what they needed.

As students settled into the process of writing, they were leaving to do their interviews, uploading their videos onto their computers so they could transcribe the interviews. They used various transcription services that offered free trials.

At this point, I also had the students find secondary sources that would aid them in telling these stories. There were two reasons for doing this. First, as a college composition class, it is required for them to learn how to find academic sources and cite them properly using MLA formatting. Secondly, this gave the students the opportunity to expand their knowledge and pursue answers to questions that may have arisen out of the interview process. For instance, if a veteran had mentioned the Tet Offensive, then the student could look up more information on that. The research was meant to help the students ground their stories in some details of the period, to build accuracy. They were required to find three sources, based on three topics that came up during their interviews. I had them write three "practice" research paragraphs, so they could

practice academic writing on a smaller assignment and learn how to cite sources properly before they moved on to the more high-stakes assignment of writing the biography.

Phase Two: During (October-November, 2023)

On October 17, I introduced the biography writing assignment. By this time, the students had all done their interviews, transcribed the videos, and done some secondary research to ground them in the details of the story. It was time to start writing the biographical stories.

Table 3: Write about your experience conducting your interview

Key phrase	Number of respondents	Code
• "Now that I did the interview, I feel a lot better about the whole assignment. It went a lot smoother than I thought and I actually had a lot of fun talking to him and learning about his past." • "I have already done my interview and it was fun and exciting. It was fun to do a activity that was outside of the classroom to get knowledge that we wouldn't necessarily learn in school." • "Not only did he give me tons of information, but he also gave some stories about his personal life. I really liked doing the interview. I think it helps unite us as a community." • "It was a neat experience and he said that it made him feel good knowing kids today are doing things like this. • "It was really cool to hear about all of the different places that he has done and all of the things that he has been able to experience. There were some moments that I could tell were harder to talk about or maybe were uncomfortable, but I just tried to make him feel better about sharing. Overall, I actually really enjoyed the whole experience and I grew a new understanding and appreciation for what these people have done for me.	19	Positive
•	0	Negative
• "I am excited to do my interview. I'm interviewing my grandpa so it's going to be very cool to learn more about him and listen to him reminisce on his past. It's a good history lesson and a way to deep dive into his	4	Not done

	past. I think he's also pretty excited to get to talk about it because it's not all the time that an opportunity like this comes up.		

We settled into a routine of me providing a mini-lesson on something that pertained to their writing, such as punctuating dialogue, using commas, using descriptive details, giving revision tips, and other lessons. Then the students had time for writing, meeting with writing partners and writing groups.

Figure 9: Meeting With Writing Partners

Table 4: Now that you have had some time to process your interview and do some research, what are your thoughts about the upcoming biography paper?

Key phrase	Number of respondents	Code
• "I am excited for it and I think it will be fun to do a different writing style. I think it will be fun to write." • "I think the paper will go well for me mostly because I have 3 stories to connect, which makes me pretty excited to start writing."	3	Excited
• "I am excited but nervous. I feel quite a bit more pressure with this paper because it is not just for me. I want to make sure that I do my veteran's story justice and make sure that it is written good."	4	Nervous and excited
• "I am really stressed and nervous because I want this to be as accurate as I can get it. I also want to make it sound professional and well-written. Mostly I just want to do well enough that it makes sense and that when I finish it, my veteran is happy with it, because he wanted to see it once it was done." • "I'm a little nervous that I won't have enough things to write about. I also think that I won't have it properly written and that it won't sound right."	12	Nervous
• "I'm not really sure how I feel. It kinda just feels like I feel for every other paper."	2	Ambivalent
• "I feel like I can write a decent paper with the information I have."	3	Confident

Once again, I asked what I could do to support them. Most of the responses included things like they just wanted to have their questions answered, they wanted plenty of time to work, and give guidance as needed. Other than those, the rest just indicated that they felt comfortable with the assignment and fully supported.

The Student Engagement Walkthrough Checklist (**Appendix A**) was used twice per week as we went through the process. They were filled out by a variety of people, including the researcher, the school principal, and a couple of colleagues who came to observe. There were eight walkthroughs, beginning on October 9, and ending on November 6, 2023. The results of the walkthroughs are shown in **Table 5.**

Table 5: Student Engagement Walkthrough Checklist

	Very High	High	Medium	Low	Very Low
Positive Body Language	3	5	0	0	0
Consistent Focus	7	1	0	0	0
Verbal Participation	3	4	1	0	0
Student Confidence	5	2	1	0	0
Fun and Excitement	2	1	5	0	0

The students ranked the highest on consistent focus, which makes sense, as most of the time they were either journaling, writing drafts, editing drafts, or meeting with writing partners or writing groups. They had a consistent focus because they were genuinely concerned about doing a good job on their papers. The lowest ranks were for fun and excitement, which also makes sense, as they were fully engaged in their work and took it seriously.

On October 27, 2023, the students were able to visit the All Veterans Memorial in town. This was not part of my original plan, but emerged as the project grew organically to have a life of its own. After the students had done their interviews, I received a phone call from one of the veterans, who was also in charge of the local All Veterans Memorial. He invited us to come to visit the memorial and see some of the artifacts that were used in war. The problem was transportation. Unfortunately, our school does not have a budget for field trips, so even just a bus trip from one side of town to the other requires outside funding. Luckily, I reached out to the Minnesota Humanities Commission to ask for funding for the bus trip, which was granted.

The trip to the All-Veterans Memorial was surreal. The students were greeted enthusiastically by a group of seven local veterans who gathered at the memorial. Because of their investment in the interview project, and the knowledge that they were going to be writing biographies, the students were extremely

engaged in the museum, interacting with the veterans, listening to stories, and fully immersing themselves in the artifacts that were on display.

While we were there, I took the opportunity to speak to a few of the veterans. One of the veterans who was involved in the planning and implementation of the museum said that this was exactly why they wanted to build it--so young people could come and learn about their history. Another woman veteran told me that it brought tears to her eyes, seeing the students actively engaged with the veterans' history, listening to their stories, and interacting with the items on display. Another veteran, who retired after twenty years of service, including both Gulf Wars, said, "This is a good learning experience for them to see what happened. . . . Especially with the current events on the news. If they're seeing that, this is good."

Figure 10: Students and veterans at the All-Veterans Memorial

Figure 11: Students reading letters from home by the Vietnam veteran who is standing right behind them

Figure 12: Students and veterans interacting at the All Veterans Memorial

Although I designed this project to see if the level of student engagement increased when they were given an authentic project with a real audience for their writing, this entire project has gone over and above my expectations. The students were genuinely interested, asking questions, and listening respectfully as the veterans told stories. On the bus on the way back to school, I asked one of the students what she thought about the project, and she said:

> I think this project is super important. We owe it to our veterans to tell their story. Our trip to the Veterans Memorial Museum added some physical visuals to the things many of our veterans told us. All in all, this has been a great experience.

The local newspaper also wrote up a feature article about this Veterans History Memorial trip, as a follow-up to their earlier article announcing the start of the project.

While I was at the Veterans History Memorial, I was invited to come and speak at the Disabled American Veterans Christmas program and dinner. The same veteran who had invited us to the memorial asked me if I would come and speak at this event and tell everyone about the project. I was honored and pleased to be asked.

On October 30, 2023, I asked the students to respond to two prompts: 1. Please share your reactions to the All Veterans Memorial and 2. Describe your level of engagement in this project. Every single student had positive, glowing responses to the trip. While this was not part of the original research project, I would be remiss if I left out some of their comments.

- "It was nice that my Veteran was there and that he had a lot of things in there from his service. I got to actually see the things he told me about and he showed me new things too. I also thought the letters were so cool. Reading them really brought you back in time and helped give a picture about what civilian life was like."

- "It was kind of cool to go back after all of these years and see it with different eyes. I think that when we went when we were younger it didn't mean as much were as this time I feel like I could actually appreciate it more. It was also so cool to see just how excited a lot of them were to share their stories and how welcoming they were."
- "I thought that the All-Veteran's memorial was very interesting, the best part though was getting to listen to the stories of the actual people there, like one guy had the letters he had written home from Vietnam displayed and it was really cool to be able to read those and also see the person that wrote them."
- "I didn't realize that there was so much in the Veterans Memorial. I also really enjoyed talking to the Veterans. It was super cool that they were there for us to talk to them."
- "I enjoyed listening to the veterans and their stories. They all had lots to say. It clearly meant a lot to them that there were young people willing to hear their stories."

There were many more glowing comments that echoed the ones quoted above. Overall, it was a wonderful addition to the project.

The second prompt in this journal asked the students to describe their level of engagement in this project. I did not give them a scale, because I did not want to give them any preconceived notions, allowing them to come up with their own descriptions. I coded their responses, as I had done before. **Table 5** lists some of the representative comments.

Table 6: Describe your level of engagement in this project

Key phrase	Number of respondents	Code
• "I think this is the most invested in a project that I have been all year because we are getting to have experiences along with writing the papers." • "I feel very engaged because I saw how much it meant to my veteran that I was telling his story. I know a lot about his story now, and just need to get it written."	16	Very engaged

• I think it's a 9.5/10. The journey is fun, and it's starting to show all the hard work we have done. The paper is coming together nicely."		
• "I think that my level of engagement is pretty normal. I've done all that's needed to be required. I've learned things from not only my person but also from the others that I've read. It makes me feel grateful for the people who've served our country so we can live a decent life." • I am decently engaged. I'm putting in the work. I could put in a little more work, but I am still doing fine."	7	Moderately engaged
• "As of right now, not very good. The paper is kind of difficult to write from what I got from my interview, so I'm struggling to figure out how I want to write it."	1	Not engaged

By the time the students handed in a draft to me, it had already gone through two drafts, which had been revised extensively by their writing partners and writing groups. The third draft, I read, graded, and handed back for revisions. This took at least a week, so during that time, the students watched a documentary called *Dear America: Letters Home From Vietnam* (1988). They also participated in a project called "Operation Gratitude," where they wrote letters to service men and women who are currently deployed. They also watched a background documentary on the history of Veteran's Day since that fell during the week. Finally, they wrote hand-written thank-you cards that would be delivered with their final drafts to their veterans.

Phase 3: After

After the project was over, and they had written their final drafts, I asked the question, "How did you feel about doing this project?" Out of the twenty-four participants, twenty-three felt it was a positive experience. Only one participant was ambivalent. Not one student indicated any negative reaction.

Table 7: Student feelings about the project.

Key phrase	Number of respondents	Code
• "It was one of the most important and coolest projects I've done. Getting to hear from and meet so many people that served our country was an honor."	23	Positive

• "I was anxious to do this project in the beginning. As we continued to work on it and go through it, I began to feel more confident. I liked this project and I felt like it pushed me out of my comfort zone." • "I have enjoyed the project. I think we have done some very important work of telling the stories of those who maybe haven't told their own." • "It was something that I will remember doing for a while." • "This project turned out to be a lot better than I thought, and it really helped me improve my ability to write quality work." • "It was fun because I have never done anything like this before."		
• "It was definitely a long process."	1	Ambivalent
	0	Negative

After the final papers were written, graded, and returned, I felt that there was a need for some closure, or celebration. This was not part of the original plan, but it is one of the things that grew organically as the project evolved. On November 21, 2023, I decided to host a morning reception with rolls, coffee, and juice, for the students and any of the veterans who could come. Not all the veterans could make it, of course, but the ones who did had a positive experience. The students read their essays aloud to each other and to the veterans. They enjoyed conversations with each other about the project. Finally, I was able to announce that we would be publishing a copy of an anthology of all their stories, and I had release forms for the students and veterans to sign. The students and veterans brainstormed possible titles for the book, which we voted on later. The students delivered their hand-written thank-you cards to their veterans and gave them a copy of the final draft of the biographical essays that they wrote. For those veterans who could not make it, we mailed them copies of the biography, their thank-you card, and the release form for the book publication.

Figure 13: Veterans' Reception

One more thing that grew organically out of the process of this project was the opportunity that presented itself for me to speak to the Disabled American Veterans Christmas party, which occurred on November 27, 2023. I was able to talk about the project, the interviews, the visit to the All-Veterans Museum, the partnership with the Minnesota Humanities Commission, and the upcoming book publication.

As I predicted when I started this project, the students were much more engaged when they had an authentic learning environment and an authentic audience. Based on the research literature that I read and from my own prior experience, I knew they would be more engaged than they would be for a regular research writing assignment. I could not have predicted just how engaged they became. It was the greatest pleasure to be able to witness this in action. As I have said, it was almost surreal, and one of the greatest moments of my thirty-two years of teaching.

After the project was over, and the students had time to process their experiences, I conducted exit interviews of three of the participants. This was when I was able to address the question of *why* the students felt more engaged. The following are some of the key phrases that came out of these interviews:

- "I felt like it was not just about me, like it was for other people, and it was their story. I wanted it to be well written for them."
- "I knew the other person was going to get it, so I wanted it to be good."
- "Like there was a different expectation for it. I didn't want to give them something that wasn't good."
- "I didn't want to write a story that wasn't the way they wanted it. I wanted to live up to their expectations. I felt like they had a thought in their head about the way they wanted it to be written, so I wanted to live up to their expectations."

Overwhelmingly, the data suggests that the fact that their writing was going to have an audience for their writing that was not just a teacher, when they are given a project that matters to someone in the real world, then their level of engagement and motivation to learn increased tremendously.

Synthesis

Looking back at all of the data that was gathered, through the journals, the field notes, photos, exit interviews, it becomes apparent that the students were initially nervous about the project. The cause of their nervousness seemed to be based on two main reasons. First, they were nervous about doing a good job and getting a good grade. These are high achieving students, who are at least a 3.0 GPA or higher. They were nervous because they were being put into an unpredictable situation. The second cause of their anxiety was because they were nervous about talking to someone. These are students who spent their formative years isolated due to Covid, and they definitely have a harder time with interpersonal communication. Many of the comments that the students made were about being "outside their comfort zone," and having to "come

out of their shell." I have a sense that this would not have been such a prevalent fear prior to 2020, although that is a subject for a different study.

The students' nervousness started to wane as they learned more about the project and became more familiar with the expectations. Many of their concerns about who they were going to interview, when, and where, and what they were going to ask were alleviated as those pieces started falling into place and the interviews started taking place.

The over-arching sense of excitement was the prevalent emotion that began early and continued to build as the students worked through this process. Getting to see the human face of their veterans and see what it meant to them to have their stories heard, paid attention to, and written, was the biggest impact of all. These students were humbled by the extreme experiences that these men and women shared, and they valued the importance of their role as writers.

The primary research question that this study set out to ask was, "Why do authentic learning experiences lead to more student engagement and motivation to learn?" The answer is quite simple. When students realize that they are doing something that has an impact on their community, or on the world at large, they realize that their voices have power and meaning. They are not just throwing down words on a page to get a grade to boost their GPA. At the end of the process, not one of the students wrote a paper that was less than "A" quality work. And not one of them cared about the grade as much as they did about doing something of value for a real person. The reward of knowing that they have written something of good quality, in addition to the reward of doing a good deed for someone else that will have a lasting impact outweighed the reward of getting a good grade in the class. When they looked into the eyes of a real human being who was being vulnerable with them, they realized the gravity of their task. I wouldn't have even had to grade these papers. I have no doubt that they would have done just as well if I had told them that the paper would not be graded at all.

The answer to the question of "why" students are more engaged and motivated to learn when they have a real problem to solve and a real audience to read their writing is simply, because it matters. If they can see the importance of a project, see the value of it, and see the connection it makes to real human beings, then they become intrinsically motivated. When the motivation comes from within, then the walls of the classroom fade away, the teacher at the front of the room steps to the side, and the students are allowed to pursue their own curiosity and their own creativity. They may not do this on their own. As was noted by the comments early in this research study, sometimes students must be pushed outside of their comfort zones. That's what the teacher is for. Authentic learning does not mean that teachers step aside and let students learn on their own. Authentic learning done right means that the teacher pushes students out of their comfort zones, provides the scaffolding to help them succeed and guidance along the way, but then ultimately steps out of the way.

Summary

Teachers in English/ language arts classes can learn from our brothers and sisters in the math, science, and language acquisition areas who have been using authentic learning strategies for a long time. Teaching writing is hard work, it is tedious, grueling, and thankless. Yes, there is some self-righteous angst that ELA teachers have in complaining about students' grammatical errors, simple sentence structures, organizational mayhem, and lack of voice. I have participated in these conversations myself. However, this can all be fixed if teachers simply would provide students with real, authentic audiences for their writing, real writing situations, and regard students as real writers, not just student writers. Once the students realize that the work they are doing matters in the world, then student engagement and motivation to learn will naturally follow. At this point, the teacher in the authentic learning classroom will recognize that sweet moment when it is time to let go. Because once you have done everything you can, teaching technique,

running alongside them, giving words of encouragement, and picking them up when they fall—once you have done all of those things, the only thing left to do is to let go and watch them soar.

In this chapter, I have described one authentic learning project in one specific classroom in one small town in Northern Minnesota. These exact circumstances can never be replicated, and that is perfectly all right. However, they can be modified, with different circumstances, to meet the needs of a variety of classroom dynamics. The following chapter will describe the ways that the findings of this study could be shared, modified, and acted upon. I would consider it the ultimate compliment to have these ideas used and reused in classrooms of all different configurations, subjects, and grade levels.

Chapter Five: Implications

Introduction

The results of this study are truly a culmination of a three-decade experiment in the practice of teaching English/ language arts. As a classroom teacher, I have tried different pedagogies over the years, experimenting with strategies that work and making mental notes of what to do and not do again. It is a practice--meaning that it is a series of informed decisions--of trial and error. I have learned that teaching *Wuthering Heights*, or *A Tale of Two Cities*, *Beowulf*, or *Canterbury Tales* is more likely to cause book-burning parties than anything Ray Bradbury might have imagined in *Fahrenheit 451*. I have learned to create assignments that are plagiarism-proof, to avoid uncomfortable meetings with parents and students. I have learned to break the class period into manageable chunks of fifteen minutes of direct instruction, fifteen minutes of activities, and fifteen minutes of independent work time. I have learned how to communicate with parents, how to discipline with dignity, how to create a positive classroom environment, what to do in a lockdown, how to manage the paper load, and so much more. None of these things has anything to do with teaching my subject, English/ language arts, but they must be done and done well in order to teach my

subject area. As a beginning teacher, I mistakenly thought that knowing my subject area and being passionate about it was the most important thing. I couldn't have been more wrong. The most important thing—in fact, the only important thing—is to engage and motivate the students through positive relationships.

I did not know any of these things as a beginning teacher, and I definitely did not learn them in my educational methods classes. After thirty years as a practicing teacher, I have honed the craft of teaching, but not perfected it. I have learned through experience what worked and what didn't, including the use of authentic learning and assessments. However, until doing this research study, I have never really stopped to consider *why* it worked. It was enough to know *that* it worked, and that was enough to keep doing it. This qualitative case study was an attempt to understand *why* authentic learning and assessments engage and motivate students.

I was driven by professional curiosity to do this study. I have used experiential learning, problem-based learning, and authentic learning projects in my classroom, and every time, I noticed that students came alive with enthusiasm and energy, much more so than when I followed the traditional model of direct instruction. This study confirmed that authentic learning works and helped me to satisfy my own professional curiosity.

This present study is professionally pertinent because, in my subject area, English/ language arts, very few studies of authentic learning have been conducted. Although I believe that many practicing teachers such as myself may have arrived at similar conclusions based on their own experiences in the classroom, there have been few research studies to corroborate this phenomenon.

Summary of Results

The purpose of this chapter is to summarize the results of the study, discuss the results of the study, discuss any conclusions based on the results of the study, address any limitations of the study, examine the

implications of the study, suggest avenues for future research, and conclude by discussing future intentions. Since I began researching this project, Nachtigall et al. (2022) has published a literature review on the conditions and effects of authentic learning. While this does not specifically address authentic learning in the ELA classroom, it does synthesize the findings of fifty different researchers who studied authentic learning and assessment. In their synthesis, they categorized four intentions of authenticity: "creating personally meaningful learning activities, emulating the work of professionals of a certain discipline, connecting learners with a community of practitioners, and reflecting experiences from real/ daily life" (Nachtigall et al., 2022, p. 1485). By combining and layering many of these intentions, a *thick authenticity* can be achieved (Nachtigall et al. (2022). Reflecting back on this present study, it seems to have a thick authenticity by having met all four of these intentions. The students had a personally meaningful activity, they were expected to emulate professional writers by writing publishable-quality work, they were connected with a community, both inside the classroom with their writing partners and writing groups, and with the community at large, with the veterans, and they reflected on real life experiences by conducting the interviews and writing the stories. Nachtigall et al. (2022) further conclude that the perception of authenticity by the students is the key to motivating them to learn. What may seem authentic to the teacher may not seem authentic to the students. Nachtigall et al. (2022) examined and synthesized research studies on authentic learning from all age levels from pre-school to adult, from all over the world, and from several different subject areas, including: 21 STEM, 10 language, 9 social sciences, 8 vocational training, and 2 other (p. 1496). English/ language arts was not a subject of authentic learning in any of the research studies. Even after thoroughly examining and coding fifty different research studies, Nachtigall et al. (2022) describe authenticity as: "a 'secret sauce' when it comes to designing promising learning settings, with *secrecy* being reflected in the fact that many studies investigating the effects of authentic learning only implicitly describe their definition and operationalization of authenticity" (p. 1507). Authentic learning works. Fifty different

research studies from all over the world and with different age levels and subjects prove that. However, *why* it works is still a mystery.

This study fills two gaps in the literature. First, there are very few research studies that examine the use of authentic learning and assessments in English/ language arts classes (Nisa, et al., 2017, Setawian & Islami, 2020, Syaifuddin, 2018). The only study I found that used an English/ language arts classroom actually used the 5E model that is often used in science classrooms: "engage, explore, explain, extend, evaluate" (Jeter, et al., p. 1). Secondly, and I believe most importantly, this study attempts to answer the question of *why* authentic learning works. In my review of the literature, I did not find a single study that set out to examine *why* it worked. The pursuit of this question could have far-reaching implications. It is my hope that this may be the start of a wave of research. It would give me great satisfaction if future researchers would take this question and press it even further, to unearth the reasons why authentic learning works.

This qualitative case study found that when students were given the authentic assignment of interviewing military veterans for the purpose of archiving their stories, they felt fully engaged in the process and motivated to do well on their biographical essays. The students felt some nervous energy at first, because they had never interviewed anyone before, and many felt some communication apprehension. After the interviews were conducted, the nervous energy shifted. Instead of being nervous about conducting the interview, they became nervous about doing a good job with their writing, so they could honor the veterans. This shows a shift from self-centered thinking to other-centered thinking. At first, they were nervous because they were personally uncomfortable, and felt pushed outside of their comfort zone. Later, they were nervous because they wanted to write a quality paper, so they could give it to someone else who is personally invested in it.

As they moved through the stages of the project, the level of engagement continued to grow. Many indicated that they were excited because they felt that they were doing something that was important, that

mattered, and that would have a lasting impact. These results matched my expectations and predictions. Since I have used authentic learning projects in my classroom before, and since the research literature supported it, I expected the students to be fully engaged and motivated to do well on this assignment. In fact, the students' level of engagement and motivation exceeded my expectations. However, my research question was meant to uncover the reasons why it worked.

Discussion of the results

After careful coding of the data from the participants' journals, from field observations, and from the exit interviews, I can conclude that the reasons why students were engaged and motivated, at least in this bounded case, were twofold. First, they were engaged because they were writing about a real person, and they felt a personal obligation to do a good job for the sake of their veteran. Secondly, they were motivated to do well because they had the sense that they were doing something that was bigger than a mere classroom assignment and would have a lasting impact on the world at large.

These conclusions are consistent with Lave and Wenger's (1991) Situated Learning Theory, in which the learning is specific to the context. Students construct meaning together, with the guidance of a community, including the more knowledgeable teacher, but also community members, each other, and outside resources, much like apprentices learning on the job. It is also consistent with Kolb's (1984) Experiential Learning Theory, which also involves students constructing knowledge in a context. In this case, knowledge is created through experiences. The results of this study are consistent with these two learning theories. The students were engaged and motivated because they were participating in a legitimate experience, in the context of a community.

Conclusions Based on the Results

Comparison of the Findings with the Framework and Previous Literature

Based on the extensive literature review that I did in preparation for this project, I found that authentic learning strategies and assessments were mostly studied in classes such as science, math, and language acquisition (Nachtigall et al., 2022, Nisa, et al., 2017, Setawian & Islami, 2020, Syaifuddin, 2018, Winarso, 2018, Viro, et al., 2020, Novak & Wisdom, 2018) In classrooms of all varieties of ages, subjects, and geographic locations, the effects of authentic learning on student engagement and motivation have been consistent (Nachtigall et al., 2022, Hasrawati, 2020, Gunes, 2020, Jeter, 2019). The research has proven that it works. The present study is consistent with the findings of previous researchers, who have resoundingly found that when students perceive that an activity has authenticity, they are much more motivated to learn. It was not surprising that the present study found that providing *thick* authenticity (Nachtigall et al. (2022), meaning that students perceived authenticity on multiple levels, inspired student motivation. This study's findings are consistent with the depth and breadth of the existing research studies.

Interpretation of the Findings

This present study used a constructivist paradigm, to study a specific case and construct meaning from it. Creswell and Poth (2018) define a constructivist paradigm as the presence of "multiple realities constructed through our lived experiences and interactions with others" (p. 35). The qualitative case study methodology was chosen in order to gain a full understanding of the whole picture (Merriam & Tisdell, 2016, Creswell & Poth, 2018). In this case, the research study was conducted on a group of high school seniors who were enrolled in a college-in-the-high school (CIHS) composition class. The study was conducted in a classroom in a small town in Northern Minnesota. Because of the nature of qualitative research studies, the results are bounded by the specific time and place and are therefore not replicable (Merriam & Tisdell, 2016). However, they are transferable to other classroom situations of all types. Other

teachers may read this study and decide to transfer it to their own classrooms. “It is the practitioner, rather than the researcher who judges the applicability of the researcher’s findings and conclusions, who determines whether the researcher’s findings fit his or her situation” (Fraenkel, et al., 2019, p. 392). It would be professionally gratifying to me to see other researchers transfer the conceptual framework of this study to different classrooms, including a variety of ages, subject matter, and projects.

Limitations and Delimitations

One of the limitations of the study is that it was a qualitative case study and therefore not replicable. This class was made up of mostly White, middle-class, high-achieving students. Would a different demographic mixture have yielded different results? Also, this group of students spent their formative years in quarantine during Covid, so their levels of anxiety when faced with a social situation that is outside their comfort zone was possibly higher than another demographic would feel.

If I were to do a similar case study again, I would consider having an outside observer, such as a student teacher or other adult, as a notetaker, taking field notes, photographs, and filling out the Student Engagement Walkthrough Checklist. There was potential for bias, as I was both the researcher and the classroom teacher. If these roles could be separated, it might lead to different results. As their classroom teacher, students may have been motivated by wanting to please me, which may have accounted for some of their excitement. They also may have been influenced by knowing that they would be graded on the assignment. If the researcher were not their teacher, then the dynamic of students wanting to please their teacher would be removed, as well as any anxiety they might have felt over getting a good grade on the assignment.

This study also had some interesting delimiters that may have contributed to the results. One such delimiter that I had not predicted was the amount of social anxiety these students had when they anticipated having a thirty-minute interview with an older adult who was not known to them. I attributed this high level

of social anxiety to the fact that these students were in their formative years during the Covid quarantine. Being isolated probably kept these students from having meaningful social interactions while they were young, so they did not learn the skills or gain the confidence to face unknown social events. Also, it is possible separation from older adults during Covid may have created some trepidation or fear of strangers of an older generation. The level of social anxiety was an unanticipated twist to this study that added some complexity.

Another delimiter was the writing quality improvement that came out of this project. As both the teacher and the researcher, I had the opportunity to know the level of writing skill that these students had prior to beginning this project. I had already assigned and graded one essay by these students. The average grade on their first essay was 85%, while the average grade on the last essay was 100%. It is a College Writing class, so the learning objective includes learning how to write. However, I have taught this class for twenty-two years, and I have never had an entire classroom of students earn 100% on any writing assignment. Again, this was not an intended outcome of the research study, but it does demonstrate that when students are engaged and motivated to learn, then their skill level increases in tandem. As the students themselves commented, their nervousness about the writing element of the project stemmed from their desire to write something of quality for their veterans. This motivation derives from a much deeper drive than just intrinsic versus extrinsic rewards. When the students felt that they were writing something for someone else, they tried harder and cared more about the quality of the writing than when they were just writing for a grade for themselves. In other words, when their hearts were involved, and not just their heads, and when they were doing acts of service for someone else, they tried much harder than when the reward was simply to get a better grade. This was not an intended outcome of the study, but a very pleasing result, leaving me with a feeling of hope for humanity and for the next generation.

Implications of the Study

This study's findings were consistent with the findings of other researchers from all over the world, using any variety of subject matter, age level, or geographic location. In short, when students feel that their work matters to someone outside of the school, or has real-world connections to the community, then they feel more engaged in the process and willing to learn (Hasrawati, 2020, Jeter et al, 2019, Gunes et al., 2020). This consistency is not surprising, because over the years, as I have attempted to utilize more and more authentic learning strategies, I have observed this phenomenon consistently as well.

The observations that I made in doing this study are consistent with the Situated Learning Theory. Lave and Wenger's (1991) Situated Learning Theory posits that learning is situated within a context. Students can learn from more knowledgeable others, by being in a learning context in which they can interact socially with a group to solve a problem. Through engagement, social interaction, and juxtaposition with old timers or masters, students are fully engaged and actively participating in their learning. This research study used small groups of young writers working alongside the more knowledgeable and older veterans to try to understand a piece of history so they could write it and produce a publishable product. Authentic learning is situated in a context, and learners create knowledge by sharing and putting their heads together to solve a problem. In this case, they were working together with their peers to create the best possible written version of someone else's story. The reason it worked was because it mattered to someone else. Authentic learning does increase student engagement and motivation to learn. This study attempted to answer the question of why that is the case. The resulting answer is not really that surprising: because it matters. Period.

When students are involved in an authentic project, they feel excited and engaged, and teachers can sense this. Teachers, for the most part, also embrace the idea of authentic learning (Viro, et al., 2020, Aksela & Haatinen, 2019, Novak & Wisdom, 2018). So then, the question is, if students enjoy learning this way,

and teachers embrace the idea and know that it works, then why aren't more classrooms utilizing authentic learning techniques?

The practical implication here is not necessarily the result of the study. How can this study contribute to the practice of teaching? Although authentic learning does increase student engagement and motivation to learn, direct instruction is still the model that is used in most classrooms because it is efficient, familiar, and simple. Teachers are overworked, with large class sizes, limited resources, and inadequate preparation time. Utilizing direct instruction is a survival tactic, and no one can blame them for trying to survive. As Herrington and Oliver (2000) pointed out, while the theories such as the Situated Learning Theory are easy to understand and make sense, *in theory,* putting them into practice poses some practical challenges, including time, money, and support. By far, the greatest implication of this study is that teachers need more time to prepare, more time for training and collaboration, and more financial and moral support from administration and the communities. Teachers cannot do this alone, and blaming teachers is not helpful when they are doing the best that they can.

Other stakeholders such as administrators, school boards, legislators, and voters tend to blame teachers when students are unsuccessful. Adding more standardized tests, state standards, requirements for re-licensure, and rigid rules takes away the teacher's ability to be creative and to utilize authentic learning activities. The implication here for everyone involved is to trust the educators to be the professionals that they are.

Recommendations for further research

An opportunity for future research might involve having students interview Native American elders, nursing home residents, local farmers, first generation immigrants, or health care workers who worked during the Covid pandemic. It would be interesting to see if the same results could be achieved if the demographic were different. It may also be interesting to see if a different group of students, such as

older, younger, or a class of mixed abilities would yield the same result. Other authentic learning projects that can be done in the English/ language arts classroom could include doing a community read, community action research paper, poetry readings, and reading to younger classes, could also be studied to measure students' level of engagement and motivation to learn. I have personally used all of these assignments in my classroom over the years, and I have seen that students do seem much more motivated and engaged when given authentic learning projects.

It would be possible to use a control group with one section of the class doing a traditional research paper and another section doing a more authentic topic for their research paper, but that would not be fair to the control group. If it is anticipated that one group would be much more engaged and motivated than the other group, it is unethical to subject an entire section to doing a traditional research paper just to prove a point.

Conclusions

The research question that began this journey was simply the question of why:

- Why does authentic assessment affect students' engagement and motivation to learn in English/ language arts classes?

To answer this question, I began by doing a deep dive into the research literature. The number of studies that have been conducted on authentic learning and assessments since Lave and Wenger's (1991) publication is truly overwhelming. Consistently, the research has shown that giving students real problems to solve, with real audiences for their writing results in a consistently higher level of student engagement and motivation to learn than when they are given regular classroom assignments. When the assignment is relevant to the students' real lives, when it is something that they want to do, and when they have some autonomy in doing it, they will engage.

This research study added to the existing research studies in two important ways. First, it used the context of an English/ language arts classroom, which makes it unique. The results show similarities to the results of other studies that used other subject areas. This proves that authentic learning works, no matter what the subject matter is. This was not surprising, as the evidence was consistent with the evidence of other studies. Secondly, this study set out to answer the question of *why* authentic learning works. This brings us back to the oft-repeated question that angsty teenagers ask, "Why do we have to learn this?" The answers that teachers give, "Because it's a classic," "Because it's good for you," "Because it's required" no longer satisfy, if they ever did. Instead, give students a real problem to solve, teach them the skills they need to solve the problem, provide support and guidance as they work through it, and let them rise to the occasion.

We don't know what the future is going to look like, but we do know that it won't look anything like the past. The old days of a teacher standing in front of the room lecturing to rows of students dutifully taking notes are gone. If we truly want to prepare today's learners for tomorrow's challenges, then we need to change to a more authentic learning model.

Imagine a future classroom in which the walls fade away. Students are outside, involved in inter-generational problem-solving. Students will themselves come up with projects that meet the outcomes that are required for proficiency. Teachers will feel supported and feel comfortable stepping away from their podiums and standardized tests. Community members will come to the school with real problems that need to be solved, and students will put their heads together to try to solve them. In other words, the classroom instruction of the future will cease to fit the mold of classrooms from the past and instead will be using the world as their curriculum, *getting real.*

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Appendix A

Name of Evaluator:_____Date:_____

Student Engagement Walkthrough Checklist

OBSERVATIONS

	Very High	High	Medium	Low	Very Low
Positive Body Language	❑	❑	❑	❑	❑
Students exhibit body postures that indicate they are paying attention to the teacher and/or other students.					
Consistent Focus	❑	❑	❑	❑	❑
All students are focused on the learning activity with minimum disruptions.					
Verbal Participation	❑	❑	❑	❑	❑
Students express thoughtful ideas, reflective answers, and questions relevant or appropriate to learning.					
Student Confidence	❑	❑	❑	❑	❑
Students exhibit confidence and can initiate and complete a task with limited coaching and can work in a group.					
Fun and Excitement	❑	❑	❑	❑	❑
Students exhibit interest and enthusiasm and use positive humor.					

Observations:

Comments: