#### Northern Michigan University

### **NMU Commons**

All NMU Master's Theses

Student Works

3-2019

# Authentic Learning in a Middle School Classroom: A Case Study

Andrea Ballard aballard@nsacd.com

Follow this and additional works at: https://commons.nmu.edu/theses



Part of the Education Commons

#### **Recommended Citation**

Ballard, Andrea, "Authentic Learning in a Middle School Classroom: A Case Study" (2019). All NMU Master's Theses. 587.

https://commons.nmu.edu/theses/587

This Open Access is brought to you for free and open access by the Student Works at NMU Commons. It has been accepted for inclusion in All NMU Master's Theses by an authorized administrator of NMU Commons. For more information, please contact kmcdonou@nmu.edu,bsarjean@nmu.edu.

### AUTHENTIC LEARNING IN A MIDDLE SCHOOL CLASSROOM: A CASE STUDY

By

# Andrea Ballard

#### **THESIS**

Submitted to
Northern Michigan University
In partial fulfillment of the requirements
For the degree of

**EDUCATION SPECIALIST** 

Graduate Studies Office

2019

# SIGNATURE APPROVAL FORM

This thesis by Andrea Teresa Ballard is recommended for approval by the student's thesis committee in the Department of Education and the Dean of Graduate Studies.		
Christi Edge, Ph.D.	Date	
Bethney Bergh, Ph.D.	Date	
Melanie Reaves, Ph.D.	Date	
Department Head: Joseph M. Lubig, Ed.D.	Date	
Dean of Graduate Studies: Lisa Eckert, Ph.D.	Date	

#### Abstract

The purpose of this case study is to explore and investigate how authentic learning is experienced in a middle school classroom within a K-12 public charter academy in the rural Midwestern United States. This was a qualitative case study, which allowed the researcher to observe the phenomenon of authentic learning as it unfolded in the classroom. The term authentic learning describes student-directed learning that involves real-life problem solving in unique contexts, over an extended period of time (Rule, 2006). The study follows a teacher's journey through planning, implementing and reflecting on authentic learning and teaching. The case study also identifies responses from students' experiences who participated in authentic learning, as well as the perspectives of the parents and their understanding of the learning that was occurring in their child's classroom. The means by which the students and teacher co-construct learning are studied, along with the struggles, successes, and negotiations of implementing and maintaining an authentic model of education. Two significant benefits and one challenge of authentic learning were identified through this study. The interpretations established through this study will be used to guide further instructional practices at the middle level in this particular public charter academy.

# Copyright by

Andrea Teresa Ballard

2019

#### Acknowledgements

The author would like to thank the following:

Dr. Christi Edge for her support and feedback during this extended thesis writing process.

Dr. Melanie Reaves for inspirations and guidance as I was beginning my study and shaping my research.

Mr. John Gillette for welcoming me into his classroom and working with me to construct knowledge and gain a better understanding of learning and teaching.

Husband, WIlliam Ballard, and children, Lucas and Dylan, for their support, encouragement and for always putting up my long hours of work.

This thesis follows the format prescribed by the APA Publication Manual and the Department of Education, Leadership, and Public Service.

# **Table of Contents**

Abstrac	t	i
Acknow	vledgements	iii
Table of Contents		iv
List of Figures		vi
Chapter I: Introduction		1
\$	Statement of Purpose	1
\$	Statement of Problem	1
]	Research Questions	3
]	Definition of Terms	3
,	Theoretical Framework	6
(	Chapter Summary	6
Chapter II: Review of Literature		8
(	Overview of the Study	8
]	Background, Characteristics and Benefits of Authentic Learning	8
(	Challenges of Authentic Learning	10
1	Authentic Learning as a Form of Constructivist Education	12
]	Modeling Authentic Learning in Schools	13
(	Chapter Summary	14
Chapter III: Methodology		15
(	Overview of the Study	15
]	Role of the Researcher	15

Participants and Setting	16
Data Collection	17
Data Analysis	20
Chapter Summary	21
Chapter IV: Results and Analysis of Study	
Overview of the Study	22
Observation Results	22
Student Perceptions	23
Parent Perceptions	25
Teacher Perceptions	26
Significance of Findings and Chapter Summary	28
Chapter V: Discussion and Conclusion	
Overview of the Study	29
Discussion	29
Recommendations and the So What?	32
Conclusion	34
References	36
Appendix A:	39
Appendix B:	40
Appendix C:	
Appendix D:	

# **List of Figures**

- Figure 1: Example of Handwritten Observation Notes
- Figure 2: Example of Student Interviews
- Figure 3: Example of Teacher Interview
- Figure 4: Example of Student and Parent Survey Data
- Figure 5: Example of Open Coding the Three Perspectives
- Figure 6: Percentage of Student Perceptions
- Figure 7: Percentage of Parent Perceptions
- Figure 8: Teacher Perceptions and Rankings

# Chapter 1: Introduction of Authentic Learning and Purpose of Study Statement of Purpose

The purpose of this study is to explore and investigate how authentic learning is experienced in a middle school classroom through the lenses of the student, parent, and teacher perspectives. The case is important because it serves as a means for developing a better understanding of the factors that contribute to the benefits and challenges of authentic learning and teaching in the classroom. The results of this study will be used to inform my school's perspectives in relation to the benefits and challenges associated with developing innovative instruction in the middle school classroom through the depiction of the perspectives of middle school students who have been learning in an authentic manner, their parents, and the teacher who has been supporting authentic learning in his classroom. This particular case study focuses on how students, parents and teachers experience authentic learning in a middle school classroom and how that information may be used to support future decision making within my school.

#### Statement of Problem

Since the late 1800s, the emphasis on alternative approaches to classroom education and instruction have been prevalent discussion topics in many schools and among several educational scholars such as John Dewey and Maria Montessori. Dewey suggests that progressive education should consist of active learning rather than passive learning, which builds upon individual experiences instead of top-down forcing (Dewey, 1938). In addition, Montessori recommends schools provide an education for students that is based on movement within a structured environment (Montessori, 1995). As a principal and curriculum director, I am constantly striving

to identify best practices for instruction at my school and for my students. My role as an educational leader includes my responsibility for assuring families that their children are receiving a quality education, which will meet each student's individual needs and prepare each student for success in their lives beyond K-12 education. Michigan (2013) Standard 1.2 reminds school leaders that they must be able to understand, collect and use data to identify "district goals, assess organizational effectiveness, and implement plans to achieve school goals" (p. 5). Beyond that, I believe that gathering stakeholder perspectives is an essential component in developing an educational program that successfully supports our learners. Stakeholder perspectives have the potential to assist in transforming education (Nicaise, Gibney, & Crane, 2000).

Research suggests that as students move from elementary programs to secondary programs, their lack of motivation and interest in school declines greatly (Anderman & Midgley, 1997). According to Collier (2015), research has established that children's' levels of motivation and engagement in school drastically decrease as they enter their teenage years. As a K-12 principal, I am passionate about identifying further investigation which supports ways in which educators can increase motivation for students as they transition into middle school and through the remainder of their secondary educational experience. Therefore, studying authentic learning in a middle school classroom will assist me in establishing my understandings of how this type of learning and teaching is being experienced by the students, parents, and teacher. The study will not only the identify the perceived benefits, but also the challenges and adversities of implementing authentic learning opportunities within a secondary classroom. "By identifying problems with the way learning experiences are structured, researchers and educators may begin

to identify solutions," (Nicaise, Gibney, & Crane, p. 80, 2000). The study will serve as point of reference in determining the extent to which this approach provides effective results for the culture of my school and the success of our students. Further, this study has the potential to be expanded to study the effects of authentic learning on the motivation of secondary students.

According to Symonds, Schwartz and Ferguson (2011), there is increasing evidence that our country's most recent graduates are not fully prepared with the skills and work ethic needed to be successful in college or career opportunities in the 21st century. Certain universities are even adopting authentic learning practices as a means for putting the focus back on the learner and improving the way they absorb and transfer knowledge (Lombardi, 2007). Therefore, it is imperative that as educators we continue to study our instructional practices and our approach to education at the middle and high school level, so that we may better advocate for our students and their futures. Through the observation of how a teacher, students, and parents experience authentic learning, I will begin the process of gathering information needed to assist in determining the most critical areas of need for our students in the 21st century. This study will identify whether or not 21st century skills are being taught through authentic learning in this particular middle school classroom.

#### Research Questions

How is authentic learning experienced in a middle school classroom?

- What are the experiences/reflections of the teacher designing, implementing and monitoring authentic learning?
- What are the experiences/reflections of the students participating in authentic learning?
- What are the parents' perceptions of authentic learning in their child's classroom?

#### **Definition of Terms**

For the purpose of this study, the following terms are defined:

<u>Authentic Learning</u> is a term used to describe a process of student-directed learning which involves

open-ended inquiry and real life contexts or application (Rule, 2006). Authentic learning promotes complex problem solving skills, collaborative working relationships, and increased student engagement. "Authentic learning is learning designed to connect what students are taught in school to real-world issues, problems, and applications; learning experiences should mirror the complexities and ambiguities of real life. Children work towards production of discourse, products, and performances that have value or meaning beyond success in school; this is learning by doing approach" (Pearce, 2016). Authentic learning is the process in which the learner constructs knowledge through the use of disciplined inquiry in a student-centered environment.

<u>Experienced</u> refers to the act of participating or obtaining knowledge through observation (Merriam-Webster, 2019). Students, parents and the teacher will gain knowledge of authentic learning through process of participation and/or observation.

Project-Based Learning refers to an approach to learning consisting of innovative strategies that strive to prepare students with 21st century skills through the use of student directed learning and open-ended inquiry. "Students drive their own learning through inquiry, as well as work collaboratively to research and create projects that reflect their knowledge. From gleaning new, viable technology skills, to becoming proficient communicators and advanced problem solvers, students benefit from this approach to instruction" (Bell, p.

- 39, 2010). Project-based learning is an approach to learning in which a culminating project is presented by students to signify understanding of concepts and learning.
- 21st Century Skills consist of the most prevalent skills that students need to become proficient in before graduating from high school in order to be successful in the postsecondary realm.
  Although the exact skills vary greatly based on the source referenced, most experts agree that the following skills play an important role in ensuring students are prepared for life beyond graduation: collaboration, critical thinking, and problem-solving skills (Rich, 2010). The National Education Association (2019) has determined that the "Four Cs" are the most important in defining 21st Century Skills. The "Four Cs" are critical thinking, communication, collaboration, and creativity (NEA, 2019).
- Constructivist Education maintains theory that students construct knowledge based on their previous understandings and information (Brader-Araje, 2002). The constructivist pedagogy indicates that learning is an active process of making meaning. "Teachers are typically acutely aware of the role of prior knowledge in students' learning, recognizing that students are not blank slates or empty vessels waiting to be filled with knowledge. Instead, students bring with them a rich array of prior experiences, knowledge, and beliefs that they use in constructing new understandings" (Brader-Araje, p. 4, 2002).
- Montessori Approach is a constructivist approach to education that was developed by Dr. Maria Montessori in the early 1900s. The Montessori approach emphasizes multi-age groupings of students, the teacher assuming the role of guide or facilitator, a prepared environment, and student freedom in their learning (Edwards, 2002). The Montessori Approach utilizes sequential and progressive materials to teach specific concepts and information, as well

as to support student inquiry and exploration.

Active Learning is an instructional practice that actively engages students in learning. "Active learning requires students to do meaningful learning activities and think about what they are doing" (Prince, p.1, 2004). Unlike traditional instructional models where students passively obtain information from the teacher, the active learning model actively engages students in obtaining information and guiding their learning.

#### Theoretical Framework

The theoretical framework underpinning this study is based upon the Social Constructivism theory. A constructivist theory of teaching and learning allows for the teacher and students to construct meaning through a shared experience. Which means that in this type of framework, the researcher must rely on the views and experiences of the participants to establish meaning (Creswell, 2013). This research is conducted as a continual process that relies heavily on the feedback that is received from the students, parents, and teacher. The entire focus of the study will be on the perspectives of the students, parents and teacher to assign meaning to the practice of authentic learning and teaching in a middle school classroom. In this case study feedback and communication is gathered through interviews and surveys.

Understandings of the learning process are collaboratively and socially constructed between the teacher and the students, whereas the researcher takes on a role of observer and interpreter. Similar to constructivist education where a teacher assumes the role of facilitator or guide. "The task of the educator is not to dispense knowledge but to provide students with opportunities and incentives to build it up," (Ultanir, p. 197, 2012). As the researcher, I provided opportunities to collect the experiences and perspectives of the participants which was used to

establish deeper understandings of authentic learning and build a foundation for future decision making. Open-ended and non-leading questions were presented to allow participants to express themselves in their natural life setting and experiences (Creswell, 2013).

#### Chapter Summary

Constructivist learning is the foundation upon which authentic learning was developed. This form of learning re-defines the role of the teacher and students within the learning process. Authentic learning establishes a learning environment that is more student-centered. Ultanir (2012), suggests that in the 21st century classroom there is a greater need for more of a learner-centered environment, and less of a teacher dominated environment. This study focuses on identifying how students, parents, and the teacher perceive authentic learning in a middle school classroom. The terms defined above will be used throughout the study and may be used to support the phenomenon of authentic learning, as well as assist in establishing a better understanding of how this type of education is experienced through the study.

#### **Chapter 2: Review of Literature**

#### Overview of the Study

The goal of this study was to identify how authentic learning is experienced in a middle school classroom through the perspectives of the students, parents, and teacher. The research was conducted in a middle school classroom consisting of 37 seventh and eighth grade students at a small public charter academy. The middle school classroom was purposely selected for the study based on the type of teaching and learning that was occurring. The students and teacher were observed in their normal classroom during the regular school day. Along with conducting observations, interviews of the students and teacher, as well as surveys of students, parents, and teacher were utilized to establish data and determine specific perspectives of this example of authentic learning.

#### Background, Characteristics and Benefits of Authentic Learning

Authentic learning is a relatively new term in education, dating back approximately three decades to the early 1990s (Rule, 2006). The term "authentic learning" has the ability to encompass a multitude of learning strategies and educational practices based on the source. For this particular study, I will utilize the following description of authentic learning: a process that refers to a multidisciplinary environment of learning that focuses on solving real-world problems over sustained periods of time (Lombardi, 2007). This type of learning focuses on establishing in-depth understandings of concepts, rather than rote memorization. In conjunction with 21st

century skills and needs, the emphasis on education has drastically shifted from memorization of concepts to the development of skilled competencies and problem solving skills (Guliker, Bastiaens, & Martens, 2005). Therefore, establishing the concept of authentic learning.

"For authentic learning, students must exercise higher levels of thinking" (Rule, 2006, p.1). In authentic learning classrooms, teachers challenge students to dig deeper and solve relevant problems in a student-centered environment. The role of the teacher is less of an authoritarian and more of a co-collaborator. This form of learning decentralizes the teacher, forcing students to take a more active role in learning and teachers to take a more facilitative role (Ultanir, 2012). Another commonality of authentic learning is that it typically spans multiple disciplines and provides a greater opportunity for students to have more control over what and how they learn (Stamps, 2004). Interest-based learning also provides the platform for further inquiry and investigation within authentic learning. Relevance and choice in student learning has been shown to increase knowledge and solidify understanding (Rule, 2006).

Many alternative and constructivist forms of learning have the potential to fall under the umbrella of authentic learning; including project-based learning, problem-based learning, and active learning. To be considered an authentic form of teaching and learning the instructional process must include the following elements of authentic learning: real-world relevance, undefined problems, extended investigation, access to diverse resources, collaboration, cross curricular, and integrated assessments (Lombardi, 2007). Although the concept of authentic learning is broad and may consist of various instructional components, it will always include an underlying theme of increasing student engagement through the use of meaningful and student-directed learning. Project-based learning is characterized by constructivist inquiry,

collaboration and communication around real-world practices (Kokotsaki, Menzies, & Wiggins, 2016). Problem-based learning challenges students to dive deep into problems while simultaneously obtaining knowledge and providing solutions (Stepien & Gallaghar, 1993). Both practices provide meaningful experiences for students and encompass the unique attributes which align with authentic learning. Research shows that the more meaningful learning is for students, the greater the desire to learn will become (Stamps, 2004).

#### Challenges of Authentic Learning

The majority of middle schools today still consist of a traditional curriculum focusing on core academic classes and a few general electives (Csikszentmihalyi & Rathunde, 2005). Certain critics suggest that middle school is only preparing students for the prescriptive environment of school rather than life (Kervin & Mantei, 2009). Yet some teachers struggle to step away from the traditional and prescriptive realm of instruction and explore the potential of authentic learning in their classrooms. There are several components of authentic learning which are challenging and unnatural to many educators, such as their specific role in the classroom. For example, in a traditional classroom the role of the teacher is one of lecturer, director and holder of the knowledge. However, the role of the teacher in the authentic learning classroom is that of facilitator, guide, resource gatherer, and co-collaborator of knowledge (Stamps, 2004). Teachers must transition from "disseminator of knowledge to coach, resource procurer, and mentor" (Renzulli, Gentry, & Reis, 2004, p. 74). The traditional order of instruction is reversed and learning is given an authentic meaning by the student rather than the teacher. Students assume a more active role, whereas the teacher then assumes a supportive role in the classroom.

Authentic learning also challenges teachers to transition from compartmentalized subject

instruction to interdisciplinary instruction. Learning is integrated into daily life in order to assist students in understanding concepts and making connections. Traditional instruction divides subjects into specialty areas to make daily instruction easier for the teacher rather than providing students with opportunities to make deeper connections to their learning (Nicaise, Gibney, Crane, 2000). Teachers using an authentic learning model must structure their instruction around authentic tasks, rather than goals of the educator. Teachers need to provide a flexible environment where they are able to support students in individual needs and courses of study. Most secondary classrooms are scheduled to last for an hour or less time in which one subject is covered during that time. Authentic learning is typically needs longer blocks of work time to allow for flexibility and individual discovery (Kokotsaki, Menzies, & Wiggins, 2016). Teachers who have the ability to offer authentic learning and teaching in their classrooms must also be able to support meaningful opportunities for critical thinking and problem solving in unique contexts (Maina, 2004). Providing extended time and opportunities for students to dig deeper into content, will assist students in establishing higher level thinking and reasoning skills.

Teachers are not the only ones who find challenges with authentic learning. According to Maina (2004), students that struggle to forego their view of the teacher as the holder of the knowledge tend to be less successful in an authentic learning environment. It requires a shift in thinking among students from viewing the teacher as holder of all the knowledge, to a role which consists of a facilitator of their learning. Often times there are students that are unable to adjust to the role reversal within the classroom. Some students in an authentic learning environment may lack the necessary skills to manage their time effectively and therefore, struggle in self-management strategies. To be successful in this type of learning environment, students must

reframe their current perceptions of learning and learn how to learn in a new way (Kokotsaki, Menzies, Wiggins, 2016). Asking students to redefine what they know about learning and how they personally learn at the secondary level can be both challenging and scary for children.

Most students receiving a public education have only been exposed to a traditional education experience. Unlike most traditional classrooms, students in an authentic learning environment are encouraged to engage in higher levels of thinking and and more complex problem solving (Rule, 2006). Diving deeper into content and inquiry provides meaningful opportunities for students to collaborate around the construction of knowledge (Kervin & Mantei, 2009). In order for students to excel in this type of learning environment they must be motivated to learn in a collaborative manner and co-construct knowledge with their teacher and peers. Students must then learn to work cooperatively to be successful in an authentic learning classroom.

#### Authentic Learning as a Form of Constructivist Education

Constructivist education identifies the learning process as an opportunity to learn through doing, in which the learners are active participants of obtaining information. According to theorists, constructivist learning consists of active learners participating in collaborative learning in a student-directed environment (Ultanir, 2012). Constructivist education encompasses authentic learning through the use of meaningful experiences and inquiry-based exploration. Authentic learning as a form of constructivist education provides opportunities for learners to construct meaning in an environment where the teacher assumes the role of facilitator or guide. "The task of the educator is not to dispense knowledge but to provide students with opportunities and incentives to build it up" (Ultanir, 2012, p. 197). Authentic learning falls under the umbrella

of constructivist education due to its emphasis on student-centered learning environment, which focuses on a collaborative process for developing understanding and assigning the roles of both the teacher and students within the classroom.

#### Modeling Authentic Learning in Schools

There is limited research identifying schools that have attempted to implement a form of authentic learning within their communities. The majority of the schools that have adopted authentic learning components typically structure their programs around a project-based or problem-based learning model. However, Bret Harte Middle School in Oakland, California provides its students an opportunity to engage in authentic learning through the use of interest-based enrichment instruction (Renzulli, Gentry, & Reis, 2004). At this school, multi-age students meet weekly for a block of time to study a topic of interest and apply their expansive knowledge in authentic learning situations (Renzulli, Gentry, & Reis, 2004). Another middle school teacher in Mississippi incorporates interest-based authentic learning to their program on a smaller scale. One day a week this particular middle school teacher allows for students to spend the entire day working on a topic of interest to them. This teacher has concluded that this particular practice has resulted in the students working much harder and longer than they would if she would have assigned them a specific topic of her choosing (Stamps, 2004).

A charter school in Chicago, Illinois offers an authentic school-wide environment for students by providing a blended learning school with interconnected classrooms, called "pods," where students are encouraged to collaborate as well as participate in individualized instruction (Toporek, 2015). The Chicago-based school is "designed to use different areas within each

classroom for different styles of learning-from traditional, teacher-led instruction to small-group collaboration and digitally based personalized learning" (Toporek, p. 3, 2015). A high school in California has also participated in a school-wide reform involving authentic learning. This school has been successful in connecting all relevant coursework with real world applications in specific workplaces (Roger-Chapman & Darling-Hammond, 2013). This form of authentic learning utilizes unique and relevant environments to engage students in meaningful ways.

In many cases charter schools are leading the charge in providing authentic learning, due to their increased freedom in designing their own curriculums. Many of these schools provide an authentic learning experience through a project-based or problem-based model of learning. Wurdinger et al.(2007) wagers that more than 2,000 schools in the United States utilize an authentic form of learning. Various charter schools across the country including EdVision Schools, The Big Picture Schools, and Learning Outward Bound offer authentic curriculums which revolve around interest-based learning and student-centered formats (Wurdinger et al., 2007). However, the United States is not the only country adopting authentic learning practices in its schools. A school for 14 and 15 year old girls in Israel that has found increased student success and motivation through the adoption of a project-based learning environment (Kokotsaki, Menzies, & Wiggins, 2016).

#### Chapter Summary

Authentic learning is a change in thinking for many adults and students, and can provide a host of challenges for implementing. However, as educators we must remember that the most important aspect of authentic learning is that it "intentionally brings into play multiple disciplines, multiple perspectives, ways of working, habits of mind, and community" (Lombardi,

2007, p.3). It is a unique method of teaching and learning that is meant to change the depth in which our students understand and relate to relevant content. Authentic teaching and learning provides opportunities for exploration and collaboration while simultaneously allowing students to demonstrate their knowledge in a manner that connects to real world application (Kervin & Mantei, 2009).

#### **Chapter 3: Methodology**

#### Overview of the Study

This research was conducted through the case study approach in which authentic learning is studied within the context of a real-life situation (Yin, 2017). The intent of the research was to explore authentic learning and provide a description of the case that will consist of a greater written narrative (Creswell, 2013). This paper examines the phenomenon of experiencing authentic learning in a middle school classroom in the form of a case study. Middle school students, their parents, and the teacher were studied to gather their perspectives and personal experiences of authentic learning. A research consent letter (Appendix A), as well as a teacher letter (Appendix B) were sent home with each student involved in the study.

Multiple perspectives were used to determine the themes that emerge through the exploration of the authentic learning approach in the middle school classroom. The intentional process of establishing an exploratory case study, provides an opportunity for further inquiry in the future (Yin, 2017). As important themes emerged through the case study process, they were then analyzed to explore the overall concept of authentic learning and how authentic learning was experienced in a middle school classroom at this particular public charter academy. The emerging themes were also compared to constructivist theories and commonalities, which is

referred to a "pattern-matching or data linking" (Yin, 2017, p. 25). The goal of this research was to gain a better understanding of how students, parents, and the teacher at my school experience authentic learning in a middle school classroom.

#### Role of the Researcher

As both the researcher and school principal, I am aware of the complexity of my role in the context of this study. One way that I have accounted for the natural bias that was present with my role of administrative school leader was to establish more than one perspective within the study. The use of three different perspectives allowed for me to triangulate the data that was collected and reduce the concern of researcher bias. Establishing a trustworthy relationship with the teacher and students simultaneously allowed me to position myself directly within the classroom to conduct direct observations. These relationships were formed as constructivist relationships in which each party brings extensive knowledge to the group and as an administrator, I am not viewed as the holder of all the knowledge. We intentionally worked collaboratively to build understanding of the study. Authentic learning revolves around the concept of collaboration and the shift from teacher directed learning to student directed learning. Therefore, interpreting this study through the lens of Social Constructivism has allowed me to interpret the research based on the perspectives and experiences of my participants.

#### Participants and Setting

The participants of this case study consist of 7<sup>th</sup> and 8<sup>th</sup> grade students enrolled in a small public charter academy, along with their classroom teacher and parents. The classroom teacher has been teaching middle school students for the past six years and works with both 7th and 8th grade students on a daily basis. This teacher was chosen for this study due to the unique teaching

methods he uses in class, as well as his passion for educational reform. This rural charter school is located in the Northwestern United States, is chartered by a local university, and serves approximately 275 to 300 students from preschool through 12th grade. The school serves an diverse demographic of students, with approximately an 11% Native American population and 50% of students qualifying for free and reduced lunch. Of the 37 middle school students, 16 are female and 21 are male students. Remarkably, all 37 students returned their permission forms and we able to participate in the study.

The public charter academy initially began as an alternative high school designed to meet the needs of our local community. Several years later the school added a middle school, and eventually an elementary school. Today the elementary school has rapidly surpassed the middle and high school in enrollment and desirability. Recent trends indicate that the school has been losing about 30% to 40% of its student population in the transition from middle school to high school. As a K-12 school administrator I am passionate about studying alternative forms of instruction which both support increased levels of students achievement and retention, and I believe that this study plays an important role in determining how authentic learning may or may not increase retention rates at the middle school level.

#### Data Collection

The collection of data for this study was gathered through the use of formal and informal observations, interviews with participants, surveys and questionnaires, and teacher reflections.

Data collection in case studies relies on multiple sources of information, including observations and interviews (Creswell, 2013). The qualitative approach, which is based on constructivist theory, allows for the exploration of the study within its natural setting. The first set of data

collected was observable data. My observation process consisted of utilizing a notebook to record my hand written observations while spending time in the classroom three to four days a week for at least an hour at a time. By utilizing this process of data collection, I was able to integrate myself into the natural flow of the day. It also provided me with the opportunity to actively listen in order to co-construct meaning with the students and teacher. My observational notes were organized based on what the teacher is doing or saying compared to what the student is doing or saying. During the observations I specifically focused on student and teacher interaction, the role of the teacher, student engagement, student and teacher struggles, and classroom feedback. All of the notes were handwritten and were recorded in a small journal that was carried with me at all times. Classroom observations assisted me in having a better understanding of the case moving forward (Stake, 1995). The figure below provides a small snapshot of the observational notes collected during my time in the classroom.

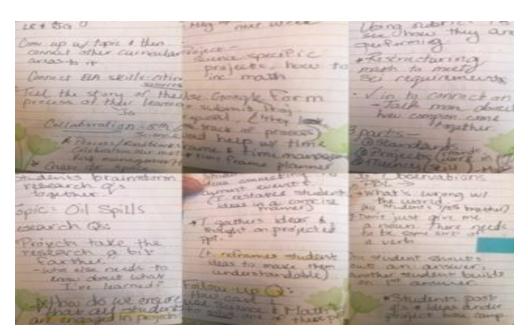


Figure 1

Example of Handwritten Observational Notes

The the second set of data was collected through the use of interviews comprised of open-ended questions and meaningful dialogue. The purpose for conducting interviews with students was to identify their perspectives relating to the challenges and/or successes of participating in authentic learning. Open-ended interview questions for students included: Tell me what the learning looks like and feels like in your classroom; Can you describe the way you learn in your classroom; What are the things you like or dislike about the learning occurring in your classroom? The interview with the classroom teacher focused on his perspective in implementing and maintaining authentic learning in the classroom. Interview questions included: Tell me about your beliefs about learning and education; Describe how your classroom works on a daily basis; What are your strengths and how do you utilize those strength in your teaching; What makes learning successful in your classroom?

Well, his class is very hands on and I like that instead of having to open a text book and readfrom it. I like how he teaches so you can experience it yourself instead of him rambling on to
you. You get to find out an answer to a question you have and if you can he helps you find a way
to find the answer.

Do you like this type of learning and teaching? What do you like about it?

Yes, I like more hands on. Before at Cherry creeck you would just get stacks of paper. With this
you can learn yourself. You find out to ryourself instead of being told how to do it.

Figure 2

Example of Student Interview

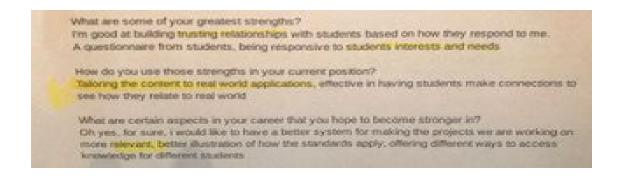


Figure 3

Example of Teacher Interview

The third set of data was collected through the students and parents participating in open-ended surveys using Google Forms. The parent survey assisted me in exploring parent understandings of authentic learning and determining an overall perception of the instructional approach. Student surveys provided information about the perspectives of students and how they were experiencing authentic learning in their classroom. When analyzing this data I looked for themes that aligned in each of their perspectives. General and specific survey and interview questions also provided me with an opportunity to investigate each perspective individually (Appendix C).



Examples of Student and Parent Survey Data

#### Analysis Procedures

The methods of interviewing, surveying, and observing in the classroom served to triangulate the data collected during the study. The qualitative data analysis involved open coding which was used as a process for comparing data. During the open coding phase of analysis, I began by organizing my data into three initial categories of student perceptions, teacher perceptions, and parent perceptions. Within each of these categories, I then pulled out topics that were repeated within each perspective. From those topics, I then identified several themes that emerged from the data. The focus of these themes were then organized into two categories based on whether or not the data represented the benefits or challenges associated with authentic learning. Figure five depicts recording of the three perspectives, emerging themes, and organizing reoccuring themes based on benefits and challenges.

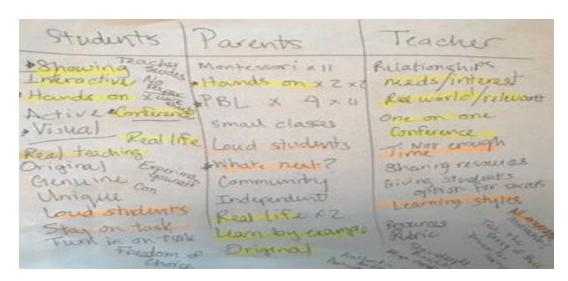


Figure 5

Example of Open Coding the Three Perspectives

#### Chapter Summary

In my personal experience, the collection of data collection held very limited meaning until the analysis process unfolded. This case study utilized three different sets of data, which allowed for vivid picture of each perspective to become evident. Each of the data sets supporting themes as they emerged among the perspectives. Within the coding phase, each of the three perspectives uncovered unifying themes and commonalities that became evident to the researcher. Yet, beyond the coding phase, the data analysis process then identified those themes as benefits and/or challenges associated with authentic learning.

#### **Chapter 4: Results and Analysis of Study**

#### Overview of the Study

The goal of this research was to identify how students, parents, and the teacher experience authentic learning in the middle school classroom. Learning authentically suggests that students participate in active learning, which includes interest-based content and real world application (Gulikers, Bastiaens & Martens, 2005). By studying the perspectives of our school's stakeholders, I plan to use the information obtained to guide further decision making practices in terms of developing programing and curriculum at the secondary level. Perceptions of authentic learning are identified, along with indications of benefits and challenges which can be utilized in further research and district planning.

#### **Observation Results**

The qualitative data obtained through this study was analyzed to identify the perspectives of the students, parents, and teacher in explaining how authentic learning is experienced in the middle school classroom. Based on the perceptions of the students, parents, and teacher

regarding authentic learning, specific benefits and challenges of the learning style were identified and utilized in establishing discussion and drawing conclusions. Data was collected through observations, surveys, and interviews. Observational data was obtained through the direct contact time that the researcher spent in the classroom. Whereas, data obtained through surveys was conducted via Google forms, and interview data was collected through one on one, in-person meetings. The results of the study show that the perspectives of the students, parents, and teacher overlap in various capacities and themes based on their experiences with authentic learning in the middle school classroom.

#### **Student Perceptions**

Through surveys and informal interviews, the students in the middle school classroom identified several key concepts that are useful in describing how they perceive authentic learning. The most commonly identified themes of authentic learning in this classroom are hands-on learning and real life application. One student provided a detailed reflection of her perspective of authentic learning:

"The class is very hands-on and I like it much more than just opening a textbook and reading it. You can experience things yourself by finding out answers to real questions."

The other themes identified by the students as indicators of authentic learning in the middle school classrooms include interactive and and active learning, visual instruction, individualized conferencing with the teacher, freedom of choice within work, ability to work in groups, distractions in the form of disruptive students, and the need for organization to be successful. The students indicated that having an opportunity to choose their own work was

supported by the teacher through one on conferencing and intentional group work. One middle school student was very inspired by the concept of having the ability to chose his own work in the authentic learning classroom:

"There is the freedom to choose what I am learning about. I can choose what I work on and that makes the learning more fun. We conference with the teacher and he helps us decide on what we want to learn about and then he gives us the standards and puts them into what we are studying. The teacher is more like the guide."

The majority of the responses from students were generally positive regarding how they experienced authentic learning. According to students, hands-on learning and real-life application were the most significant and positive components of this learning style. However, several students were extremely explicit in their critique of their own flaws within the authentic learning classrooms. Several students indicated that they were unable to hold themselves accountable for completing work in a timely manner and keeping their work and materials organized. One student said that her, "organizational skills aren't very good" and she has a hard time staying on top of her work. Whereas, other students indicated that the disruptive behavior of a few students in the classroom resulted in their inability to concentrate during work time. "When people around me are talking I want to listen to them and I get distracted from my own work." Represented in figure 6 are all of the students' perceptions, which are made visible based on the percentage of student response.

# Student Perceptions: How is authentic learning experienced in my middle school classroom?

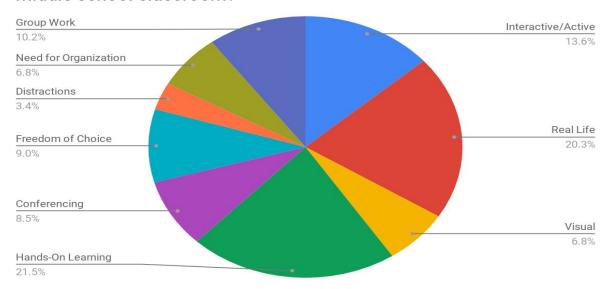


Figure 6

Percentages of Student Perceptions

## Parent Perceptions

Parent interviews and surveys provided a description of parent perceptions regarding the authentic learning that is occuring in their child's classroom. The majority of parents perceived authentic learning as hands-on learning, including real-life application in a project-based setting. Several of the perspectives shared by students align with the perspectives of the parents. The key phrases "hands-on learning" and "real-life application" were reiterated among both perspectives. One parent summarized her perceptions of authentic learning by stating, "It seems to be genuine learning, real life tasks with a hands-on approach." The theory that hands-on learning within this particular classroom is the foundation that supports authentic learning. My interpretations are that the parents consider "hands-on learning" to include any learning that differs from worksheet and textbook driven instruction. The other component relates directly to real life application of

learning. According to researcher observation, projects begin with specific and personalized questions for research and end with applied learning which is presented to authentic audiences.

The perceived notion of distractions presented itself in the view of the parents, as well as the students. Several parents indicated that their child had expressed concern for their ability to concentrate with so many different activities occurring simultaneously. "My child gets frustrated when she is unable to learn due to distractions from other students. Sometimes they are off task or talking loudly and she can't concentrate." In an authentic learning environment students are expected to self regulate their behavior and manage their work goals independently. For many students this type of self-directed learning proved to be a struggle. Parents were concerned that their children may not be receiving all of the content that they will need to be successful in high school due to their inability to learn independently. Parents also questioned the notion of, "what's next?" A general concern resonates from the fear of not know whether or not their child will be prepared with the skills needed for what comes next in their educational journey. Figure 7 identifies the various perceptions and relative percentages of the parents in regards to how their children are experiencing authentic learning.

# Parent Perceptions: How is authentic learning experienced in my child's classroom?

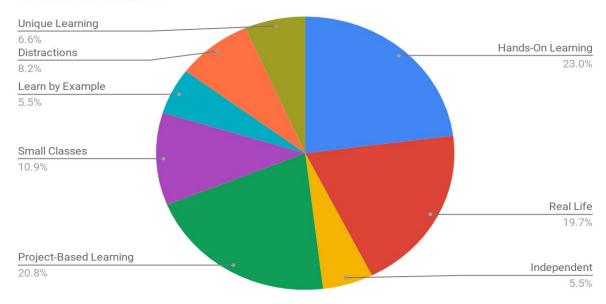


Figure 7

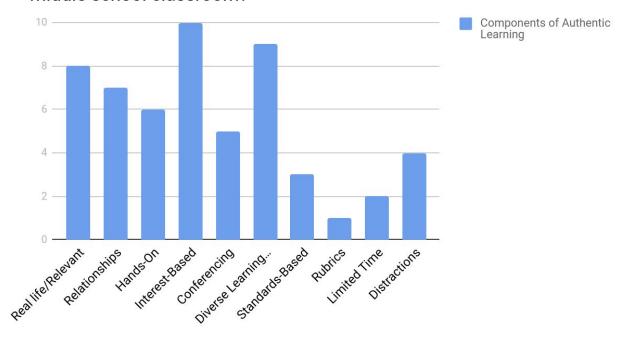
Percentages of Parent Perceptions

#### **Teacher Perceptions**

The teacher's perception of how authentic learning is being experienced in his classroom was obtained through a one-on-one interview, observational data, and a shared platform for discussion. The teacher's theories and beliefs about learning and education are exemplified in his practice and the way he conducts his classroom. The teacher works closely with students to build relationships, determine their learning needs, and identify learning strategies to meet their individual needs. The teacher identified ten components of authentic learning in his classroom and then ranked them based on importance, with ten being the most important and one as the least important.

Figure 3. Teacher Perception

Teacher Perception: How is authentic learning experienced in your middle school classroom?



Of the ten components of authentic learning identified by the teacher, interest-based learning and meeting the needs of diverse learning styles were identified as the two most relevant parts. "We must always have different ways of accessing knowledge for different learning styles. That is how the students will be successful." Through the use of one-on-one conferencing and the alignment of applicable standards, the teacher provides opportunities for both interest-based learning and the ability to meet the diverse learning needs of all the students.

Although real-life application wasn't among the teacher's top two important components of authentic learning, he did identify real-life application as an integral part of experiencing authentic learning in his classroom. "Tailoring content to real world applications is an effective way to have students make connections to how they see and relate to the world."

Along with students and parents, the teacher also identified the idea of distractions as a

component of experiencing authentic learning in his middle school classroom. The teacher suggested that varied levels of student participation and motivation often resulted in distracting behaviors. "Some students excel in this type of environment because they are self-motivated and interested in learning. Some students struggle to stay on task and fully participate, which leads to distracting other students." Thus, these types of behaviors have the potential to prevent learning from occurring for the both the distracted student and the student doing the distracting.

## Significance of Findings and Chapter Summary

The observation of authentic learning in the middle school classroom provided various opportunities for detailed observation and analysis. Through the process of coding, several themes emerged as relevant to the experiences of all three perspectives. The top three and most significant overlapping themes or perceptions of authentic learning that were identified by students, parents, and the teacher include hands-on learning, real life application, and classroom distractions. The greatest occurrence of these perceptions being the theme of hands-on learning in the classroom. These three themes were significant because they all assist in telling the story of how authentic learning is being experienced in this particular middle school classroom.

# **Chapter 5: Discussion and Conclusions**

## **Overview of the Study**

This case study examined the perspectives of students, parents, and the teacher as a means of determining how authentic learning is being experienced in a middle school classroom.

Authentic learning was the experience of all 7th and 8th grade students in this classroom for an

entire year of instruction. Through the use of researcher observations in the classroom, as well as student, parent and teacher surveys and open-ended interviews, three overarching themes were identified as how authentic learning was experienced in this classroom. Those themes included hands-on learning, real-life application, and classroom distractions. The goal of this research was to establish the experiences of school stakeholders in experiencing authentic learning and utilize the information obtained to support future decision making by myself and our school leadership team.

### Discussion

The results of the study indicated that the perspectives of the students, parents, and teacher contained many similar beliefs. One of the most significant findings from this case study on authentic learning in the middle school classroom, indicated that students, parents and the teacher found value in the constructivist form of education. A commitment to authentic, student-centered learning is evident in student reflections, as well as in the dedication identified by the teacher. Most students suggested that this type of learning was "better than other types of learning." Several students indicated that an authentic, hands-on learning model was much more a more preferable learning strategy in comparison to textbook and worksheet learning. Several parents also indicated that this type of learning was a more meaningful option due to it being "genuine." Similarly, the teacher expressed his preference for this type of learning, as a "means for connecting with students on an individual level."

Although most students and parents involved in the case study expressed positive perspectives on the learning method, several indicated their fear in regard to the unfamiliarity of the educational process. Parents questioned whether or not their child was receiving the content

that they needed to be successful in high school. The students described their fears not so much in regards to content, but more about process of learning how different that learning process might be in high school. Whereas, the students, parents, and teacher all identified distracting behaviors as a concern in the authentic learning classroom. These concerns were made apparent in all aspects of learning in the authentic classroom and suggest that if not addressed appropriately that students make lack the learning opportunities needed to be successful in this type of environment.

The results of this case study show that experiencing authentic learning in this middle school classroom has both benefits and challenges. Two major benefits of authentic learning were identified by the students, parents, and teacher. Those benefits are hands-on teaching and learning, as well as real-life application. "Authentic learning offers the opportunity for teachers to bring the outside world into the classroom. In doing so, students can begin creating those connections. This will empower them to transfer their knowledge and skill learned at school into their everyday lives outside of school, thus making the value of learning much more important to them," (Mims, p. 2, 2003). Providing opportunities for hands-on learning and real-life application has been shown to increase motivation and provide higher levels of engagement in students. When students are directly involved in the learning process they are able to better understand the material, further enhancing their motivation to learn the concepts (Wurdinger et al., 2007).

The students also identified the freedom of choice and interactive learning as two other benefits of authentic learning. Whereas, the parents suggest that project-based learning and small class sizes are benefits of the authentic learning environment. Further, the middle school teacher

has established that relationship building through one-on-one conferencing as another predominant benefit of authentic learning. Although all three perspectives identified different aspects of authentic learning as being beneficial, each of these concepts are interrelated.

Interactive learning occurs through project-based learning and within the realm of constructing meaningful relationships. Additionally, freedom of choice for students can only be maintained in a small learning environment which allows for the opportunity of one on one conferencing with the teacher.

Along with benefits, various struggles were also identified as part of the authentic learning experience. The students were extremely forthcoming in identifying the lack of personal organization as a struggle in this learning environment. Focusing and staying on task in an environment in which all of the students are working at their own pace or collaboratively can prove to be a challenge for students that are unfocused and unmotivated. In this situation, the teacher has a greater responsibility for redirecting and scaffolding the learning of these students to ensure their success. In order for students to be successful in this type of learning environment, a student must learn to become independent and organized learners. In many instances this type of self-directed learning may not be a good fit for all students.

Parents, students and the teacher also identified distracting behaviors in the classroom as a challenge to authentic learning. Each perspective indicating that distracting behaviors have the potential to affect the level of learning in the middle school classroom. The teacher suggested that distracting behavior occur for numerous reasons. The most prevalent reasons being that many students have never experienced this type of self-directed learning and don't know how to manage their time, as well as the varied levels of engagement among students due to lack of

motivation. These behaviors present a challenge for the students that want to learn and focus, yet struggle to do so in a distracting environment. Whereas, the challenges for the teacher lie in student management and ensuring that all of the students are getting their individual needs met.

# Recommendations and the So What?

As a result of this study, I now have a better understanding of just how critical it can be to gather more information from stakeholders in order to make informed decisions regarding my school. Fully understanding who your stakeholders are and where they come from plays a critical role in planning and decision making. Asking the right questions is an extremely valuable tool for school leaders as well. Asking questions and gathering information through surveys and interviews provided me with a more explicit interpretation of the educational programming and how it was being perceived by my stakeholders. As a current school leader I will remember to continue asking questions and striving to gather more information for the benefit of my school.

Although asking questions is an important component of offering effective programing and being a good school leader leader, listening and acknowledging others is also critical to the success of a school. In order for a leader to ask the important questions needed to guide and inspire their followers, they must be able to listen for meaning and understanding. Listening should be an intentional process in an open and trusting environment to achieve the most productive results. Murphy (2013) reminds school leaders how important it is to listen carefully. First, when an administrator fails to understand the varying perspectives of others, organizational problems do not get solved-and new ones are likely to be created. It is not enough to know just the facts; a leader also needs to understand feelings, the meanings, and the perceptions that are tied to those facts. Such understanding requires careful listening to what is said and careful

reading between the lines (p. 35). Providing an outlet for students, parents and the teacher to communicate with a school leader has not only provided me with a better understanding of the strengths and challenges associated with authentic learning, but it has also allowed for open and honest communication between myself and my stakeholders in a trusting environment.

Through the completion of this research I have not only modeled but supported my teacher in the process of reflection upon our practices as educators. I believe that providing my educators, as well as myself, with an opportunity to reflect on current experiences and practices will allow for a greater depth of growth and understanding. By initiating conferencing time with the teacher, the teacher and I were able to reflect and co-construct meaning around how authentic learning is being experienced. Establishing a designated time for reflection provides teachers with an opportunity to create meaning from their work (Costa and Kallick, 2000). During reflection time the teacher and I posed questions, uncovered theories, and constructed meaning from not only the work but also the experiences that were occurring in their classes. These meetings were established with the intention of learning together through a process of questioning, listening and reflecting.

This study portrays how authentic learning is perceived at this particular charter school. The research establishes a vivid description of how authentic learning is experienced by students, parents and the teacher in this particular middle school classroom. First, all three perspectives identified hands-on learning and real life application as critical components of authentic learning. Second, the teacher's perspective indicated that the most critical component of authentic learning lies in connecting students' interests to what they are learning. Last, along with the perceived benefits of authentic learning, this study has also identified several challenges associated with

this form of learning. The challenges include the increased number of distractions evident in the classroom, lack of time and managements skills, as well as the fear of what comes next in their academic process.

As an instructional leader it is imperative that I am working collaboratively with my teachers to continue improving our educational programs. Michigan Standard 4.1 states, "Candidates understand and can collaborate with faculty and community members by collecting and analyzing information pertinent to the improvement of the school's educational environment" (Michigan, 2012, p.16). With the data obtained through this research, specific challenges were identified including classroom distractions and the fear of what is next for students. Upon obtaining this information our leadership team will work collaboratively with all of our stakeholders to address these challenges by redesigning our program to eliminate classroom distractions and develop a more effective communication process for informing parents what is the next step for students. "In today's schools, there is an underlying theme focusing on the need to build significant relationships. If this is true, collaboration is a best practice that must prevail. Through collaboration, school leaders can change traditional practices, shift the attention of stakeholders to goals that focus on student learning, and begin to build relationships that will open the door for new ways of working together to profoundly affect the achievement of students" (Green, 2010, pg. 163).

Trust and communication go hand and hand within a school environment. Trust must be established between school leaders and teachers, as well as between teachers and students. As school leaders it is our responsibility to model trustworthy behavior for all members of our school community. Serving as a model of trustworthy leadership is an important way to establish

open and reliably relationships with all of our school's stakeholders (Tschannen-Moran, 2013). "...The absence of trust impedes effectiveness and progress" (Tschannen-Moran, 2013, p. 40). Without trust our teachers will lack in the vision, coaching and support needed to become great teachers. Teachers who work in schools with supportive and trusting administrators can grow to become innovative and effective instructors. Trust is not only crucial between administrators and teachers, but also teachers and students. School leaders need to build and model trustworthy relationships with their teachers if they want their teachers to build trusting relationships with their students.

In order for teachers to stretch their thinking and grow their understandings about their instructional process they must have a trustworthy and open relationship with their school leader. "One key is to develop cooperative, nonthreatening partnerships with teachers that are characterized by trust, openness, and the freedom to make mistakes as they attempt novel teaching approaches" (DiPaola and Hoy, 2014, p. 35). To encourage growth in our teachers, we must establish a supervising role which consists of coaching and collaborating. It is our job as school leaders to create an environment for our teachers in which we are able to push their thinking without shutting it down. When asking teachers to take risks in their instruction they must be able to trust that they can make mistakes and have the opportunity to learn from those mistakes.

Through the observational data, surveys and interviews from all three perspectives, it can be concluded that the benefits of authentic learning in this particular classroom outweighed the challenges. Therefore, as the educational leader I would recommend continuing this type of learning in middle school classrooms with certain modifications to ensure the success of all

classroom. Examining schoolwide practices, I believe that students would be better suited for authentic learning at the middle school level if they are exposed to student-centered learning environments at an earlier age. Providing opportunities for younger students to take a more active role in their learning process at a younger age will assist them in learning those self-management and organizational skills that are needed to be successful at the middle school level. Modifications within the classroom might include more supports of structures for students that are lacking in participation. Whereas, adapting the classroom environment to provide intentional quiet spaces to work and learn may also reduce the level of distractions felt by certain students. Most importantly, I believe that establishing a school culture which revolves around student-centered learning will have the greatest impact in establishing authentic learning environments at our school.

### Conclusion

This case study has painted a picture of how authentic learning is experienced in a middle school classroom through the perspectives of the students, parents, and teacher. The case study identified numerous benefits and challenges of authentic learning, however, it also established that in this particular situation, the benefits outweigh the challenges. In the future, a more in-depth study of authentic learning might provide an opportunity to study the effects of authentic learning on student motivation and academic achievement. At this time, this study has concluded that authentic learning can offer valuable experiences for all of those involved, including real life application and collaborative working skills. Authentic learning provides students with various opportunities that they may not be able to experience within a traditional

classroom setting. Whereas, authentic learning provides the teacher with opportunities to get to know students on a more personal level while simultaneously co-constructing knowledge with students. As a researcher and school leader, I have determined that by creating a school environment which is conducive to authentic learning and supportive of constructive educational practices, will ultimately support student growth and teacher development.

### References

- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. A Journal of Educational Strategies, Issues and Ideas, 83(2), 39-43.
- Collier, L. (2015) Grabbing students: Researchers have identified easy ways to boost student success by increasing their engagement in learning. *American Psychological Association*. 47(6), p. 58. Retrieved from:
- http://www.apa.org/monitor/2015/06/grabbing-students.aspx
- Creswell, J.W. (2013). *Qualitative inquiry and research design (3rd edition)*. Thousand Oaks, California: Sage Publications.
- Costa, A. & Kallich, B. (2000). Getting into the habit of reflections. Educational Leadership, 57(7), 60-62.
- Dewey, J. (1938). Experience and Education. New York: Macmillan Company.
- DiPaola, M. F., Hoy W. K. (2014). *Improving instruction through supervision, evaluation, and professional development*. Information Age Publishing, Inc.
- Edwards, C. (2002). Three approaches from Europe: Waldorf, Montessori, and Reggio Emilia. *Early Childhood Research and Practice*. 4(1).
- Green, R. (2010). The four dimensions of principal leadership: A framework for 21st century schools. Boston, MA: Allyn & Bacon.
- Gulikers, J. T. M., Bastiaens, Th. J., & Martens, R. (2005). The surplus value of an authentic environment. *Computers in Human Behavior*, 21, 509-521.
- Hughes, S. (2012). Exploring the 21<sup>st</sup> century skills used during a project-based learning experience at the secondary level. (Doctoral Dissertation: Walden University). Retrieved from http://www.eric.ed.gov.
- Jones, G.M. & Brader-Araje (2002). The impact of constructivism on education: Language, discourse, and meaning. *Journal of American Communication*, 5 (2). Retrieved from <a href="http://ac-journal.org/journal/vol5/iss3/special/jones.pdf">http://ac-journal.org/journal/vol5/iss3/special/jones.pdf</a>

- Kokotsaki, D., Menzies, V., Wiggins, A. (2016). Project-based learning: A review of the literature.
  - *Improving Schools*, 19(3), 267-277.
- Lombardi, M. (2007). Authentic learning for the 21st century: An overview. *Educause Learning Initiative*, ELI Paper 1/2007. Retrieved from <a href="http://net.educause.edu/ir/library/pdf/ELI3009.pdf">http://net.educause.edu/ir/library/pdf/ELI3009.pdf</a>
- Maina, F. (2004). Authentic Learning: Perspectives from contemporary educators. *Journal of Authentic Learning*, 1:1-8.
- Mantei, J., & Kervin, L. (2009, July). "Authentic" learning experiences; what does this mean and where is literacy learning? In A Moult, A. (Ed). *Bridging Divides: National Conference for Teachers of English and Literacy,* (1-16). Hobart, Australia: Australian Association for Teaching of English/Australian Literacy Education Association.
- Merriam-Webster. (2019). Experience. Retrieved from: <a href="https://www.merriam-webster.com/dictionary/experience">https://www.merriam-webster.com/dictionary/experience</a>
- Michigan Department of Education (2012). *Michigan Standards for the Preparation of School Principals*.
- Michigan Department of Education (2013). *Michigan Standards for the Preparation of Central Office Administrators*.
- Mims, C. (2003). Authentic learning: A practical introduction and guide for implementation. *Meridian: Middle School Computer Technologies Journal*. 6(1), 1-3. Retrieved from: <a href="http://www.ncsu.edu/meridian/win2003/authentic\_learning/index.html">http://www.ncsu.edu/meridian/win2003/authentic\_learning/index.html</a>
- Montessori, M. (1995). *The absorbent mind* (Claremont, C. A., Trans.). New York, NY: Henry Holt. (Original work published 1967)
- Murphy, J. (2000). The unheroic side of leadership: Notes from the swamp. In M. Grogan (Ed.)
- NEA. (2019). An educator's guide to the "Four Cs:" Preparing 21st century students for a global society. Retrieved from: <a href="http://www.nea.org/tools/52217.htm">http://www.nea.org/tools/52217.htm</a>
- Nicaise, M., Gibney, T., Crane, M., (2000). Toward an understanding of authentic learning: Student perceptions of an authentic classroom. *Journal of Science Education and Technology*. 9(1), p. 80.
- Pearce, S. (2016). Authentic learning: What, why and how? *e-Teaching Management Strategies* for the Classroom. Retrieved from http://www.rethink.edu.org.
- Prince, M. (2004). Does active learning work? A review of the research. Journal of engineering

- education, 93(3), 223-231.
- Rathunde, K. R., Csikszentmihalyi, M. (2005). Middle school students' motivation and quality of experience: A comparison of Montessori and traditional school environments. *American Journal of Education*, 111, 341–371.
- Renzulli, J., Gentry, M., Reis, S. (2004, September). A time and place for authentic learning. *Association for Supervision and Curriculum Development*. 62(1), 73-77.
- Rich, E. (2010). How do you define 21-century learning? *Education Week*. Retrieved from: <a href="https://www.edweek.org/tsb/articles/2010/10/12/01panel.h04.html">https://www.edweek.org/tsb/articles/2010/10/12/01panel.h04.html</a>
- Rogers-Chapman, F. and Darling-Hammond, L. (2013). *Preparing 21st Century Citizens: The Role of Work-Based Learning in Linked Learning*. Stanford, CA: Stanford Centre for Opportunity Policy in Education.
- Rule, A. C. (2006). The components of authentic learning. *Journal of Authentic Learning*, 3(1), 1-10.
- Slepkov, H. (2008). Teacher professional growth in an authentic learning environment. *Journal* of Research on Technology in Education. 41(1), 85-111.
- Stake, R. (1995). The art of case study research. Thousand Oaks, CA: Sage Publications.
- Stamps, L. (2004). The power of authentic learning. *Classroom Leadership*. 8(2). Retrieved from:

  <a href="http://www.ascd.org/publications/classroom-leadership/oct2004/The-Power-of-Authentic-Learning.aspx">http://www.ascd.org/publications/classroom-leadership/oct2004/The-Power-of-Authentic-Learning.aspx</a>
- Stepien, W., Gallaghar, S.(1993). Problem-based learning: As authentic as it gets. *Educational Leadership*, 50(7), 25.
- Symonds, W. C., Schwartz, R., & Ferguson, R. F. (2011). *Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century.*
- Tschannen-Moran, M. (2013). Becoming a trustworthy leader. In M. Grogan (Ed.), The Jossey-Bass Reader on Educational Leadership (3rd ed.) (p. 40-54). San Francisco, CA: Jossey-Bass.
- Toporek, B., (2015). Chicago school designed with blended learning in mind. Education Week. Retrieved from:

  <a href="https://www.edweek.org/ew/articles/2015/04/13/chicago-school-designed-with-blended-leae">https://www.edweek.org/ew/articles/2015/04/13/chicago-school-designed-with-blended-leae</a>
- rning-in.html

Ultanir, E.(2012). An epistemological glance at the constructivist approach: Constructivist learning

in Dewey, Piaget, and Montessori. International Journal of Instruction, 5(2), 195-212.

Wurdinger, S., Haar, J., Hugg, R., Bezon, J. (2007). A qualitative study using project-based learning in a mainstream middle school. *Improving Schools*, 10(2), 150-161.

Yin, R.K. (2017). Case Study Research: Design and Methods. Thousand Oaks, California: Sage Publications

### APPENDIX A



# North Star Academy Research Student Consent Form

Throughout the course of the next school semester North Star Academy administrator, Andrea Ballard, will be studying authentic learning and teaching in your child's middle school classroom. Throughout the upcoming school year, your child's teacher will develop and implement Authentic Learning opportunities for the students in his classroom. To get a better understanding of this process we will be conducting classroom observations, student and family interviews, questionnaires and surveys. The information gathered will be used to investigate Authentic Learning at North Star, compose a written thesis of the phenomenon, and assist school leaders with informed decision making practices in the future.

My student	has my permission to
participate in all aspects of	f the North Star Academy and the Authentic Learning
data collection processes.	
	Parent/Guardian Signature

Date	

Thank you for helping our school continue to strive to be an leader in innovative educational practices.

Andrea Ballard K-12 Principal aballard@nsacd.com

APPENDIX B



### Dear Parent or Guardian:

We am writing to tell you about the exciting way that we are learning in our middle school classroom.

As you might know, in our school we use innovative teaching methods such as Project Based Learning and Authentic Learning to help students learn better. This type of learning motivates students to gain knowledge, and assists them in remembering it longer. Projects give students the chance to apply the skills they learn in school to personally relevant and real-world situations. These models of instruction allow your child to learn skills such as how to think critically, solve problems, work in teams, and make presentations. These skills will help students succeed in the future, both in school and in today's work world.

Students will be assessed individually on their content knowledge, their collaboration skills, and their presentation skills. As parents or guardians, you can discuss your child's individual work at home, encouraging your child to think hard and ask questions about the topic. You can also support your child by [helping in the classroom, taking students on field work, providing expertise and resources, etc.].

Please do not hesitate to contact me if you have any questions about the work we are doing in our middle school classroom.

Sincerely,

John Gillette

Andrea Ballard

Middle School Teacher

K-12 Principal

### APPENDIX C

# **Teacher and Student Sample Interview Questions**

The purpose of this study is to explore and investigate the process in which authentic learning is conducted in a middle school classroom. Tell me what it is like to participate in authentic learning as either the teacher, student, or parent.

- Teacher Sample Questions: What are your experiences in designing, implementing and monitoring authentic learning?
  - What was the most challenging part of the process?
  - What aspects of authentic learning are most successful?
  - How might you modify your practices in the future?
- Student Sample Questions: What are your experiences in participating in authentic learning?
  - What was the most challenging part of learning in this way?
  - What aspects of authentic learning were the easiest for you?
  - Would you chose to learn this way in the future? Why or why not?

### APPENDIX D

# **Sample Student and Parent Survey Questions**

The purpose of this study is to explore and investigate the process in which authentic learning is conducted in a middle school classroom.

### **Parent Survey Questions:**

How would you rate your child's educational experience this year on a scale of 1 to 10? (1 being the worst experience and 10 being the best experience)

How would you describe Mr. Gillette's teaching style?

How would you describe the way you think your child is currently learning in Mr. Gillette's class?

What does authentic learning mean to you?

How motivated has your child been to learn this year on a scale of 1 to 10? (1 being the least motivated and 10 being the most motivated)

What do you like about the way Mr. Gillette taught this year and the way that your child has learned this year?

What are some of the struggles your child has had with the teaching and learning this year in Mr. Gillette's class?

How do you think your child has overcome the struggles he or she had?

Do you have any other thoughts, concerns or suggestions that you would like to include?

### **Student Survey Questions:**

How would you rate your educational experience this year on a scale of 1 to 10? (1 being the worst experience and 10 being the best experience)

How would you describe Mr. Gillette's teaching style?

How would you describe the way you are currently learning in Mr. Gillette's class?

What does authentic learning mean to you?

How motivated have you been to learn this year on a scale of 1 to 10? (1 being the least motivated and 10 being the most motivated) Why?

What do you like about the way Mr. Gillette taught this year and the way you have learned this year?

What are some of the struggles you have had with the teaching and learning this year in Mr. Gillette's class?

How have you overcome those struggles?

Do you have any other thoughts, concerns or suggestions that you would like to include?