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Application of Lortie's Apprenticeship of Observation Model: Evidence of Iowa Teaching Standards with Amish School Teachers

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

Jacquelyn R. Burr Moorman University of Northern Iowa May 2023

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Abstract

Classroom educators are held to standards of teaching and learning throughout their professional careers. The standards are the expectations laid out by the national and state levels to determine how and why teachers should teach the way they do to increase student achievement (NBPTS, 2016; State of Iowa Department of Education, 2019; CCSSO, 2013). The teaching standards in Iowa align with pedagogy, instruction, and professionalism (State of Iowa Department of Education, 2019).

Some educators learn how to become teachers through their post-secondary education courses. Those teachers who are part of the Amish community do not follow a traditional path to becoming an educator within the Amish school system. Their preservice learning and teaching requirements are much different, which is the focus of this research, as they have no post-secondary formal education on how to be an educator.

The intent of this qualitative study was to understand if Amish teachers, without any formal post-secondary education, were able to show evidence of the Iowa Teaching Standards within their teaching instruction. Classroom observations were conducted and evidence was collected that show which standards were being implemented. The secondary part of this study is to understand how these Amish teachers were able to know how to be teachers in the Amish classroom. Structured interviews were conducted of Amish teachers and explored how Amish teachers learned to be instructors of the classroom while determining if their responses align with Dan C. Lortie's (1975) Apprenticeship of Observation Model.

This Study by: Jacquelyn R. Burr Moorman

Entitled: Application of Lortie's Apprenticeship of Observation Model: Evidence of Iowa

Teaching Standards with Amish School Teachers

has been approved as meeting the dissertation requirements for the

Degree of Doctor of Education

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Dedication

Grandma Burr,

I thought of you so many times during this journey.

Your resiliency is in my DNA.

All my love.

Acknowledgements

To my Amish friends: You opened your classrooms and your hearts to me. You shared with me your passion for teaching and your love for the children you teach. For that, I am forever inspired.

To my committee members, Dr. Matt Townsley, Dr. Benjamin Forsyth, Dr. Curtis Nielsen, and Dr. Theophile Muhayimana: Your advice and encouragement was continuous. For that, I am forever grateful.

To Mom and Dad: You always believed that I could do this. Your optimism was my motivation. For that, I am forever confident in my abilities to achieve my dreams.

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Chapter 1: Introduction

Overview

Academically preparing to become an educator has evolved over time. During the 21st century, educators in PK-12 public schools typically earn a four-year degree in various disciplines in the field of education, focused on pedagogy. Although it should be mentioned that some current educators have taken other paths to obtain their teacher licenses in the United States. Some pre-service educators may need to take exams prior to applying for their teaching license. Once approved by a department of education, the teacher may begin their career as an educator in a public or private school.

However, educators in other educational systems are not required to follow the same path as the public school requirements. Amish teachers in the Amish school system, which was the focus of this research, pre-service learning and teaching requirements are much different. The qualifications of an Amish teacher as stated in Guidelines (1978:12) include having, 'Good Christian character, good educational background, and a desire to improve that education.' (p. 108). While these teachers have an interest in teaching the Amish youth of their community, they receive no formal post-secondary education on how to be a teacher. Many of these teachers have modeled their own teaching practices after their own teachers in their formative K-8th grade school years.

Amish teachers and their schools are very different from those of the traditional public school systems. When observing in an Amish school, one would feel as though they have stepped back in time to an era of one-room schoolhouses. Wooden desks are organized in rows, a chalkboard is at the center of the classroom, and student work and classroom decorations are taped to the walls. The teacher's desk is situated at the front of

the classroom near an enlarged table used for small group instruction. The classroom is without electricity and may not include running water or indoor plumbing. While the classroom is the entire school, teaching and learning occur within its walls.

The teachers of this one-room schoolhouse are typically Amish unmarried females, although this is not always the case. Some female teachers are married. There have also been male teachers (Fischel, 2012). Kachel (1989) explains that when an Amish teacher shows interest in teaching, there is not usually an application or interview process. The elders of the community and the school board determine if this teacher would be suitable for the position (p. 94). Oftentimes these teachers' teaching methods are reflective of the teaching practices of their own previous teachers they had as a student.

Because the goal of Amish education is closely aligned with the community values, teachers focus on the skills needed to align with the vocational paths of the students. Hostetler (1993) discusses that the goal of the Amish school is to teach not only academic subjects, but also life skills including living by values, discipline, and getting along with others. Reading comprehension, writing, and arithmetic are the main content areas, while also embedding the cultural and religious beliefs throughout the school day. Specifically, Amish teachers continue to have students practice and apply their home language of learning throughout their weekly lessons. While these Amish teachers have had no formal post-secondary education after the 8th grade, various instructional practices are used by the teachers. Small group instruction, reteaching, differentiated instruction, and peer tutoring is embedded throughout the daily lessons.

Public school teachers learn about pedagogy and effective teaching practices throughout their post-secondary education. Amish teachers are not required to attend any post-secondary education prior to becoming an Amish educator. These teachers have no no formal training after their own 8th grade year of school, on how to teach children (Fischel, 2012; Hostetler, 1993). Their understanding of pedagogy is learned from watching and reflecting on their own teachers when they were students (Lortie, 1975). The idea that Amish teachers can be effective educators based on a set of teaching standards, without formal teacher education, was the focus of this research.

Typical public schools follow the state standards for student learning, while teachers must meet the criteria of the required teacher standards. These teaching standards explain the requirements teachers must incorporate into their professional practices to continue to be considered an effective educator. Standards can include but are not limited to, the implementation of student standards, content knowledge, instructional practices, classroom management, and professional growth as an educator. Educators are then individually evaluated according to these standards.

Evaluation criteria is usually set by the state in which the teacher holds the teaching license. In Iowa, teachers are evaluated based on the Iowa Teaching Standards (Appendix B). These standards were first developed on May 10th, 2002, revised on May 13th, 2010, and are listed in the Iowa Code Section of 284.3 (Iowa Department of Education, 2018, p. 1-3). The overarching criteria of the Iowa Teaching Standards are aligned to the areas of curriculum, instruction, and assessment. These standards include:

 Demonstrates ability to enhance academic performance and support for and implementation of the school district's student achievement goals.

- Demonstrates competence in content knowledge appropriate to the teaching position.
- c. Demonstrates competence in planning and preparing for instruction.
- d. Uses strategies to deliver instruction that meets the multiple learning needs of students.
- e. Uses a variety of methods to monitor student learning.
- f. Demonstrates competence in classroom management.
- g. Engages in professional growth.
- h. Fulfills professional responsibilities established by the school district.

When dissecting the area of curriculum, teachers use resources that align with their grade level standards. This can be printed materials such as textbooks, various resources that align to concepts and or topics, and hands-on manipulatives that help the student to understand the learning targets of the standards. Instructional methods can vary depending on the teaching style and also the content area. In education, the term "effective instruction" is used often to ensure that evidence-based practices are implemented into the teachers' daily instructional methods when teaching the students (Stronge, 2007). Examples of effective instruction can be creating an engaging classroom, implementing social-emotional learning techniques into the classroom environment, and teaching for learner differences (Stronge, 2007). For assessment practices, teachers would be using formative and summative assessments within their classrooms to ensure student learning is occurring. Teachers should also use these assessments to guide their own instruction. The teacher can use the results to reteach

concepts that the students do not understand, move forward to extend thinking and learning, and also to help students be active participants of their own learning.

Overall, the teacher has much to learn about how to facilitate an effective learning environment. Researcher, Hermann Astleitner (2005) stated the following principles as guides to effective instruction:

Principle 1: Instructing based on a design for reflexive learning

Principle 2: Multiple supporting of cognitive, motivational, and emotional characteristics

Principle 3: Considering the strengths of students

Principle 4: Knowledge acquiring and applying in varying contexts

Principle 5: Supporting and evaluating basic knowledge but also higher-order skills

Principle 6: Stimulating argumentation skills

Principle 7: Realizing and guiding self regulated learning

Principle 8: Increasing the efficiency of learning

Principle 9: Arousing and sustaining interest

Principle 10: Increasing positive feelings

Principle 11: Decreasing negative feelings

Principle 12: Establishing respect & responsibility

Principle 13: Using self-instructional learning materials

When reflecting on these principles within the classroom instruction, additional professional learning may be needed for the teacher to feel successful implementing all of these principles within the classroom. To learn about effective classroom instruction

methods and how to implement them into a classroom with students, most educators seek additional training beyond their high school diploma.

Some educators in Iowa have obtained a college degree in the area of education, either at the elementary or secondary level. In addition, some states have explored and implemented different paths for professionals to obtain alternative teaching licenses. For example, in Iowa, a person may choose two different pathways to become a licensed educator. This is only available at the high school level with the requirement of 12-18 credits in the area of expertise, and then the candidate may be hired at a school on an intern license. After one year of teaching in a high school, the candidate takes additional coursework towards becoming a fully licensed teacher (Iowa Department of Education, 2021b).

When determining the expectations layed out for teachers within the Iowa school system, Amish school systems have similar characteristics, but also look very different. Amish schools resemble our nation's past; As, the Amish 21st century schools mirror the one-room schools from the 19th and 20th centuries. Amish schools educate students in grades kindergarten through 8th grade within one classroom. There is typically one teacher who teaches all students at every grade level, each day they are in school. Even in this diverse make-up of the Amish classroom, these Amish teachers within their school system show evidence of effective instruction for the students of their classrooms.

Statement of Problem

There have been few opportunities for researchers to understand how Amish school systems function in a day-to-day manner. Research completed by Zehr et al. (2005) observed and discussed living and teaching in the Amish schools, as an Amish

community member. The goal of their research was to provide an Amish perspective to academic research about Amish education. However, research conducted by McConnell and Hurst (2006) stated that current research completed within the last 30 years is not comprehensive and lacks an understanding of the functioning of Amish schools. This may be due to the Amish community not allowing non-Amish people, or outsiders, within their schools, or an overall lack of interest in the cultural education aspect of Amish schools and their teachers in research.

Addressing McConnell and Hurst (2006) assertions of the lack of comprehensive research in Amish education, several specific areas do have minimal research.

Understanding how teachers are chosen within the Amish school system and their training to be teachers within the Amish school is lacking current research in the education field. Understanding how teachers are trained to implement various grade level curriculum also has limited research available to the education field. Additional limited research includes how Amish teachers know how to be effective instructors while managing a class of diverse students from multiple grade levels. Without learning, understanding, and utilizing a specific set of teaching standards in the Amish classroom, observing any evidence of teacher state standards would provide an analysis of how Amish teachers teach within their multi-age classrooms.

Dan C. Lortie (1975), provides research that educators are attracted to the teaching profession for several reasons. Through his research he has also indicated that with any occupation there are three induction processes used to learn how to do the tasks within that specific profession. He also believes that many teachers learn how to be teachers through the Apprenticeship of Observation Model. These models help

researchers understand how and why educators chose the field of education as a profession. This information will be particularly important when learning about the Amish school systems.

It is important for other educators to understand how this cultural environment in a rural non-public system functions. Discussions and observations with the Amish classroom teachers will allow other educators to know what instructional practices are used to educate children of this specific environment and how, cognitively, the Amish teachers know how to teach these children without any formal training.

The conclusions made during this study will allow other educators to correlate the effectiveness of various instructional strategies in this specific Amish environment while relating it to other non-public or public, rural or urban, elementary or secondary, classrooms and schools. Finding evidence for the Iowa teaching standards, while providing evidence-based examples of instructional practices within the Amish classrooms, will be beneficial in providing research that McConnell and Hurst (2006) state are absent in Amish education research.

Purpose of Study

This study analyzed a specific school system without the modern day technologies and a formally educated teacher. The intent of the study was to understand what specific Amish teachers' teaching practices showed evidence of the Iowa Teaching Standards when conducting classroom observations in Amish schools. Additionally, data was collected through structured interviews with Amish teachers. Interview questions explored how Amish teachers learned to be instructors of the classroom while

determining if their explanations align with Lortie's (1975) Apprenticeship of Observation Model.

This qualitative research was conducted through two data collection processes, classroom observations and structured interviews. One goal of the research was to understand what instructional practices were evident through a set of teaching standards. Another goal was to examine the teacher's explanations of their teaching practices and reasons for becoming a teacher. This data drew conclusions as to how this specific group of teachers in the 21st century, without any formal post-secondary educational training, knew how to implement standards of teaching into their daily practices.

Research Questions

Within this study, the following research questions were explored:

- 1) What evidence can be found of the Iowa Teaching Standards within Amish teacher instruction in the Amish classroom?
- 2) Based on the Amish teacher's reflection of their teaching path, why did they decide to teach in the field of education and how were they trained to do so? What evidence exists that their decision and training is related to Dan Lortie's Apprenticeship of Observation Model?

Theoretical Framework

Teachers learn how to teach from various environments, including their own classrooms when they were students, a post-secondary education program at the collegiate level, by observing and communicating with other professionals, and also learning-by-doing. An additional way to continue to learn how to be an effective instructor is to engage with professional development. This can be done at a district or

individual level. Examples of professional learning include, but are not limited to, watching videos of effective instructors, reading professional articles and books on topics to enhance a teacher's performance, or learning specific instructional practices that can be implemented into the teacher's classroom instruction.

Lortie's (1975) Apprenticeship of Observation framework focuses on the teacher as a learner, through a learning-by-doing model. He determined that to know how to do something, one must first be a mentee within the environment. This framework states that one's experiences as an observer in an environment influence how the said observer will then perform in a similar environment. This is similar to the idea of an apprenticeship path within a vocational training model.

Lortie (1975) states that the real apprenticeship for teachers begins when they are first the learner in a classroom. A learner in the classroom is estimated to observe at least 13.000 hours of their teachers by the time of high school graduation (p. 61). In the Amish community, students attend school from kindergarten or first grade through the 8th grade. During their educational years, the students observe and learn from their Amish or public school teachers. While the hours of observation would be less than a typical public school student, it can be inferred that the Amish learners who went on to become Amish school teachers, learned how to be teachers through observing their own teachers in the classrooms when they were a K/1st grade through 8th grade student.

Before becoming an initially licensed teacher in a typical post-secondary college path, one must go through the student teaching process. This is where the student learns from their mentor, the classroom or cooperating teacher. This allows the student teacher to learn through observation, conversations, assisting the classroom teacher, and

practicing instructing the students while implementing various strategies through their instruction. At this stage, pre-service teachers not only are participating in an apprenticeship, they are also identifying how it feels to be a teacher. Lortie (1975) states,

"The interaction [in the classroom] is not passive observation... the student learns to 'take the role' of the classroom teacher, to engage in at least enough empathy to anticipate the teacher's probable reaction to his behavior. This requires that the student project himself into the teacher's position and imagine how he feels about various student actions" (p. 62).

This self-reflection and first-hand experience allow the pre-service teacher to fully experience the role of a teacher, beyond just observing the teacher as a student in the classroom. Amish teachers only finish their 8th grade school year of the general education curriculum, as is typical in the Amish community. It can be inferred that for these Amish pre-service teachers, during their 8th grade school year, they are going beyond just being a learner in the classroom. Students use their observations of their classroom teachers to help mold their own teaching practices once they become teachers themselves. Some Amish teachers were following the Apprenticeship of Observation Model while they were in their 8th grade year of school. The Amish teacher may have older students assist with grading, organizing the classroom, and assist in the instruction of younger students. Informal conversations about the responsibilities of teaching may also occur between the teacher and the students. This is how many young students in the Amish community begin their journey to understanding what a classroom teacher does and then the student realizing they want to become a classroom teacher.

Lortie's (1975) Apprenticeship of Observation Model has been used in four specific research studies that are summarized in the work by Högqvist (2016). The first study was completed by Bailey et al. (1996). Seven college students were the focus of this study as they were examining their learning experiences as relates to learning a language. They gauged their experiences as either good or bad as how it affected them as a learner. Further investigation revealed that the experiences the students had related to their own behaviors as a teacher. Because the teacher behaviors were observed by students through the Apprenticeship of Observation Model, those behaviors became known as the default behaviors for when the students themselves were teachers.

Gutiérrez Almarza (1996) researched four students who were studying to become teachers of foreign languages. In this study, the Apprenticeship of Observation Model was examined to determine how much influence Lortie's (1975) model had on the students' beliefs about the teaching profession. It was found that teachers who used the Apprenticeship of Observation Model supported the students' ideas about content knowledge, general learning and teaching knowledge. The students were able to conclude that observing the teacher and others within the classroom, formally and informally, supported their own beliefs about the education profession.

The intent of Urmston's (2003) study was to examine if students' knowledge and beliefs changed from when they ended their secondary education to the ending of their post-secondary education (p. 112). The method of this study was to give a questionnaire to students when they started their teacher education program and another questionnaire when they were nearing the end of their teacher education program. The outcome of the comparison data from the two questionnaires showed two major outcomes. The first

being that students realized their beliefs held from their Apprenticeship of Observation from their secondary education did not always match up with their beliefs after their courses in their teacher education program. While this conflict existed, the pre-service teachers did not always change their beliefs or methods from what they first observed from their secondary schooling.

A fourth study of significance for the Apprenticeship of Observation Model was conducted by Moodie (2016). This study examined the impact of the framework on non-native English-speaking teachers. The method of this study was to reflect writings from 18 Korean English teachers and interviews of four of the teachers, while also analyzing their writings to determine the significance of their prior learning and what influences their prior learning had on their own beliefs as educators. After analyzing the data, Moodie (2016) found that these students had developed an anti-apprenticeship of observation belief. The students revealed that they wanted to be different educators than the ones they had previously had while learning a second language. Because they wanted to be different educators than those that they had had in their schooling experiences, the new beliefs they developed became their influence for how they were as educators.

In all of these four studies, Lortie's (1975) Apprenticeship of Observation framework has had some significant relationship to the influence on the participants' beliefs. Based on the situation, the influence had a positive or a negative impact on the participants' beliefs. This framework supports the use of its ideas when analyzing how Amish teachers learn to become educators without any specific secondary education.

Significance of Study

Within the last few years, a rural school district in Iowa has seen an influx of Amish families moving into or building homes and farms within the public school district boundaries. In multiple conversations with the religious head of the Amish community, the local public school superintendent has discussed the Amish schools joining the local public school system. The Amish community has decided to not partner with the local public school system and will educate their own students. As of the 2022-2023 school year, the Amish community has built four of their own one-room schools and the students are educated by local Amish teachers, all who have no formal post-secondary education beyond their own 8th grade education.

In regards to Amish education, there is current research available that dissects the specifics of the Amish school system and what a typical day looks like for students (Anderson, 2015; Dewalt, 2006; Harroff, 2004; McConnell & Hurst, 2006). One of the most current articles of research include the perspective from a current Amish teacher as they describe their teaching journey within the Amish community (Zehr et al., 2005). There is however limited research within the last decade in regards to Amish education, especially when addressing what evidence is present when compared to a set of teaching standards and teaching characteristics of Amish teachers. McConnell and Hurst (2006) stated that in the last 30 years no comprehensive assessment has been completed in regards to Amish education. A classroom mirroring the 1900s one-room schoolhouse and being a vital school within the Amish community still provides valuable educational experiences for children when evidence of learning and effective teaching is present.

Amish teachers and evidence found of the Iowa Teaching Standards will be insightful to

the research field of education due to the lack of post-secondary training in these teachers. Adding to this area of research of Amish education and the teaching standards will help professionals in the field of education understand how teaching practices of teachers are learned and what evidence of implementation is present. This research will fill some research gaps in areas of Amish education, especially Amish teachers' instructional practices and understanding their perspectives as to why they entered the teaching field.

Preview of Methods and Procedures

Currently within a rural Iowa school district, four Amish schools are established within the Amish community and taught by four Amish women and one Amish man. These schools have chosen to not be part of the public school system and retain their own private school entity. Within the four Amish schools, approximately 90 students, ages 6 through 14, are educated from 1st - 8th grade. Relationships have been established between the researcher and a religious head of the community, along with some of the Amish school teachers, although some teachers have moved on to other life experiences and are no longer teaching. Prior to the formal observations of this study, informal classroom observations were conducted to build background knowledge of the research and establish relationships between the researcher and the Amish community.

For this study, formal classroom observations were conducted and data was collected during the instruction in the Amish classroom. Through these formal classroom observations, data was collected on what evidence of the Iowa Teaching Standards are present in the teachers' instruction within the Amish classroom. Of those Amish teachers who were currently teaching, structured interviews were conducted exploring their

perspectives on teaching, why they chose the teaching path as a vocational path, and how they were trained to be an educator.

Organization of Study

This research is divided into five chapters. The first chapter discusses the introduction, including an overview, the statement of the problem, the purpose of the study, the research questions, theoretical frameworks, the significance of the study, a preview of the methods & procedures of the study, delimitations and limitations, and definitions. Chapter 2 discusses a review of literature focused on effective instruction, teaching standards, and Amish school systems. Chapter 3 consists of the methods & procedures used to conduct the study. Chapter 4 discusses the finding of the study, including observational data. Lastly, Chapter 5 provides a summary of the findings, conclusions, discussion, limitations, and additional recommendations for further research.

Chapter 2: Literature Review

Teaching standards are the expectations laid out by the national and state levels to determine what and how teachers should teach the way they do to increase student achievement. These expectations are ways administrators are able to evaluate teachers on their classroom and district performances, which also ensures that students' academic, social, and emotional needs are being met throughout the school year. While understanding the development of teaching standards and how teachers align their understanding of content knowledge, the management of their classrooms, and the instructional practices for the delivery of content instruction, one can begin to understand what effective instruction looks like in the classroom.

Throughout this chapter, understanding the concepts of the national and state teaching standards including The National Board for Professional Teaching Standards (NBPTS) written by the Council of Chief State School Officers (2013), Model Core Teaching Standards and Learning Progressions for Teachers (InTASC), and the Iowa Teaching Standards and Criteria and how they relate to other standards for teachers in various school systems will be examined. Understanding how teaching standards are related to the state standards for student learning and effective instruction will be addressed next. Additionally, research examining the Apprentice of Observation Model and its understanding to what extent educators' past experiences influence their current practices will be explained. The comprehension of the teaching standards and their connection to effective instruction in the classrooms will help examine how those two tenants are embedded within an Amish school in rural Iowa within a framework for learning.

National and State Teaching Standards

A teacher's knowledge, the classroom management style, the implementation of instructional practices, and assessing the learning of the students can vary from classroom to classroom, from school to school, from state to state. Designing, implementing, and evaluating teaching professionals on a consistent measure of standards is needed to reflect on the goals of our nation's educational system. Hamsa (1998) stated the purpose of schools is to help students be successful in the world. To help students be successful, teachers need programs that will continually improve their teaching skills. The purpose of standards serves three main domains. The Council of Chief State School Officers (2013) states that standards provide a vision of where to go and a specific level of performance to meet. "Third, they can articulate the "opportunity to learn" supports that must be in place to ensure a teacher has the opportunity to meet the standards. All three are essential to success" (p. 7). While this is one perspective of teaching standards, other professional organizations provide various definitions and purposes as well.

The National Board for Professional Teaching Standards

The National Board for Professional Teaching Standards (NBPTS) was launched in 1987 to improve teaching and learning. This was completed by implementing high standards for teachers. The NBPTS are focused on teacher and student learning, content knowledge, monitoring student learning, self-reflection of the teaching and student learning, and continued collaboration through learning communities with other educators (National Center for Educational Statistics, 2006). In the following paragraphs, each of the NBPTS will be discussed in greater detail to understand the purpose and framework of this particular set of teaching standards that are used to assess teacher performance.

Standard 1: Commitment to Student Learning. The first core proposition under the NBPTS is that teachers are committed to students and their learning. Based on research from the National Board for Professional Teaching Standards, this can be observed as teachers responding to their students' needs and adjusting the instruction to meet those needs. Meeting those needs can be based on the student's likes and dislikes, individual strengths and weaknesses and the student's prior knowledge. Teachers, under this proposition, learn how students develop and acquire the knowledge from instruction. Teachers are expected to facilitate learning for students of different cultural backgrounds, implement accommodations and modifications for students with disabilities, and reach state and federal mandates (Hamsa, 1998). Other developmental areas of learning can include, but are not limited to, language acquisition, social skills, higher order thinking, and making connections between prior knowledge and new learning. "All the information that teachers acquire about students through the course of instruction subsequently informs their understanding of teaching and learning, which transforms their practice" (NBPTS, 2016, p. 14).

Standard 2: Teachers Know the Subjects They Teach and How to Teach those Subjects to Students. Teachers know the subjects they teach and how to teach those subjects to students is the second proposition from NBPTS. "Accomplished teachers value the relationships among subject areas, using those relationships to forge multiple paths to knowledge" (NBPTS, 2016, p. 19). Teachers know how to embed critical thinking and analysis, along with higher-order thinking skills into their subject area. Within this area, teachers also use "pedagogical expertise incorporating wisdom related to the teaching and learning processes, as well as the dynamic between student

needs and content demands" (NBPTS, 2016, p. 20). The research indicates that these teachers use many modes of learning including experiments, analogies, interactive learning, demonstrations, and incorporate technology into their teaching (NBPTS, 2016, 2016). Teachers meeting this standard continually find ways to implement new and effective resources into their classroom to meet their students' needs and the curricula goals.

Students' Learning. The third proposition from NBPTS for teachers is being responsible for managing and monitoring student learning. "To track their success, teachers carefully monitor activity within the learning environment—observing student interactions, evaluating classroom performance, assessing all aspects of student development, and measuring learning outcomes relative to objectives" (NBPTS, 2016, p. 24). Teachers meeting this standard incorporate evidence-based instructional practices into their daily instruction, while also taking into consideration the pedagogical aspect of child development and learning progressions. According to the research, student engagement, monitoring student learning based on the standards, and having students take an active role in their learning are also key components of this plan.

Standard 4: Teachers Think Systematically About Their Practice and Learn From Experience. Self-reflection is essential for a teacher, whether novice or veteran, to continue to improve in their craft. The fourth expectation of NBPTS is stated that teachers think systematically about their practice and learn from experience. Educators make daily decisions on how to best instruct a classroom of students, how to incorporate new learning or reteach skills that are lacking, or what standard carries more weight than

another standard. Educators are continually evaluating what went well, what needs to be changed, and what needs to be included in each interaction of learning.

Standard 5: Teachers Are Members of Learning Communities. The fifth proposition from NBPTS states that teachers are members of learning communities. These teachers "reach beyond the boundaries of their individual classrooms to engage wider communities of learning. They connect with local, state, national, and global groups in person or via technology to take advantage of a broad range of professional knowledge and expertise" (NBPTS, 2016, p. 35). Not only do teachers continue their learning in a variety of modes, but they also collaborate with other professionals. This can be in the form of mentor/ mentee relationships, professional learning communities, grade-level or content-area teams, or daily conversations with colleagues in the school or district. These interactions and purposeful learning opportunities not only increase the teachers' effectiveness in the classroom, but also the students' learning and their outcomes and the school system's ability to improve toward the district's goals.

Communication with other professionals is not only the mode that makes teachers part of a learning community. Being an active participant in the child's learning and communicating that with parents and guardians, while also partnering with families increases the likelihood of success for the student. According to the research by NBPTS (2016),

Teachers inform them about their children's accomplishments and challenges, responding to their questions, listening to their concerns, and respecting their views. Teachers encourage families to become active

participants in their children's education by acquainting them with school programs and enlisting their help to develop skill sets and foster lifelong learning (p. 38).

Parents, guardians, and the community as a whole can play a major part in not only the student's success, but also the school community as a whole.

Learning about, implementing, evaluating, and reflecting on the professional teaching standards are behaviors all educators should do on a consistent basis. The National Board for Professional Teaching Standards started in 1986 with the Carnegie Task Force. Its goals were to increase the professionalism for educators to mirror the professionalism expected within fields of law and medicine (Hamsa, 1998).

Educators are able to become certified with the National Board of Professional Teaching Standards. Under the No Child Left Behind Act, National Board Certified Teachers (NBCT) are considered "highly qualified" (Elkins, et al., 2010). As of 2006, nearly 40,200 teachers or 1% have been certified as National Board Certified Teachers (Boyd & Reese, 2006). Meeting these standards of teaching allows the teacher to be considered a leader not only at the national level, but also within their school and district. The National Board Certified teacher may receive additional pay, have more leadership responsibilities, be a mentor to other teachers, and be considered an expert in the field of education (Elkins, et al., 2010).

Weakness of The National Board for Professional Teaching Standards. With every set of standards, there are strengths and weaknesses. Those teachers who have the National Board for Professional Teachers certification have shown to have students perform better than those teachers who are not certified. There are some drawbacks to

obtaining the NBPTS certification (Mississippi State University, 2017). While the NBPTS process has a 71% success rate of those who seek certification, the process to complete the certification can be time consuming (National Board for Professional Teaching Standards, 2022). Based on the research with National Board Certified Teachers, it was found that it may take teachers one to five years to complete the certification process (Mississippi State University, 2017). The certification process consists of many candidates to take assessments of their knowledge and submit three different portfolios as they relate to the standards. The portfolios focus on student work samples, videos showcasing teachers and students along with self-reflections, and using classroom assessments to improve instruction (Mississippi State University, 2017).

The NBPTS process can also be considered costly for those interested in obtaining this certification. Each of the four components cost a fee to earn the certification, plus a registration fee totalling around \$1900. If components are not passed by the candidate, they are able to retake the section for an additional \$125 fee. Once certification is obtained, to keep the certification active you must maintain the certification every five years. This maintenance fee is \$495, plus a \$75 registration fee (National Board for Professional Teaching Standards, 2022).

While this information is not directly linked to the National Board for Professional Teaching Standards themselves as standards, many teachers will be hindered to engage in this process because of the time commitment and also the cost. Although these standards are not used in this study, it is important to compare various teaching standard frameworks. In this study a great focus will be on the Iowa Teaching Standards and those standards will be discussed.

Interstate Teaching Assessment and Support Consortium (InTASC) Standards for Educators

In 2013, the Council of Chief State School Officers, made of professionals in the education field released its Model Core Teaching Standards and Learning Progressions for Teachers, 1.0 also known as the Interstate Teacher Assessment and Support Consortium (InTASC) standards. While these standards were first written for beginning teachers, they have been revised to include all those educators in the profession. These standards outline what teachers should know and be able to do within any Pre Kindergarten - 12th grade classroom in the United States. They provide a "banner" or vision of what teachers should be able to do to support the learners in their classrooms (CCSSO, 2013). These standards have been aligned with the Common Core State Initiative Standards and the National Board of Professional Teaching Standards. "The updating of the core teaching standards was driven not only by new understandings of learners and learning but also by the new imperative that every student can and must achieve high academic standards (CCSSO, 2013).

The key themes included within the InTASC standards are to improve student learning by recognizing that each classroom has diverse learners. Under each of those themes includes core teaching standards in which the teacher is expected to work towards and meet based on the research for the InTASC standards. This complete list of the InTASC standards can be found in Appendix A. These students may require instruction that accelerates their learning or a more scaffolded approach because of a learning disability. Teachers must also adhere to the understanding of how English Language Learners and other culturally and linguistically diverse classroom makeup may

be. Personalized learning for all students includes understanding that each learning is unique in nature and it is the job of the educator to tap into that by providing multiple opportunities for students to learn skills and obtain content knowledge through direct instruction, technology, and collaborative learning (CCSSO, 2013). "Teachers need to recognize that all learners bring to their learning varying experiences, abilities, talents, and prior learning, as well as language, culture, and family and community values that are assets that can be used to promote their learning (CCSSO, 2013).

Learners of the 21st century need more than just content knowledge to be successful after graduation. They need "attributes and dispositions such as problem solving, curiosity, creativity, innovation, communication, interpersonal skills, the ability to synthesize across disciplines, global awareness, ethics, and technological expertise" (CCSSO, 2013, p. 4). These skills are addressed in the InTASC themes as well. By incorporating the above dispositions into daily lessons and embedded into all content curriculum students will be able to attain the InTASC's standards of higher-level thinking and achievement.

The drive for the InTASC standards is to change the way instruction is delivered to students so all students at all learning levels are able to achieve at high levels. The theme of Improve Assessment Literacy asks educators to have a strong understanding of assessments so they can be used to drive the instruction of the classroom as it relates to the core standards. "... teachers need to have greater knowledge and skill around how to develop a range of assessments, how to balance use of formative and summative assessment as appropriate, and how to use assessment data to understand each learner's

progress, plan and adjust instruction as needed, provide feedback to learners, and document learner progress against standards" (CCSSO, 2013, p. 5).

Having a collaborative environment for students, teachers, and administrators is an implementation that must be included within the culture of districts if student achievement is to increase. "The core teaching standards require teachers to open their practice to observation and scrutiny (transparency) and participate in ongoing, embedded professional learning where teachers engage in collective inquiry to improve practice" (CCSSO, 2013, p. 5). By teachers and leaders reflecting on their practices, collaborating with others within the educational system, and adjusting through feedback not only are teachers continuing to push and change the face of education, but the students we work with will reap the benefits of the continuous professional growth of these teachers.

While knowing the themes of the InTASC standards is key, looking at each standard directly is imperative for its understanding and implementation within the teaching profession. The InTASC standards have been organized into four main categories. They are The Learner and Learning, Content, Instructional Practice, and Professional Responsibility.

The Learner and Learning. Under The Learner and Learning standard, two standards are listed. The first standard is learner development and learner differences, and the second standard is learning environments (CCSSO, 2013). Teachers understand the development of learners and how to support them within the classroom through learner development, differences, and environments. They know their diverse backgrounds while still holding them to high expectations for learning. Educators implement this into their professional dispositions, "by combining a base of professional knowledge,

including an understanding of how cognitive, linguistic, social emotional, and physical development occurs, with the recognition that learners are individuals who bring differing personal and family backgrounds, skills, abilities, perspectives, talents and interests" (CCSSO, 2013, p. 8).

Content Knowledge. The second group of standards focuses on Content Knowledge. Two standards are listed under this area, content knowledge and application of content (CCSSO, 2013). Teachers not only need to understand the content they are teaching but also know how to make the content relevant for their students' lives. Teachers must be able to make the content attainable to their diverse classrooms.

Instructional Practices. Instructional Practices is the third group of standards. Standards within this group include: assessment, planning for instruction, and instructional strategies (CCSSO, 2013). Knowing students' backgrounds, how they learn, and the content teachers are responsible for are important factors, but also being intentional in how they teach is crucial to the learners' success. Educators need to plan for their instruction by knowing what they want to assess within their units and use the process of backwards planning for their lessons. All of a teachers' planning should be aligned to the content standards. Teachers reflect on how to engage the learners throughout the instructional unit and purposefully plan for formative assessments throughout the unit.

Professional Responsibility. The fourth classification of standards falls within the group of Professional Responsibility. The two standards under this area are professional learning and ethical practice, and leadership and collaboration (CCSSO, 2013). Within this standard, educators are asked to collaborate with all stakeholders of

the school community, self-reflect on their own teaching, and continually work to improve their own practice through professional development opportunities. Learning about and finding ways to improve one's own craft will only reap benefits for the whole child.

InTASC Progressions. Within the research of the Council of Chief State School Officers there are also The InTASC Learning Progressions for Teachers. "The progressions are focused on describing the key pedagogical strategies needed to get to the new vision of teaching that is essential for successful implementation of college- and career-ready standards" (CCSSO, 2013, p. 10). The progression categories are written in detail underneath each standard and describe the actions that would be observable when the standards are being implemented. There is a performance map to evaluate the teacher's performance and then shifts for implementation are given.

The performance map for each standard is considered a strength of the InTASC standards development and implementation. The progressions allow the teacher to step towards professional growth in various areas. The standards are broken down into three key domains: performances, essential knowledge, and critical dispositions (CCSSO, 2013). These standards and progressions continue to be aligned with the Common Core State Initiative Standards and the National Board of Professional Teaching Standards.

Understanding various frameworks of teaching standards is important to know the expectations and links between teaching and learning. While the National Board for Professional Teacher Standards (NBPTS) and the Interstate Teaching Assessment and Support Consortium (InTASC) Standards have been discussed, in this study the Iowa Teaching Standards will be a focus within the research.

Iowa Teaching Standards

In Iowa, there are specific standards teachers are expected to adhere to and are evaluated on throughout their teaching career. The teacher standards listed for Iowa derive from the late 1990s. These standards were developed by the Iowa Department of Education with input from various stakeholders. The exact process used to develop these standards could not be found in research. Iowa began its journey in 2001 by adopting the Iowa Teaching Standards and Criteria, an evaluation process for staff, and the induction program for new hires into education through the mentoring program (Iowa Department of Education, 2018).

These standards and their model criteria were developed by the Iowa Department of Education. These standards include:

- a. Demonstrates ability to enhance academic performance and support for and implementation of the school district's student achievement goals.
- b. Demonstrates competence in content knowledge appropriate to the teaching position.
- c. Demonstrates competence in planning and preparing for instruction.
- d. Uses strategies to deliver instruction that meets the multiple learning needs of students.
- e. Uses a variety of methods to monitor student learning.
- f. Demonstrates competence in classroom management.
- g. Engages in professional growth.
- h. Fulfills professional responsibilities established by the school district.

Included in each standard are criteria allowing the educator to incorporate specific behaviors into the learning environments. These criteria can be found in Appendix B. "The determination of quality is defined by the licensed Iowa evaluator, the professional conversation between the evaluator and the teacher about the evidence, and the district guidelines for evaluation set by the Teacher Quality Committee" (State of Iowa Department of Education, 2019). Although some countries or states require educators to show evidence for meeting each standard via a performance portfolio, the State of Iowa is not one of them.

When examining the various types of teaching standards, both nationally and at the Iowa state level, the overall goal is to improve teacher performance and student outcomes, and there are specific similarities between them. Through the compilation of the InTASC standards by the Council of Chief State School Officers in 2013, their research has provided alignment to various other state and national standards, one being the National Board of Professional Teaching Standards. Because it is already aligned with NBPTS, the InTASC standards will be compared with the Iowa Teaching Standards in the following table.

The information in Table 1 is based on the correlation of the standards done by Graceland University for the pre-service and graduate education majors (Alignment of Iowa Teaching Standards, n.d.). This model was chosen as it showed a clear alignment that served the purposes for this study when analyzing the comparison of the two models of teaching standards. A more in depth comparison can be found in Appendix C.

 Table 1

 Comparison of InTASC Teaching Standards to the Iowa Teaching Standards

Iowa Teaching Standards	InTASC Standards
Iowa Standard 1: Demonstrates ability to enhance academic performance and support for implementation of the school district's student achievement goals.	InTASC Standard 1: Learner Development The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences. InTASC Standard 5: Application of Content The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
Iowa Standard 2: Demonstrates competence in content knowledge appropriate to the teaching position	InTASC Standard 4: Content Knowledge The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of discipline accessible and meaningful for learners to assure mastery of the content.
Iowa Standard 3: Demonstrates competence in planning and preparing for instruction	InTASC Standard 7: Planning for Instruction The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, crossdisciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
Iowa Standard 4: Uses strategies to deliver instruction that meets the multiple learning needs of students.	InTASC Standard 2: Learner Differences The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards. InTASC Standard 8: Instructional Strategies The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Iowa Standard 5: Uses a variety of methods to monitor student learning.	InTASC Standard 6: Assessment The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
Iowa Standard 6: Demonstrates competence in classroom management.	InTASC Standard 3: Learning Environments The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
Iowa Standard 7: Engages in professional growth.	InTASC Standard 9: Professional Learning and Ethical Practice The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.
Iowa Standard 8: Fulfills professional responsibilities established by the school district.	InTASC Standard 10: Leadership and Collaboration The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Similarities of InTASC Teaching Standards to the Iowa Teaching Standards.

When comparing the Iowa Teaching and Criteria to the InTASC standards several observations can be made within Table 1. All of the Iowa Teaching standards align in some way to the InTASC standards, meaning all of the Iowa eight standards are intertwined with InTASC's ten standards. When analyzing standard 4 from the Iowa standards, there are two InTASC standards that correlate this one standard in Iowa. Those two InTASC standards are standard 2, learner differences, and standard 8, instructional strategies. Another observation is that in the Iowa standard 1 there are two

InTASC standards that also discuss the same tenets. Those standards include standard 1, learner development, and standard 5, application of content.

Differences of InTASC Teaching Standards to the Iowa Teaching Standards.

Analyzing the criteria of both the Iowa Teaching Standards and the InTASC standards, found in Appendix C, one will see that not all criteria are aligned with the two models. Of the 43 criteria from the Iowa Teaching Standards, 36 out of the 43 criteria are met with a similar standard in the InTASC model, which is 83% of similarities. In the Iowa Teaching Standards, in standard 1, criteria a, b, c, d, e, and f do not align with any of the InTASC standards. Also in standard 7, criteria e does not align with any of the InTASC standards. Table 3 below gives the specific standards in their alignment to each other in visual form.

Table 2Commonalities of the Iowa Teaching Standards to NBPTS and InTASC Standards

Iowa Teaching Standards	National Board for Professional Teaching Standards (NBPTS)	Interstate Teaching Assessment and Support Consortium Standards for Educators (InTASC)
Standard 1: Student achievement goals	Standard 1 Standard 3	Standard 1 Standard 5
Standard 2: Content knowledge	Standard 2	Standard 4
Standard 3: Planning for instruction	Standard 2 Standard 4	Standard 7
Standard 4: Meeting learning needs of students	Standard 3	Standard 2 Standard 8
Standard 5: Monitoring student learning	Standard 3	Standard 6
Standard 6: Classroom management	Standard 3	Standard 3
Standard 7: Professional growth	Standard 4 Standard 5	Standard 9
Standard 8: Professional responsibilities		Standard 10

Nonpublic Schools & Teaching Standards

Public schools follow specific guidelines for teacher performance as written in their teaching standards. Based on the U.S. Department of Education State Regulations for Private Schools those recommendations are left up to the state to determine what must be enforced for private schools and its educators. In Iowa, there are no specific teaching standards that teachers must adhere to in the nonpublic/ private, accredited schools.

According to the state regulations, if the school is accredited, the school must employ licensed and certified staff to fill the roles as teachers. The only regulation that is

required is that professional development is provided to the staff that aligns with the needs of the school and its students, while also learning about how to increase student achievement through research based practices (The U.S. Department of Education, 2009).

Comparison of the United States Teaching Standards and Other Countries

Countries around the world have different perspectives on teaching. In Darling-Hammond's (2017) research examining Finland, Singapore, Canada, Australia, and the United States, teaching requirements vary depending on how the national government has prioritized its educational system. For example, in Finland teachers have standards for admission into the field of education and must hold a master's degree of two years that was centralized on pedagogy, subject matter, and research. Canada requires its teachers to have at least two years of education at the graduate level. Singapore, in their educational reform movements during the past 40 years, have also moved towards specific standards for admission. These standards for admission include having a passion for teaching, along with a strong academic ability that will be used during classroom instruction. Australia has incorporated tuition-free places at their universities for those seeking to earn degrees in the teaching field. The United States offers various ways to enter the teaching field. Educators can hold undergraduate degrees, graduate level degrees, or enter through alternative ways without prior training in the field.

While the educational systems and teacher qualifications vary across the world, one aspect that they do have in common is that they have systems for teacher professional growth and development. This is specifically true in the developmental education systems of Australia, Singapore, Canada, and Finland (Darling-Hammond, 2017). While

every country cannot be examined for the purpose of this study, the list of countries that have educational systems is not limited to the ones listed above.

When comparing the United States to other countries and their teaching standards for practicing teachers, Sinnema et al. (2017) found in their research that the standards for practicing teachers vary based on the expectations for those teachers. New Zealand, in their 2015 teaching standards, measures educators on the domains of professional relationship and values, and professional knowledge in practice. In 2011, the National Professional Standards for teachers in Australia, use professional knowledge, professional engagement, and professional practice in their standards' domains. England's teachers' standards in 2012 include teaching, and professional and personal conduct. Professional values and practice, knowledge and understanding, and teaching are Wales' qualified teacher status standards. Northern Ireland's standards developed in 2011 are called Teaching: The Reflective Profession. The standards used are professional values and practice, professional knowledge and understanding, professional skills and application, and additional code of values and professional practice. The United States has led the field of including teaching standards into the educational performance for teachers. In 2005, Singapore adopted the ideas from the InTASC standards to be part of their Values, Skills, and Knowledge (VSK) criteria. The Ontario College for Teachers in Ontario, Canada has included 16 competencies on their standards for teachers.

The goal of implementing teaching standards globally is to increase not only teacher performance, but the student learning and outcomes. The similarities between all of these educational entities is that they have systems in place for the qualifications they want teachers to meet and improve upon within their schools. All of the educational

systems listed have differences between them as well. Darling-Hammond (2017) found that while many countries have teaching standards in place, how they effectively use the standards, apply them, and how teachers are held accountable for meeting the standards within their schools varies.

Student Learning Standards

While teachers have performance standards as it relates to the teaching profession, students also have standards that are aligned to their learning outcomes. Learning standards are national and state academic and behavioral standards that are aligned to each specific grade level and each specific content area. These learning standards describe what the student is expected to know and be able to do. These learning standards guide the teacher to align their instruction with the expected learning outcomes for student learning.

State Standards for Student Learning

While there are teaching standards for educators, there are also core state standards for student learning that teachers embed within their curriculum. According to the Common Core State Initiatives website, our nation's Common Core State Standards were first launched in 2009 with the insight from governors, state leaders, and professionals in education. These standards were developed to ensure that each state was consistent on what schools were teaching students and the level of proficiency for student learning was consistent throughout the United States. These standards are not mandated by the federal government (Karge & Moore, 2015). Currently forty-one states, Iowa being one of them, have adopted the Common Core Standards for their state.

The development of the standards took a considerable amount of time and revisions. The College and Career Readiness standards were developed first. These standards were created to ensure students are ready for post-secondary education or work-force related skills after high school graduation. English-Language Arts (ELA) and mathematics standards were then developed, with other academic standards rolling out to states at varying times. According to the standards developers, the goal of the standards is to "be essential, rigorous, clear and specific, coherent, and internationally benchmarked." It is essential for the standards to "be reasonable in scope in defining the knowledge and skills students should have to be ready to succeed in entry-level, creditbearing, academic college courses and in workforce training programs" (Conley, et al., 2011, p. 3). Development of the standards included the following criteria: rigorous, clear and specific, teachable and learnable, measurable, coherent, grade-by-grade, and internationally benchmarked (NGACBP & CCSOO, 2019). Students need to know how to achieve the expectations in all areas of reading, mathematics, speaking and listening, writing, and language standards. Research by Karge and Moore (2015) states that teachers have many demands when thinking about their instruction. They must use curriculum to plan their instruction, incorporate various resources, deliver the instruction to students and then meet the needs of the students before, during, and after instruction (Rutherford et al., 2011).

While student learning standards are important to the field of education to know what students should be learning and that they are prepared for life after their PK-12 education, the teaching standards are just as important. The focus of this research will be on teaching standards instead of student learning standards. The reason for this focus is

due to the fact that there is limited research on the Iowa Teaching Standards in relationship to teachers in specific cultural communities across the state.

The national and state level teaching standards, along with the other frameworks for teaching and learning are all decisive elements within the educational field. Teachers who know their content and how their students learn best, while executing the most effective instructional strategies, should be able to increase student achievement, as they have been working towards throughout time. This idea holds true whether teaching in urban, suburban, or rural school settings.

Rural Education and Teaching Standards

Small, rural schools are becoming somewhat invisible in the education landscape across our country. Based on the National Center for Education Statistics (NCES) (2006), small, rural towns can be classified into three categories, as stated in Table 3.

Table 3NCES's Urban-centric Locale Categories for Rural Definitions, released in 2006

Fringe	Census-defined rural territory that is less than or equal to 5 miles from an	
	urbanized area, as well as rural territory that is less than or equal to 2.5 miles	
	from an urban cluster	
Distant	Census-defined rural territory that is more than 5 miles but less than or equal	
	to 25 miles from an urbanized area, as well as rural territory that is more than	
	2.5 miles but less than or equal to 10 miles from an urban cluster	
Remote	Census-defined rural territory that is more than 25 miles from an urbanized	
	area and is also more than 10 miles from an urban cluster	

^{*}An urban cluster is defined as having 2,500 to 50,000 population

Based on data from Iowa Department of Education (2021a), the 2021-2022 school year in Iowa, there were a total of 327 school districts in Iowa. 126 of those school districts are classified as rural (National, 2006). This means that 39.4% of students in Iowa are being educated in rural schools.

Rural education is not a new facet of education, especially when reflecting on the history of one-room schools. At the beginning of the 1900s, many schools were one-room with multi-ages educated within the walls of the school. The teacher was versed in all grade levels and relied on older students to be peer-tutors to the younger students. In the 21st century, many rural schools are consolidated or closed to maximize resources and finances. However, there are small, rural schools that are still functioning today.

In the research done by Barley and Beesley (2007), they examined rural districts and found attributes that made them successful. Of the multiple principals that were interviewed, seven factors were identified. They were as follows: high expectations for all students; structural support for learning; use of student data; alignment of curriculum, instruction, and assessment; individualization of instruction; teacher retention; and professional development. The community also played an important role within the school's environment. "The communities in which these schools are located are strongly connected to their schools through formal partnerships, the centrality of the school facilities, and personal investment of community members' time and money" (p. 9).

The Amish School Systems

Amish Values

The Amish, also known as Old Order Amish and a Mennonite sect, dates back to the German-speaking regions of Europe. Throughout history they were persecuted for their religious beliefs as they varied from other Christian religions (Fischel, 2012). Research by Waite and Crockett (1997) states the Amish moved to the Americas in the 17th century where they continued to be persecuted at times for their way of living and religious beliefs. The community of Amish members are a family-centered culture. Amish "live in a community of people with similar values, surrounded by others who are outside the fold but may have goals which are also rural in nature" (Ediger, 2005, p. 424). The family structure, the community, and the schools are reflections of this (Kachel, 1989). According to Wyman's (1996) research on Amish communities,

Amish communities wanted to maintain a specific set of core values: a need for separation from the world; the practice of their religion on a daily basis in every aspect of their lives; a strict adherence to community discipline and demeanor; and a life demonstrating harmony with soil and nature. In conjunction with their core values, the strong emphasis for educational demenore involves social connectedness, cooperation, and interdependency (p. 109).

These values are embedded within the daily interactions of the Amish people, especially within the community and school settings.

While many cultures look for individual achievement and success by pursuing personal aspirations, the Amish choose to focus on group accomplishments and cooperation as a way to be successful within the community (Kachel, 1989). This is due to maintaining their cultural values and aspirations and not to be influenced by the ways of living from those who are not of the same Amish beliefs (Fischel, 2012). The most important factor for the Amish community is to embed the children with the God's beliefs through all of the child's activities both at home and at school (Kachel, 1989). To achieve the community's goals and values, many Amish groups choose to educate their children in their own parochial schools.

The school is a reflection of the community's values. In Wyman's (1996) research, "Today, as in the past, the most important educational aspects for Amish families raising their children are the maintenance of religious values: affording children the opportunity to cultivate humility, simple living, and adherence to the will of God" (p. 109). In the Amish community, the family is seen as having the main responsibility for upbringing their own children and helping them achieve the way of life of the Amish beliefs (Hostetler, 1993). Because of the closely knit community, the school mirrors that

of the community's values and is often viewed as having a family atmosphere (Hostetler, 1993).

Amish School Structure

When children enter the Amish school during the 1st grade, they are around the age of six. They have learned respect for authority and obedience prior to their formal schooling years and are expected to continue using those attributes in their school day and throughout the community (Hostetler, 1993). "The function of the school is to teach the children the three R's in an environment where they can learn discipline, basic values, and how to get along with others" (Hostetler, 1993, p. 176). The basic skills of reading, writing, and arithmetic are the main focus of their educational years (Fischel, 2012). The students, or scholars, continue their schooling through the 8th grade in the Amish school. After the 8th grade, most scholars continue on to a two-year vocational training period or home-based training (Fischel, 2012). The influences of the parents, the community, and the church are seen as an invaluable aspect for the child's education (Waite & Crockett, 1997).

While in school, there is separation in curricula, activities, or games according to gender (Nolt, 2016). According to Nolt's (2016) research, when children complete the 8th grade, they move on to vocational training within the community. Boys may begin working in vocational training such as welding, carpentry, or agriculture. Girls may take a more active role at home with the household responsibility such as sewing, canning, or quilting. Learning how to read, write, and problem-solve proficiently is aligned with the goals of adulthood within the Amish community.

Amish school structures reflect that of 19th century schoolhouses and have not changed much in the last 150 years. Most schools are one-room in size, with student desks set in rows facing the front of the classroom. The teacher's desk is at the front of the classroom with a chalkboard placed for use throughout the day. Electricity is absent, while wood burning stoves provide heat within the four walls of the school. Outhouses are more than likely used and water may be pumped from hand from the school yard (Kachel, 1989). Walls may be decorated with colored pictures relating to that of a Bible verse, the alphabet in both English handwriting and German handwriting, and the schedule of the school day. Windows are around the classroom to let in natural light and curtains may be hung from them. The land in which the school house sits upon may be donated by a community member (Hostetler, 1993). A major influence of Harroff (1998) and Hostetler and Huntington (1992) is Anderson's (2015) research. According to Anderson, the neighborhood of the school helps in all aspects for getting the school up and running. Everyone pitches in to help construct and maintain the school and they remain invested in the school's success as children begin to be educated there.

Amish Schools and Rural Education

The Amish education system also reflects similar attributes to rural education. Amish teachers, along with the community, want and assume that all individuals will be educated to be able to live a life according to their Christian values (Kachel, 1989). While their curriculum is aligned with appropriate grade levels and to their religious beliefs, it is approved for the use in the schools by the bishop, school board, and parents. Amish teachers, because they teach in multi-age environments, provide multiple opportunities for differentiated instruction and individualized instruction

or reteaching when needed. Some attributes that are not mirrors of other rural schools include teacher retention and professional development. Because most schools are taught by unmarried, female teachers in the Amish schools, and sometimes leave the classrooms when they become married. Professional development is not an accountability piece for Amish school teachers. Limited collaboration and opportunities to professionally grow in the profession is lacking with the Amish school systems (Fischel, 2012; Hostetler, 1993).

Amish School Standards

As stated in the *Minimum Standards for the Amish Parochial or Elementary Schools of the State of Iowa as a Form of Regulations* (Bishops, Committeemen, and Others In Conference, 1983), standards are the framework for the Amish education system. These standards were compiled by bishops, committeemen, and others in conference during the 1983 school year.

The standards include:

- 1. Needs, Methods, and Objectives
- 2. The School District
- 3. Administration of School
- 4. Teachers: Qualifications & Duties
- 5. Discipline
- 6. Attendance
- 7. The Education Program
- 8. Other Standards Pending Consideration & Recommendation

The purpose of these standards is to ensure the child has "received instruction that will enable it to earn an honest living and lead a Christian life, then that the child has been

'adequately' educated. The Amish schools of IOWA have been set up with that principle as their objective" (Bishops, Committeemen, and Others In Conference, 1983, p. 2).

Amish Teachers within the Amish School System

When attending an Amish parochial school, the scholars are usually taught by a female Amish community member, who is unmarried (Fischel, 2012). However, a teacher who is male may also be chosen to be the school teacher. The selection process is quite simple in the Amish school. If someone shows interest and the community feels they have the aptitude for educating children, they are selected as the teacher (Hostetler, 1993). The Amish teacher is expected to "integrate their life with that of the community, for every aspect of behavior and personality is related to teaching. They must be well grounded in religious faith, exemplifying the Amish traits of steadfastness and love of others" (Hostetler, 1993, p. 184). "The school teacher is the most constant and visible formal leadership position available to women, albeit still legitimized by a male school board" (Anderson, 2015, p. 12). Wyman (1996) states,

The qualifications of an Amish teacher as stated in Guidelines (1978:12) includes: 'Good Christian character, good educational background, and a desire to improve that education.' Other qualities mentioned are the ability to 'get along' with children, willingness to cooperate with parents and school board members, a sincere attachment to the teaching profession, 'and above all (the realization) that she will need help from a higher power to mold the lives of these children as we desire them to be' (p. 108).

The selection process for Amish teachers is very community focused. While Amish teachers do not go through an application process or an interview for the teaching job, they are asked by the local school board and the community elders (Kachel, 1989).

According to Fischel (2012), the local school board is usually made up of the parents from the school, and they are the ones who hire and pay for the teacher (p. 115). There are no formal contracts for the Amish teacher, instead a verbal agreement is made between the school board and the teacher. (Kachel, 1989). "The majority of Amish teachers will earn less than \$6,000 per year with few, if any fringe benefits such as health insurance or pension plans" (Kachel, 1989, p. 94). According to Wyman (1996), most salaries are paid monthly and it is equivalent to paying someone to clean their home. Typically if an Amish man is hired as the teacher, he will be paid more than a female teacher (as cited in Hostetler & Huntington, 1992). In some cases, the salary does not directly go to the teacher. If the teacher is unmarried and still living with his or her parents, the salary may go to the parents of the teacher to continue to support the family's needs. Nolt's (2016) research states, "Typically, until Amish youth are twenty-one they turn their wages to their parents- who, in turn, provide for their needs and promise to give them financial help of various sorts when they marry and start a household of their own" (p. 70).

Based on the research around Amish teachers within the school systems, it has shown that research around this topic is outdated. While research has been cited, much of the research is over ten years old. This dissertation will focus on the ideas of the Amish teachers, their teaching, and the Amish school systems in which they teach and share an updated version of Amish schools functioning in the 21st century.

Amish Teachers' Professional Learning

New Amish teachers have much to learn during their first year of teaching. These teachers have no more than an 8th grade education and no formal training on how to teach children (Fischel, 2012; Hostetler, 1993). However, based on a study done by Payne (1971), implications were stated that "the Amish without past educational experiences or special training have adapted teaching behavior and patterns to their value system" (p. 90). New teachers in Amish schools spend hours learning the curriculum they are to teach. They have teaching guides to assist in this process (Anderson, 2015).

Improving one's craft and being successful is the goal of many professionals. In Anderson's (2015) research, Amish teachers are given feedback from others in their profession as well as from the community (school board members, parents, and other community members). There are some, but limited opportunities in professional development for Amish teachers. Anderson (2015) states, some teachers engage in correspondence courses. Several publications offer support to Amish teachers such as *The Blackboard Bulletin*, where these teachers can read about teaching strategies, how to discipline students, and other classroom areas of interest to help the teacher be successful (Wyman, 1996).

It is helpful for Amish teachers to network with other Amish teachers. Amish teachers may have the opportunity to attend state and/or local training with other Amish teachers to gain support and advice for the classroom (Hostetler, 1993). Wyman (1996) has found, these meetings are vital for many Amish teachers as it may be the only time to collaborate with others who are in the same profession.

Lacking from the Amish schools are administrators and other staff that public schools have access to. The Amish teacher at various times throughout the school day performs all duties that many faculty and staff would fulfill at a public school (Kachel, 1989). While the Amish schools may lack modern-day technologies, the community views the role of teachers and teaching the children as a special calling (Kachel, 1989). According to Anderson (2015), "... the Amish teacher serves more as a more appropriate role model than a non-Amish teacher, who is an adult but does not embody Amish values" (p. 5).

Amish School Curriculum and Instructional Practices

While members of the community value the role the schools play in their children, Amish children are taught to look at schooling and their lessons as enjoyment and not something that is mandated (Anderson, 2015). According to Ediger (2005), during the school day, scholars focus on reading comprehension, phonics, context clues and syllabication, while also learning about various skills in arithmetic.

Instructional practices differ in the Amish classroom depending on the goal of the lesson. Oftentimes the teacher will use the method of small group instruction to teach grade level groups. The scholars, another name used for students in Amish schools, are called to the front of the classroom to work on specific lessons, while other scholars will be working independently at their seats. If scholars do have questions, peer teaching is implemented with the older scholars to the younger ones (Kachel, 1989). The teacher uses the older children in the classroom to help the younger children, especially if she is also working with other individuals. This cooperative learning strategy cultivates the

family-oriented environment (Anderson, 2015, as cited in Dewalt, 2006; Hostetler & Huntington, 1992[1971]).

Because the one room schoolhouse philosophy is integrated in Amish schools, differentiated instruction is embedded throughout the day to ensure student success. "Since teaching happens in a common classroom, pupils in the lower grades absorb some of the lessons being taught to the older students" (Nolt, 2016, p. 76). Teachers meet students in small groups for reading and math groups and offer multiple opportunities for success, while also providing reteaching opportunities if needed.

Within the classroom the teacher may incorporate various strategies for classroom management purposes. While a teacher is working with a small group of students, other students are working individually at their desks. When they need the teacher's attention or have a request to make, they use various non-verbal cues to communicate. According to Anderson's (2015) research, visual cues are used as a classroom management tool. Students may receive or give cues to the teacher and make gestures to grant permission for specific requests or activities. For example, if a student wishes to leave their desk and use the restroom, they may hold up one finger. The teacher will acknowledge the request when it best fits the group she is working individually with. When the request is granted, the student quietly leaves their desk, performs the task they have requested, and walks quietly back to their desk and begins to work on their individual work again.

Discipline problems are not immune to Amish schools. Teachers use praise, encouragement, and corrective feedback as a way to decrease misbehaviors. Because

Amish schools are embedded with their religious philosophies, teachers discipline their students without the use of sarcasm or ridiculing them (Hostetler, 1993). Based on Wyman's (1996) research, communication between the teacher and parents, along with the school board continually occurs throughout the school year. This is especially important when there are discipline problems within the classroom. When this does happen, the teacher will contact the parents to discuss the concern (Wyman, 1996). In an interview with Amish teachers, Wyman (1996) reported, "... that if a child gets into trouble at school, they generally get into trouble at home" (p. 116). However, because the teacher and students work together on a daily basis, the student does want to please their teacher and do what is expected of them (Hostetler, 1993).

Keeping the students' grades up-to-date is imperative to measure the students' progress. "Grading and record keeping are done on a daily basis in each subject area and are an important part of the bookkeeping that goes along with teaching" (Wyman, 1996, p. 115). In Wyman's (1996) research, children in Amish schools receive grade progress reports every six weeks much like their public school counterparts.

Amish Schools Functioning in the 21st Century

While there are many differences between an Amish school and a public school when considering technologies, physical structures, and curriculum, there are many similarities. A teacher who is passionate about supporting the community's values and working with children is one very evident similarities between an Amish school and other schools. All schools want supportive parents who care about the education of their children is another similarity between the two. And having a school community who

wants their youth to grow to be productive citizens is what everyone should want for their schools and the children who attend them.

Amish school systems continue to function within the 21st century, while achieving the goals of their schools as they align with the community beliefs. But a question continues to linger within this researcher of Amish education. How do Amish teachers learn to be teachers if they have no post-secondary education in this area? Lortie (1975) theorized frameworks in education that support teacher and student learning. In his Apprentice of Observation Model, he explores the methods in which teachers learn how to be teachers. Lortie's framework will be explained with deeper analysis in the next section.

Dan Lortie's Frameworks for Teaching

Chronological Overview

The first traditional school was established around 1839. After this many other schools were established (Lortie, 1975). Around the middle of the 19th century, it was the first time teachers were given some type of formal training on how to be teachers within the education field. And, it took another seventy years after any specific training was given to teachers (Lortie, 1975). "By 1928, for example, all but five states had created normal schools or state teachers' colleges" (Lortie, 1975, p. 18). Teaching as an occupation has changed greatly over time.

Lortie (1975) states, "Occupations shape people" (p. 55). One could also say that people shape their occupations to fit their interests, personalities, and professional needs to evoke change in a particular institution or system, in Lortie's (1975) research on the limits of socialization in teaching. His research was conducted from a survey of 84

elementary and secondary teachers, of various school settings and grade levels. This study is known as the Five Towns research.

From this research, Lortie (1975) explained various areas of socialization with occupation fields, specifically those in education. For this study on Amish school systems, understanding Lortie's specific research on the attraction to teaching, the occupational induction process and specifically the Apprentice of Observation Model as it connected to Amish school teachers is the focus of this study.

Lortie's Theoretical Framework

Understanding the teaching standards and being able to implement them effectively within the classroom is the goal for all schools. By doing this, student learning will increase and continuous school improvement will follow. Effective instruction is key to any successful classroom when looking at it through classroom management, engagement, participation, and responding to instruction. Understanding how teachers learn to teach and the pedagogy behind their understanding of the teacher role is important. Because most teachers learn to become teachers through post-secondary education and a student teaching placement, learning their attraction to the teaching field, the induction process to teaching, and a model of apprenticeship should be considered as to how teachers learn to become educators.

Attractors to the Teaching Field. Research by Lortie's (1975) Five Towns research concluded there are five attractors to entering the teaching field. The first is one of interpersonal themes. This is explained by teachers wanting to have an occupation in the teaching field because they want to work with people. In the Five Towns research, some teachers specifically mentioned working with children (p. 27). The second attractor

to teaching is the one of a service theme. "The idea that teaching is a valuable service of special moral worth is a theme in the talk of Five Towns teachers" (Lortie, 1975, p. 28). The continuation theme is the third attractor. This is explained as sometimes students become so attached to school that they don't want to leave, so they may likely enter the teaching field. Teachers in the Five Towns research stated they liked school when they were students and this influenced their occupational decision (Lortie, 1975). The fourth theme for attractors to the education field is material benefits. These benefits would include prestige, job security, and money (Lortie, 1975). The final attractor is time compatibility. This is an attractor because of the work schedule and also the length of time spent in schools each day and throughout the year (Lortie, 1975). Whatever influences teachers to enter the field of education, once their journey of teaching begins, there is another process they go through in their careers.

Induction Process. Lortie's (1975) research sought to understand an occupation's induction process. He determined "basic components are found in all systems of occupational induction... formal schooling, mediated entry, and learning-while-doing" (Lortie, 1975, p. 57). Formal schooling is considered to be one where the student is instructed through various methods and then continued study occurs to expand the thinking and the learning of the student. Mediated entry, is known as apprenticeship (Lortie, 1975). Apprenticeship dates back to medieval times and is now common in occupations in the trades fields (Lortie, 1975). He continues to explain how "teaching does not require as much preparation as other professions, crafts, or other skilled fields" (p. 60). In teaching, apprenticeship looks like those who are practicing teaching. "The practice teacher normally observes the work of an experienced teacher and teaches

classes as that the teacher sees fit..." (Lortie, 1975, p. 59). In current practices, this mediated entry would like teaching placements and student teaching for those post-secondary students who are seeking an education degree.

The third induction process, learning-by-doing, is one that historically is seen in the area of teacher education. Lortie (1975) states, "Learning-by-doing continues to be important; we shall see that teachers believe work experience is highly influential in shaping their performance" (p.60). Learning-while-doing is consistently practiced in the business and industry areas, where employees work their way to more prestigious responsibilities within the company. This process can be described as learning what to do and needing to learn to do everyday work of the occupation (Lortie, 1975).

Loritie's ideals about how teachers in education are initially attracted to the profession and their level of entry into the profession varies for each individual. Most teachers in public and some private schools learn how to become a professional in their field by formal schooling opportunities. This includes a post-secondary education based on pedagogy and content studies, while some will also include various field experiences.

Lortie's Apprenticeship of Observation Model. Lortie (1975) describes how general schooling and his framework known as the Apprenticeship of Observation can be applied in the area of teaching. The Apprenticeship of Observation Model describes the phenomenon of pre-service teachers having already had multiple hours of observation professionals in their field of study prior to beginning any formal coursework (Lortie, 1975). Students have long observed their teachers in what they are doing throughout the school day, how they teach, what strategies they use for students to understand the material, and how they interact with the students. Lortie (1975) discusses,

The interaction [in the classroom] is not passive observation... the student learns to "take the role" of the classroom teacher, to engage in at least enough empathy to anticipate the teacher's probable reaction to his behavior. This requires that the student project himself into the teacher's position and imagine how he feels about various student actions (p. 61-62).

On average, a student may have up to 13,000 hours of direct contact with their teachers by the time they finish their high school journey (Högqvist, 2016; Lortie, 1975). Because teachers, when they were students themselves, have been interacting with their own teachers throughout their entire schooling years, new teachers likely begin their careers teaching in ways in which they were taught when they were students in a school (Kennedy, 1999).

Kennedy (1999) states that there are three ways that teachers learn to teach as it relates to the Apprenticeship of Observation Model. The first being observation of their own teachers, then learning at the postsecondary level of their course work, and lastly, they develop their own teaching style through their interests, personalities, and teaching techniques. However, Kennedy (1999) asserts that the student does not observe all that a teacher does. The student does not always see how the teacher plans, analyzes, or determines specific implications of the classroom. This is seen as a challenge for many (Greenwalt, 2014). Lortie (1975) states, "What students learn about teaching, then, is intuitive and imitative rather than explicit and analytical; it is based on individual personalities rather than pedagogical principles" (p. 62).

However, Lortie's discussion on what students learn during this Apprenticeship of Observation time, cautions that much of what is observed is of the observer's

imagination. The observer has a limited vantage point of the professional. When a student learns about teaching, this apprenticeship "is not like that of an apprentice and does not represent acquisition of the occupation's technical knowledge. It is more a matter of imitation, which being generalized across individuals, becomes tradition. It is a potentially powerful influence which transcends generations…" (Lortie, 1975, p. 63).

When teachers have been asked to reflect on their experiences with the induction process, many are using the learn-by-doing model of teaching. While they are learning how to do the said occupation while they are in the midst of working in the occupation, they may have some prior knowledge to pull from. This prior knowledge comes from being a participant of the Apprenticeship of Observation Model. These teachers have been observing teachers since they themselves entered school as students. This is a factor in how teachers have learned to be the teachers they are.

Use of Lortie's Apprenticeship of Observation in Other Research

Lortie's Apprenticeship of Observation Model has been used in various settings in research conducted around the world. Bailey et al. (1996) focused on a professor and seven language pre-service teachers where they reflected on their own language learning. The collected data was based on their own previous learning experiences and how those learning experiences may or may not have influenced how they categorize good or bad behaviors in regards to teaching. They determined through reflecting on the framework of Apprenticeship of Observation and their own experiences, that they often defaulted to the behaviors of past educators they had in their varied classroom settings, instead of creating their own responses as it relates to their interests and personalities. This study concluded that an apprenticeship model influences a teachers' belief systems.

Gutiérrez Almarza (1996) conducted a study that investigated four foreign language teachers on their initial beliefs about the profession of teaching. Their beliefs showed connections on how others' behaviors, either positively or negatively, and their interactions with them influenced their beliefs. This study concluded that the apprenticeship model influenced the beliefs of these four foreign language teachers.

Another study conducted by Urmston (2003) was to analyze how a pre-service teachers' beliefs may have changed from when they entered a teaching program to when they finished their course work within the teaching program. There were 30 pre-service teachers in this study.

The study found that as the students progressed through the course they realized that there was a conflict between what they knew and believed based on their experiences as learners and what the teachers of their teacher training courses were trying to teach them (p. 113).

However, even though this realization happened among the students, few students changed their beliefs.

Moodie (2016) examined the impact of non-native English-speaking teachers and the impact the Apprenticeship of Observation had on them. Data was collected and analyzed from the writing of 18 Korean English teachers. Four of the 18 teachers were also interviewed to discuss more in-depth analysis of the experiences. Results from this study evolved in the idea of an "anti-apprenticeship of observation" model. Teachers shared because of this apprenticeship experience, they realized what behaviors they did not want to exhibit within their own classrooms. Again, even though the apprenticeship

of observation created a desire to be the opposite, it still showed to have an impact on the participants of the study.

Limitations of Lortie's Apprenticeship of Observation Model

With every framework or model, there are limitations and weaknesses, and Lortie's (1975) work is not exempt from those. Lortie (1975) stated that students, who view their teachers through the Apprenticeship of Observation Model, are viewing the teaching and interactions of the teacher with other students in the classroom through their own student perspectives. The student's viewpoint of the teacher is more of an imaginary one than of a real viewpoint. This is due to many of the components that a teacher goes through during the day that are not observable to the student. This includes planning, shifting instruction, self-reflection, and intentions. Because all full understanding of the teaching profession or teaching processes are not obtainable through an Apprenticeship of Observation Model, it can offer a slanted view of the teaching profession.

Conner and Vary (2017) state three more aspects that may be limitations to Lortie's framework. The first limitation is focused around the idea of effective teaching. The observer determines what they believe to be effective teaching only on the basis of the individuals they have observed. The teacher who is being observed may or may not be an effective teacher based on many other factors besides an observation. Secondly, the observer may have a limited skill set as they have only seen a specific skill set from the teacher they have observed. Lastly, the observation of a teacher only gives you a slice of the role of the teacher. Many other factors are implemented throughout a teacher's day and the decisions they make throughout the school day as it relates to their teaching.

Another limitation of the Apprenticeship of Observation Model focuses on the misled perceptions. Feiman-Nemser (2001) discusses the beliefs generated from those who have participated in the Apprenticeship of Observation. She stated that the beliefs prospective teachers have, "mislead prospective teachers into thinking that they know more about teaching than they actually do and make it harder for them to form new ideas and new habits of thought and action" (p. 1016).

Lortie's (1975) research of Five Towns cases indicate that the influence of previous teachers can have an effect on a current teacher's choice of vocation. This indication does not mirror the idea of apprenticeship because the knowledge and skills are not taught through the observations, as it is only an imitation or assumptions made by the observer. By observing a teacher and then deciding to become one can be problematic for many. Lortie (1975) found that many in his case studies commented that teaching was more difficult than they could foresee.

Another perspective on why Lortie's (1975) framework is flawed includes the role of teachers as caregivers. Greenwalt (2014) states that those who enter the profession of teaching may be doing so because they had a teacher that they loved and respected as it relates to the classroom teaching. Because of this, the observer has a positive viewpoint of the teacher and that particular classroom. Within the 13,000 or more hours of observing educators in their classrooms, and knowing that students have multiple teachers in multiple classrooms during their school experience, those observations can shift their perspectives when observing those professionals.

Mewborn and Tymiski (2006) found that the Apprenticeship of Observation

Model does not decipher between positive and negative experiences and how it drives the

actions of the observer. Some teachers have had negative experiences as students. Those negative experiences propelled those teachers to have different and more positive pedagogies within their classrooms. This research conclusion also mirrors the research completed by Moodie (2016).

There are varying viewpoints on Lortie's (1975) limitations through these research studies. While realizing the limitations and how they can affect beliefs, the focus of this study will be focused on how Lortie's (1975) Apprenticeship of Observation Model. This framework will be used to see how it has influenced the teachers of an Amish school system and their implementation of the Iowa Teaching Standards.

Lortie's Framework and the Amish School System

When Amish persons choose to enter the teaching profession within their communities, Amish teachers are attracted to teaching for several reasons. Lortie (1975) listed five areas that cause others to be attracted to teaching: interpersonal reasons, a sense of service, continuation of wanting to be attached to the school and learning, material items, and compatibility. Of those five areas, based on research, interpersonal reasons, a sense of service, and a continuation of attachment to a school. These attractions support the reasons why Amish teachers enter the teaching profession.

Amish teachers have also had opportunities to participate in an induction process of mediated entry when they were older students of the classroom or a classroom helper after their 8th grade education. Because Amish children only have an 8th grade education, those interested in becoming teachers in the future begin to take on leadership roles within the classroom: helping the teacher, mentoring younger children, through peer teaching, completing classroom tasks, and grading. Ongoing conversations between the

Amish student would likely learn the Amish teachers' role from early on in their education careers as a student. These are examples of the mediated entry induction process within the classroom setting for young Amish students.

Once teachers take the role as the classroom teacher, they then participate in another induction process called the learning-by-doing model. Teachers in the Amish school system learn how to become teachers from this model, not a formal apprenticeship method like student teaching is for most educators. The Amish teachers learn how to teach relying on their own previous experiences and learning how to do the teaching job while they are immersed at the same time as they are the teacher in the classroom.

Amish teachers have learned how to execute the teaching tasks of a classroom teacher through the induction process of mediated entry and also the learning-by-doing model. However, these processes only elevate the teachers' withitness of being a classroom teacher. This is due because they have been participants of another model since they started school as a 1st grade student in an Amish school. Based on Lortie's (1975) Apprenticeship of Observation Model, it can infer that Amish teachers learn how to be teachers during their 1st-8th grade educational years as a student. They have been watching what their teachers do on a daily basis. This includes instructing students, organizing the classroom, managing behaviors, and knowing the content for their students' learning.

For Amish teachers teaching in an Amish school system, they have participated in mediated entry, the learning-by-doing model, and Apprenticeship of Observation Model.

This has allowed these teachers to know how to teach within their own classrooms in an

Amish school system. Evidence to show how they know how to teach is done in this research when classroom observations are completed and the observation notes are compared to a set of state teaching standards. This comparison will show what standards the teacher is showing or not showing evidence for. Interviewing Amish teachers based on Lortie's Five Towns survey questions will focus on the teachers' attractions to teaching and how the Apprenticeship of Observation Model played a role in helping them know how to become a teacher. The interview data will also be analyzed to see if through this structured interview, evidence of teaching standards are present. It can be inferred that through this data analysis of classroom observations and interviews, conclusions will be made that show Amish teachers learn how to be teachers of the classroom through the Apprenticeship of Observation Model, even without any specialized educational training after their 8th grade educational year.

Based on the research, Amish school teachers implement many of the same aspects of the Iowa Teaching Standards. They include, but not limited to, schools supporting the community goals, providing instruction that meets the learners needs, addressing discipline issues, and having content knowledge of the subjects they teach. It can be inferred that evidence can be found of the Iowa Teaching Standards within Amish teachers' instruction in the Amish classroom. This is due because Amish teachers learned how to be educators through Lortie's Apprenticeship of Observation Model. This is the foundation for their professional journey as Amish teachers within Amish school systems.

Limitations on Amish Schools

Research regarding Amish school systems is limited. Much of the Amish school system research that is available was completed more than 10-15 years ago. This is due to the fact that many non-Amish people are not allowed to observe the Amish school in practice. This may be due to the people of the Amish culture choosing to remain closed off from the modern world. Research that is available mostly describes the physical attributes of the school, students, and teachers. The research frequently describes in vague terms subjects taught within the school curriculum as stated in previous explanations of the Amish school system in this literature review.

But yet, when looking at the Amish school systems, teachers within these environments have no pre-service training, education beyond the 8th grade, or professional development based on the Iowa Teaching Standards. Amish teachers learn to be educators from observing their previous educators they had as their own classroom teachers. At this point in the review of literature there is no indication that Amish teachers have been evaluated on a set of state teaching standards. There is also no research indication of understanding how those teachers are able to be educators with no formal post-secondary educational training in pedagogy, content knowledge, classroom management, or meeting diverse student needs.

Conclusion

Pre-service teachers learn about the profession through theory, curriculum, and pedagogy studies. They also participate in multiple teaching experiences in various subjects, classrooms, and environments. Practicing teachers continue their professional learning through professional development, advanced degrees, continued learning in

individual inquiry and research, collaboration with other colleagues and evaluations based on feedback and the teaching standards. Teacher personality and disposition can lead to success or failure in the classroom. Implementation of standards and expectations can also be a hindrance for some educators if they are not capable of knowing and applying the knowledge of how to be a professional educator within their school. This can determine if students are successful within various student learning outcomes.

Based on the research of Amish school systems, teaching standards, and applying the Apprenticeship of Observation Model into their classrooms is guided in this research. Kennedy (1999) questions that if teachers are going to model their own teaching practices after those teachers they have observed throughout their own PK-12 education, why is teacher education important? Amish teachers are not formally educated from a post-secondary institution. But rather learn the craft of teaching and instructing from learning while doing mentoring model, as Lortie's theory suggests. By having first-hand, in real-time, observation and interview access to Amish school teachers and their classrooms, the researcher hopes to find evidence of the Iowa Teaching Standards in the teaching of the Amish school teachers.

Chapter 3: Methodology

Purpose of the Study

The purpose of this study was to analyze a specific school system without the modern day technologies and a formally educated teacher who has sought a post-secondary degree in education, and how it functions within the 21st century. A particular Amish school system's Amish teachers, who all are Amish teachers in Iowa, were researched by conducting interviews and classroom observations. The observations took place in the Amish teachers' classroom. The intent of this qualitative research study was to find evidence of the Iowa Teaching Standards in the Amish teachers' classroom instruction. Interview questions explored how Amish teachers learn to be instructors of the classroom, while determining if their explanations support Lortie's (1975) research on the Apprenticeship of Observation model.

Research Questions

Within this study, the following research questions were explored:

- 1) What evidence can be found of the Iowa Teaching Standards within Amish teacher instruction in the Amish classroom?
- 2) Based on the Amish teacher's reflection of their teaching path, why did they decide to teach in the field of education and how were they trained to do so? What evidence exists that their decision and training is related to Dan Lortie's Apprenticeship of Observation Model?

Research Process

This is the research process that was followed throughout this study:

- The researcher discussed the study with a religious leader of the Amish
 community and gained permission for the study where classroom observations
 and one-on-one teacher interviews will take place.
- 2. The religious leader of the Amish community gave written consent to conduct the study at the Amish schools. He signed a Letter of Study Site Cooperation.
- 3. The researcher met with each of the Amish teachers to discuss the study where classroom observations and one-on-one teacher interviews will take place.
- 4. The Amish teachers gave written consent to conduct the classroom observations in the Amish schools. They signed a Participant Consent form.
- 5. The researcher scheduled classroom observation times with the four Amish teachers.
- 6. The researcher collected data based on evidence observed from the the Iowa Teaching Standards:
 - a. During the classroom observation period, anecdotal notes were taken of the classroom observations
 - Notes from the classroom observations were then typed out, noting the time and anecdotal notes in the Classroom Observation Protocol tool
 - c. Each time segment was read and analyzed to determine if there was evidence that was observed within the Iowa Teaching Standards. If evidence from an teaching standard was observed, the criterion letter for what was observed was documented in the Classroom Observation Protocol tool next to the time segment's anecdotal notes

- d. At the end of each of the teacher's Classroom Observation Protocol tool, the total amount of times evidence was shown for each Iowa Teaching Standard and each specific criterion will be tallied to give an overall analysis of the evidence found in the Amish teacher's observations.
- e. After the classroom observations, another educator looked over the Iowa

 Teaching Standards narratives to determine inter-rater reliability
- 7. The researcher conducted individual interviews with the Amish teachers and,
 - a. The interviews were conducted at a time outside of the school day that is convenient for the teacher
 - b. The interviews were not audio-recorded, per the request of the Amish teacher and their culture values
 - c. Because audio-recording was prohibited,
 - i. A written list of the interview questions was given to the Amish teacher
 - ii. The researcher asked Amish teacher to answer the questions via written response
 - iii. While the Amish teacher answered the question, the researcher wrote the Amish teacher's answers
 - iv. Once the question was answered and recorded, the researcher read the written response to the Amish teacher for verification by the Amish teacher
- 8. The researcher transcribed the interview answers from teacher interviews on an electronic document

- The researcher coded the recordings looking for themes and connections to Lortie's (1975) Apprenticeship of Observation
- 10. The researcher analyzed the data from the Iowa Teaching Standards observations and teacher interviews

11. Conclusions were drawn

The timeline of data collection took place in December of 2022 through February 2023. Because the Amish schools start their schooling in late August or early September, classroom observations were completed first. Individual interviews with the teachers who agreed to participate took place in January and February 2023. The timeline of data analysis took place in February of 2023, with the completion date of data analysis completed by February 2023.

Setting

A rural, public school district in Iowa covers several small communities and has three schools within its district. There is a PK-K school in one town, a 1st-2nd grade center in another town, and a 3rd-12th grade school in the third town within this school district. As of the 2021-2022 school year, there were around 675 students district-wide. Within the last few years, the school district has seen an influx of Amish society build homes and businesses within our school district boundaries.

In multiple conversations with the religious head of the Amish community during the past few years, the Amish community has decided to not be educated through our local public school system. However, the Amish have made one exception in the last few years. A 3rd grade student, who has Downs Syndrome, attends this rural, public school to receive special education services throughout her school day as she integrated into the

public school day with non-Amish students. As of this school year (2022-2023), the Amish community has built four of their own one-room schools and the students are educated by a local Amish teacher, many who have no additional training or education beyond their own 8th grade education.

This research provides the opportunity to observe and interview up to four current Amish school teachers, based on the Amish's religious head and Amish teachers agreeing to classroom observations and teacher interviews. There are three female and one male Amish teachers. They have been teaching for five years or less. All of the Amish educators will have completed their 8th grade education. These teachers teach in an Amish school, built and subsidized by the Amish community within this rural, public school district.

Participant Characteristics

Five individuals teach in the neighboring four Amish schools. Each of the five teachers were asked to be part of this study. Four of those teachers responded and consented to be part of the classroom observations and interviews. Personal information gathered from the interviews included year of birth, gender, community of birth, number of years in the teaching profession. A summary of this demographic information is listed below.

Table 4Amish Teachers' Participant Characteristics

Teacher	Year of Birth	Gender	Community of Birth	Amish School	Number of Years in the Teaching Profession
Teacher N	1993	Male	Town A	School X	0.5 year
Teacher R	1990	Female	Town B	School X	2 years a teacher 1 year a classroom helper 1 year a co- teacher (2-3 days a week)
Teacher E	2004	Female	Town A	School Y	0.5 year
Teacher RS	1999	Female	Town C	School Z	5 years

Researcher Characteristics

The researcher is a 46-year-old female, who has been teaching for the past 23 years. The researcher has taught 4th grade in an urban public school district in Texas for two years, two years were spent in a private parochial school teaching a 5th and 6th grade combined classroom in Iowa, two years were spent in a private parochial school teaching a 4th grade in Iowa, 13 years in a public school in Iowa as a middle school special education teacher, and is currently in a 3rd year as a 6th grade teacher in the same middle school in Iowa. During the time teaching in the public school in Iowa, the researcher has also been a 6th-12th grade instructional coach for the past seven years and the school improvement coordinator for the past three years.

 Table 5

 Researcher's Teaching Experience

Year	Type of School	State	Grade Level
1999 - 2001	urban public	Texas	4th grade
2001 - 2004	private parochial	Iowa	5th/6th combined
2004 - 2006	private parochial	Iowa	4th grade
2006-present	rural public	Iowa	6th-10th special education 8th grade English- Language Arts 6th-12th grade interventionist 6th grade social studies 6th-12th grade school improvement coordinator

The researcher is a licensed Iowa educator. The degrees earned by the researcher include a bachelor of arts in elementary education, a master of education in special education, and an advanced studies certificate in Educational Leadership, Principal PK-12 / Supervisor of Special Education. The researcher is currently a doctoral student in the area of educational leadership. Additional endorsements include: reading 5-12, special education consultant, instructional strategist II LD/BD K-12, instructional strategist 15-12, middle school endorsement 6-8, instructional strategist I K-8, reading K-8, K-8 English/language arts, and elementary education K-6.

There was a second researcher to determine the inter-rater reliability. The researcher is a female who has been in the field of education for 42 years. She is a licensed Iowa educator. The degrees earned by the researcher include a bachelor of arts in elementary education and vocational home economics, a master of arts in education and special education, and Doctor of Philosophy in education and special education.

Additional endorsements include: family and consumer sciences 5-12, consumer / homemaking education 5-12, mildly disabled 5-12, and behavioral disorders 5-12. The researcher has worked in a private school for adolescents with behavior disorders. Since 1996, the researcher has worked in private universities in Iowa. She currently is a professor of education and director of graduate programs in education in a private university.

Data Collection Procedures

For this study, formal classroom observations were conducted and data was collected on the Iowa Teaching Standards that are observed during instruction in the Amish classroom. The procedure for gathering data on the Iowa Teaching Standards through formal observations was:

- 1. 3 5 observations per classroom were conducted by the researcher
- 2. Each observation was at least 20 minutes in length
- During the classroom observation period, anecdotal notes were taken of the classroom observations
- 4. Notes from the classroom observations were then typed out, noting the time and anecdotal notes in the Classroom Observation Protocol tool

- 5. Each time segment was read and analyzed to determine if there was evidence that was observed within the Iowa Teaching Standards. If evidence from an teaching standard was observed, the criterion letter for what was observed was documented in the Classroom Observation Protocol tool next to the time segment's anecdotal notes
- 6. At the end of each of the teacher's Classroom Observation Protocol tool, the total amount of times evidence was shown for each Iowa Teaching Standard and each specific criterion will be tallied to give an overall analysis of the evidence found in the Amish teacher's observations.
- 7. After the classroom observations, another educator looked over the Iowa
 Teaching Standards narratives to determine inter-rater reliability
 Finding evidence of the Iowa Teaching Standards during the classroom observations
 were the focus of this study. The document used for data collection, Classroom
 Observation Recording Tool, can be found in Appendix D. Merriam (2009) discusses
 how naturalistic observations within educational settings give researchers the opportunity
 to see experiences firsthand.

Once observations were completed, the data was analyzed on what Iowa Teaching Standards are observed most within the Amish schools and what standards are being observed the least, with specific classroom evidence to support the teaching standard that was observed. Evidence was analyzed to determine what similarities and differences are between teachers and the evidence gathered as it relates to the teaching standards.

Discussion of implications of meeting the standards based on post-secondary education was also explored.

One-to-one interviews with the Amish teachers discussing their professional paths towards becoming an educator within the Amish school system was conducted based on the religious head of the Amish community and Amish teacher agreeing to the interview. The interview questions, found in Appendix E, will be some of the questions that Lortie (1975) used within the Five Towns Interview to understand how concepts from Lortie's (1975) Apprenticeship of Observation align with the Amish teachers' decision to enter the teaching profession. These questions were categorized into three categories made by the researcher: questions focused on the background of an Amish teacher, questions focused on the Apprenticeship of Observation, and Self-reflection questions on teaching as a profession. The answers from the section of the Apprenticeship of Observation were used to show understanding of how the Amish teachers were able to know how to become teachers and their focus as a professional.

Data Analysis Procedures

Using data from the Classroom Observation Recording Tool, data from the classroom observations and evidence gathered for the implementation of the Iowa Teaching Standards, data was analyzed. The data was used to determine what standards are implemented by each teacher individually, and also by all of the practicing teachers, collectively. This data helped the researcher determine if evidence of the Iowa Teaching Standards are evident in the teaching practices of the Amish teacher, even without any post-secondary education degrees in education. Inter-rater Reliability was used to determine credibility of the classroom observation and teaching standards data.

Braun and Clarke (2006), who offered a six-phase thematic model, will be used in the analysis of the interview data from this research. Their six phases include:

- collect the data set
- review the data to familiarize the researcher with what data has been collected
- generate codes and labels
- identify concepts from the data; search for themes and patterns
- connect themes to conclude findings

In this research, themes connected to the Iowa Teaching Standards and Lortie's (1975)

Apprentice of Observation model were analyzed, while also being aware of other themes that may be found through the classroom observations and interviews.

The first phase of this analysis process was to collect the data set. Interviews of each the Amish teachers were completed using Lortie's (1975) Five Towns research questions. Reviewing the data, step 2, was completed when the interviews were transcripted from handwritten notes to electronic notes, and then reread again by the researcher. Step three consisted of generating codes and labels. The interview notes were grouped with the interview question and the response of all four of the Amish teachers under the interview question. for easier analysis. Key concepts were highlighted for each response for each question. This allowed for codes and labels to be created. From these codes, similarities and differences were identified with the codes. The researcher used the codes to determine themes and patterns within the interview data collected. Lastly, the researcher connected the themes from the interviews to research found on Lortie's (1975) Apprenticeship of Observation Model. This will help to understand how Amish teachers know how to teach in their school systems without any education beyond the 8th grade or formal training in the field of education.

Lastly, interview questions and responses will be analyzed to find connections between the evidence found in the Iowa Teaching Standards. Responses from the interview may provide evidence to an Iowa Teaching Standard that did not have any evidence from the classroom observations. This cross analysis of data will provide a more comprehensive understanding of what evidence of the teaching standards are present in the Amish classrooms.

Inter-Rater Reliability

The following were used to determine inter-rater reliability of scoring of the Iowa

Teaching standards with the anecdotal notes from the classroom observations.

- 1. For each teacher, the primary researcher and the 2nd scorer individually scored the data from the classroom observation recording tool. This was to create the process accuracy, credibility, and dependability.
- 2. The researcher gave the 2nd scorer a copy of the Classroom Observation Recording Tool with all of the anecdotal notes from each of the observations for each of the Amish classroom teachers. This tool requires judgements to be made on the Iowa Teaching Standards.
- 3. The researcher gave the 2nd scorer a copy of the Iowa Teaching Standards to use to code the classroom observations.
- 4. For practice, the researcher randomly selected two time segments out of the four classroom observations of each teacher.
- After practice, the 2nd scorer asked questions from the anecdotal notes time segments.

- 6. The researcher and the 2nd scorer then compared the scores to determine what Iowa Teaching Standards showed evidence within the observation data.
- 7. The 2nd scorer continued to score all of the anecdotal notes from each of the observations for each of the Amish classroom teachers on the Classroom Observation Recording Tool.
- 8. During practice, it was found that the understanding of Standard 3,
 Demonstrates competence in planning and preparing for instruction, was different for the researcher compared to the 2nd scorer.
- After agreement was reached the researcher decided to go back into each of the teachers' classroom anecdotal notes on the Classroom Observation Recording
 Tool and rescore for Standard 3.
- 10. During practice, it was found that the understanding of Standard 5, which uses a variety to monitor student learning, was different for the researcher compared to the 2nd scorer.
- 11. After discussion of concrete evidence v. abstract evidence in the area of classroom assessments, agreement was reached to include both types of evidence.
- 12. The researcher decided to go back into each of the teachers' classroom anecdotal notes on the Classroom Observation Recording Tool and rescore Standard 5.
- 13. After the sample scoring discussion of each standard and the criteria, the researcher decided to rescore each of the teachers' classroom anecdotal notes

- on the Classroom Observation Recording Tool to ensure fidelity of inter-rater reliability.
- 14. It was agreed upon that the researcher and the 2nd scorer would meet again to determine the Inter-Rater Reliability score.
- 15. The Inter-Rater Reliability score was calculated for each teacher on each of the standards.

Ethical Considerations

The Amish community is a religious and private one. Outsiders are not usually granted access to understanding the ways in which particular systems work within their society. Because of their beliefs of no photography, the researcher will adhere to this restriction. Permission was not granted to use an audio recording for the teachers' interviews. Answers to the interview questions were written word-for-word to ensure authenticity of the teachers' insights and perspectives. Interviews were conducted in the schools of two teachers and in the home of two teachers. This was based on the teachers' preference. When discussing teachers' names, only the first initial will be used for three of the teachers, and the teacher's first and last name of the 4th teacher. When discussing students' names, only the word student is used throughout the study to protect the anonymity of the individual because they are minors.

Anticipated Results

The intent of this study was to observe any evidence that can be found of the Iowa
Teaching Standards within Amish teachers' instruction in the Amish classroom, even
though these teachers have no formal post-secondary education. Through the classroom
observations and teacher interviews, the researcher anticipates that evidence from the

following standards will be observed: Standard 1- Demonstrates ability to enhance academic performance and support for implementation of the school district's student achievement goals; Standard 2- Demonstrates competence in content knowledge appropriate to the teaching position; Standard 3- Demonstrates competence in planning and preparing for instruction; Standard 4- Uses strategies to deliver instruction that meets the multiple learning needs of students; Standard 5- Uses a variety of methods to monitor student learning; and Standard 6- Demonstrates competence in classroom management. Through the interviews with the Amish teachers, the researcher anticipates that the questions taken from Dan Lortie's (1975) Five Towns questionnaire will lead to conclusions that the teachers learned how to teach and implement the teaching standards from observing and learning from their own previous experiences as students from their teachers. It is anticipated that these conclusions will align with Lortie's (1975) Apprenticeship of Observation Model.

Summary

Chapter 3 discusses the purpose of the study, the research questions, research process, the setting, the participant characteristics, data collection procedures, Inter-Rater Reliability, and ethical considerations within this study. Chapter 4 will talk about the results of this study. Chapter 5 will conclude the study by presenting discussion and findings.

Chapter 4: Results

Introduction

Through classroom observations of Amish teachers and individual interviews with the Amish teachers, this qualitative research study is to understand how specific Amish teachers' instructional techniques align with the Iowa Teaching Standards. Within this study, the following research questions will be explored:

- 1) What evidence can be found of the Iowa Teaching Standards within Amish teacher instruction in the Amish classroom?
- 2) Based on the Amish teacher's reflection of their teaching path, why did they decide to teach in the field of education and how were they trained to do so? What evidence exists that their decision and training is related to Dan Lortie's Apprenticeship of Observation Model?

Observation notes and how the observation data show evidence to the eight Iowa Teaching Standards are analyzed for each of the Amish teachers. The interview questions will explore how Amish teachers learn to be instructors of the classroom with no education past the 8th grade and no post-secondary education, while determining if their explanations align with Dan C. Lortie's (1975) Apprenticeship of Observation model.

Data Collection

Data collection was completed for each of the four Amish teachers. The first part of the data collection was focused on classroom observations. Each of the Amish teachers were observed in their classrooms on four separate occasions. Each observation lasted at least 20 minutes during various times throughout the school day. Anecdotal notes, with specific time stamps aligned with teacher and students actions were taken

during the classroom observations. These notes were then transferred to electronic notes. These anecdotal notes by each time stamp with teacher and students actions were then compared to the Iowa Teaching Standards and Criteria. This was to determine what evidence of the teaching standards were observed during each segment of the observation. The standard and criteria were recorded on the Classroom Observation Tool. Evidence found for each of the eight Iowa Teaching Standards was totaled at the end of the four classroom observations. Evidence found for each of the specific criteria listed under each of the Iowa Teaching Standards was also totaled at the end of the four classroom observations for each Amish teacher.

The second part of the data collection consisted of teacher interviews. Each Amish teacher was interviewed at a time outside of the school day. These interviews were not recorded, per the teacher's request due to cultural reasons. Interview questions were taken from Lortie's (1975) Five Towns research. The researcher gave each teacher a list of the questions that would be asked and then the questions were asked orally to the teacher. The researcher transcribed each of the answers the teacher gave to the researcher, for each individual question that was asked. After each question and answer, the researcher reviewed with the teacher had provided an answer and additions or corrections were made to the teacher's answers. Each teacher was assigned a first initial in the observation notes and interview. The schools in which the teacher teaches were also given a pseudonym (School X, School Y, and School Z).

Data Analysis

Using data collected from the Classroom Observation Recording Tool, the evidence found for each of the eight Iowa Teaching Standards was analyzed at the end of

the four classroom observations. The data was used to determine what evidence there is of the standards by each teacher individually, and also by all of the practicing teachers, collectively. This data will help the researcher to determine if there is evidence that the Iowa Teaching Standards are implemented in the teaching practices of the Amish teacher.

For the individual teacher interviews, the process by Braun and Clarke (2006) was used. This is a six-phase thematic model. Their six phases include: collect the data set; review the data to familiarize the researcher with what data has been collected; generate codes and labels; identify concepts from the data; search for themes and patterns; connect themes to conclude findings. In this research, themes were developed and connected to the Iowa Teaching Standards and Dan Lortie's (1975) Apprentice of Observation Model.

Inter-Rater Reliability

Both researchers found evidence for each teacher. The evidence of the Iowa Teaching Standards 2, 3, 4, 5, and 6 were displayed. Through the inter-rater reliability, researchers found no evidence of the Iowa Teaching Standards of 1, 7, and 8 in three out of the four teachers. Found my one inter-rater score, Teacher R showed evidence of standard 1 in the co-taught with another teacher in the same classroom in School X. Because they were in the same classroom, they had the opportunities to communicate with each other about students' performance. In Table 5 Inter-Rater Reliability Scores, an X is placed in the column of each teacher if both researchers found evidence of the specific Iowa Teaching Standard within the classroom observation notes.

Limitations of interrater reliability included the primary researcher was physically present during all classroom observations, and the secondary researcher only had the

annotations of the primary researcher to rely on to score the presence of each Iowa

Teaching Standard for each teacher participant.

Table 6Inter-Rater Reliability Scores

	Teacher N	Teacher R	Teacher E	Teacher RS
Standard #1	X		X	X
Standard #2	X	X	X	X
Standard #3	X	X	X	X
Standard #4	X	X	X	X
Standard #5	X	X	X	X
Standard #6	X	X	X	X
Standard #7	X	X	X	X
Standard #8	X	X	X	X
Overall Inter- Rater Reliability score for each individual teacher	100%	88%	100%	100%
Overall Inter- Rater Reliability		97	7%	•

Themes Within the Evidence of the Iowa Teaching Standards

Based on the evidence gathered from the classroom observations and the Iowa
Teaching Standards, several themes of the teaching standards emerged from the data to
answer the first research question of this study: What evidence can be found of the Iowa

Teaching Standards within Amish teacher instruction in the Amish classroom? Of the standards that teachers showed evidence in all four of the Amish teacher's practice included Standards 2, 4, 5, and 6. For the classroom observation data collection, the number of pieces of evidence that aligned to the Iowa Teacher Standards are shown in the table below.

Table 7

Total number of tallies that showed evidence of the Iowa Teaching Standards from classroom observations

	Teacher N	Teacher R	Teacher E	Teacher RS
Standard #1	0	0	0	0
Standard #2	65	67	48	54
Standard #3	68	68	48	58
Standard #4	68	66	49	60
Standard #5	68	59	51	62
Standard #6	63	61	40	50
Standard #7	0	0	0	0
Standard #8	0	0	0	0

An analysis of the table shows that Standard 2 states: Demonstrates competence in content knowledge appropriate to the teaching practice, is evident in these teachers' classroom instruction. During the teachers' observations, evidence of this standard was shown in a range of 48-67 times. Specific evidence from these observations included, but are not limited to the teacher understanding the key concepts of a content area. Examples

of this include teachers being able to explain the key concepts of a lesson, specifically the phonic sounds, finding the area, and grammar rules and application of the English language. Teachers were also able to use specific instructional strategies that are appropriate to the specific content areas. Examples of this include, reading aloud to practice fluency skills, small group instruction, fluency of addition, subtraction, multiplication, and division facts, and decomposing sentences to understand various parts of the sentence structure.

Evidence for Standard 3, demonstrates competence in planning and preparing for instruction, ranging from 48-68 times within the four teachers' observations. All four teachers showed evidence of this standard. Teacher E, the youngest and least experienced as a teacher, showed evidence 48 times. Teacher N and Teacher R showed evidence of this standard 68 times. They specifically, when conversing with each other as coteachers in the same classroom, have opportunities to discuss planning and instructional changes throughout the school day. An example of this standard shown in Teacher N and R's classroom was when they were discussing a specific grade level's assignments and how it aligns with the previous grade level's learning. Teacher R also referred to the upcoming lessons to guide the instruction for that particular day. Teacher RS showed evidence of this standard too. This teacher also referred to previous lessons and upcoming lessons to guide the daily instruction.

Standard 4 states: Uses strategies to deliver instruction that meet the multiple learning needs of students is also evident in all four of the Amish teachers. The make-up of the classroom, with students ranging in grades from 1st to 8th grade, naturally supports this standard. During the teachers' observations, evidence of this standard was shown in

a range of 49-68 times. Specifically, these teachers showed evidence of this standard through various teaching practices embedded within their instruction. Examples include, but are not limited to, reteaching concepts to small groups or individual students and using scaffolding instruction by reviewing previous learned concepts for students to be able to access the current concepts. Teachers also connected to the students' prior knowledge of previous learning as well. Teachers also continually read directions aloud to students to ensure they knew what to do in their independent work.

All of the four Amish teachers also showed evidence of Standard 5, which states uses a variety of methods to monitor student learning. During the teachers' observations, evidence of this standard was shown in a range of 51-68 times. The majority of the evidence found within this standard was teachers providing substantive, timely, and constructive feedback to the students in both the academic and behavioral areas. Examples of this standard included, but not limited to, working one-on-one with a student when they had a question about their independent work, when working in small groups the teacher giving specific and corrective feedback to students on their understanding of the academic concepts, and when students needed to be reminded of meeting the classroom expectations for behavior.

The last standard that all of the Amish teacher participants showed evidence of is Standard 6, demonstrates competence in classroom management. During the teachers' observations, evidence of this standard was shown in a range of 40-63 times. Many of the pieces of evidence came from the students participating in and following the classroom procedures and routines established by the teacher. The greatest example of this was demonstrated when the teacher was working in small groups at the table or with

a student at their desk. Other students would raise their hand and wait for the teacher to acknowledge their raised hand. Once the teacher acknowledged the student, then the student would complete the task they were asking permission to do. Other examples of routines and procedures being in place within the classroom include the classroom's transition routines from when students arrive at school, come in from recess, and also end their school day.

Finding evidence of Standards 1, demonstrates the ability to enhance academic performance and support for implementation of the school student achievement goals; Standard 7, engages in professional growth; and Standard 8, fulfilled professional responsibilities established by the school district was not evident within the classroom observations of the Amish teachers. While no observable data was collected on these three standards, these standards did show evidence within the Amish teachers' interviews during the second part of the data collection. Those specific standards and criteria examples are given in each of the individual teachers' observational data discussion in the paragraphs that follow.

In addition to each of the four teachers' evidence of the Iowa Teaching Standards collectively, a specific breakdown for each individual teacher and the standards with the matching Iowa Teaching Standard criteria are organized below in separate tables. An explanation of what criteria was met with specific examples that supported the criteria and teaching standard are also explained for each teacher.

Table 8

Teacher N- Total Number of Tallies that Showed Evidence of the Iowa Teaching

Standards from Classroom Observations

Teacher N Classroom observation tallies that show evidence of the Iowa Teaching Standards								
Standard	Standard 1	Standard 2	Standard 3	Standard 4	Standard 5	Standard 6	Standard 7	Standard 8
Total number of tallies that shows evidence of this standard within the classroo m observati on	0	65	68	68	68	63	0	0
Evidence of specific criteria as listed under each teaching standard	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0 Criteria f- 0 Criteria g- 0	Criteria a- 62 Criteria b- 51 Criteria c- 7 Criteria d- 65	Criteria a- 0 Criteria b- 2 Criteria c- 63 Criteria d- 66 Criteria e- 66	Criteria a- 0 Criteria b- 65 Criteria c- 60 Criteria d- 9 Criteria e- 15 Criteria f- 52	Criteria a- 65 Criteria b- 1 Criteria c- 1 Criteria d- 2 Criteria e- 59 Criteria f- 0	Criteria a- 40 Criteria b- 20 Criteria c- 46 Criteria d- 7 Criteria e- 5	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0

Teacher N showed evidence of the Iowa Teaching Standards for Standard 2, 3, 4, 5, and 6. Teacher N showed the following evidence of the following criteria that is aligned to the standard. In Standard 2, criteria a, evidence was shown 62 times, in criteria b evidence was shown 51 times, for criteria c evidence was shown 7 times, and for criteria d evidence was shown 65 times within the classroom observations. Specific

classroom examples of evidence for the Standard 2 criteria include, but not limited to: the teacher explaining in detail the concept of pronouns to the student; the teacher giving additional examples of verb phrases when explaining the concepts in the day's lesson; and, the teacher explains the phonic sounds of -ir and -ou in context of the words within the students' texts.

Evidence shown for Standard 3 is most observant in criteria c, d, and e. In Criteria c, evidence was shown 63 times, criteria d was shown 66 times, and criteria e was shown 66 times. Criteria b was shown only 2 times and criteria a was shown 0 times. Specific examples of the evidence of this standard include the teacher reading aloud with students as they take turns reading aloud paragraphs as a small group. The reading curriculum used during the reading instruction is aligned to the Amish values of getting good grades and being a good person. Another example of Standard 3 includes setting expectations for academic success by the teacher reminding students of the individual work that is to be completed. These assignments were also written on the board to students to see visually.

For Standard 4, Teacher N showed the following evidence of the following criteria that is aligned to the standard. Criteria a, evidence was shown 0 times, criteria b had evidence 65 times, for criteria c evidence as shown 60 times, there was 9 pieces of evidence for criteria d, 15 pieces of criteria for criteria e, and for criteria f there were 52 pieces of evidence. Specific classroom examples of evidence for the Standard 4 criteria include, but not limited to: The teacher refers to the phonics chart on the wall to show students where they are at in the progression of their phonics learning; the teaching reviewing with flashcards 1:1 with a student; and, the teacher explains that adding of

suffix to words as students are reviewing learning prior to the day's lesson of adding -ed, -ing, and -less).

Within the Iowa Teaching Standard 5, Teacher N showed the following evidence of the specific criteria for this standard: criteria a was shown with evidence 65 times, criteria b and criteria c were shown with evidence one time each, respectively. Criteria d was shown evidence 2 times, while criteria e was shown evidence 59 times. There were 0 times criteria f evidence within this standard. Specific evidence of Standard 5 from the classroom observation include, but is not limited to: the teacher responding to a student by saying, "Try to do everything you can and I'll help you,"; students handing in their textbooks on the teacher's desk for grading when their work in complete; and, the teacher redirects and prompts the student. "Remember to put the cent sign."

Lastly, Teacher N showed criterion evidence for Standard 6. For criteria a, the teacher exhibited evidence 40 times, for criteria b there was evidence shown 20 times, criteria c was 46 instances of evidence, 7 times for criteria d, and for criteria e there were 5 times evidence was observed. Specific classroom examples of evidence for the Standard 6 criteria include, but not limited to: all students are working at their desks independently unless they are working with the teacher at the table in a small group; students raising their hands and wait until the teacher calls on them to ask what they need; and students handing in textbooks on the teacher's desk when they their work is complete.

Standards 1, 7 and 8 were not shown with evidence during the classroom observations. However, Standard 1 had evidence when Teacher N was interviewed as the second part of the data collection. When Teacher N was asked, "Looking back to today,

what do you think were the most important factors in your decision to become a teacher?" Teacher N discusses criteria d (accepts and demonstrates responsibility for creating a classroom culture that supports the learning of every student) and criteria f (participates in and contributes to a school culture that focuses on improved student learning) of Standard 1. Teacher N states,

One thing for me to become a teacher, who had too many teachers who were young and only out of school for 2-3 years. We had teachers who wanted to be a teacher and some who weren't interested. Children will learn better if the teacher is interested instead of trying to push through the books. There was an effect on students. They did the lessons but it didn't soak in (personal communication, February 4, 2023).

This explanation from Teacher N describes the importance of creating a culture of learning for the students based on the teacher's interest in helping students learn what is being taught by the Amish teacher. Teacher N also shared that when he teaches a concept and the students work on it independently at their seats, when he grades their work, he looks at their scores and analyzes them. If the students didn't do well, he explained that he knows he didn't explain it so they can understand it. This is another example of Standard 1, specifically criteria c.

Evidence of Standard 7, engages in professional growth, was discussed in the interview portion of the data collection. Teacher N explains his experience at the annual Amish Teacher's Meeting held in November 2022. He states,

A guy there spoke about how to go in a way for students to have respect. For example if a student does something and the teacher demands it, then he (the guy

at the meeting) explained it in a way to command it. For example, boys go sledding in a neighbor's field. The teacher could chew the boys out or [they could] say, "Didn't I ask you... I didn't want you to do this..." and use a different tone of voice. [Then they could] Ask, "Would you please not do it again?" (personal communication, February 4, 2023).

This example given by Teacher N shows how the professional development conference he attended had an impact on his teaching practices. This specific example shows evidence of Standard 7, criteria a, b, and c.

While evidence Standard 8 was not explicitly found through the classroom observations, in the interview Teacher N discusses changing the phonics curriculum for the younger students. He shared in the interview that he and Teacher R, in their co-taught classroom, found a phonics curriculum they felt would teach those skills better to the students. As the teachers of the classroom, they also had to learn the new phonic skills as well. Prior to changing the curriculum, Teacher N discussed the new phonics curriculum with the parents of the children in the school to get their approval. This process of changing the curriculum to meet the students' needs not only is evidence for Standard 1, but also Standard 8. The evidence for Standard 8, specifically criteria d and e, was shown by recognizing a change in the curriculum was needed and also collaborating with parents to ensure they supported the change of the phonics curriculum.

Table 9Teacher R- Total Number of Tallies that Showed Evidence of the Iowa Teaching

Standards from Classroom Observations

Classro	Teacher R Classroom observation tallies that show evidence of the Iowa Teaching Standards								
Standard	Standard 1	Standard 2	Standard 3	Standard 4	Standard 5	Standard 6	Standard 7	Standard 8	
Total number of tallies that shows evidence of this standard within the classroom observation	0	67	68	66	59	61	0	0	
Evidence of specific criteria as listed under each teaching standard	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0 Criteria f- 0 Criteria g- 0	Criteria a- 64 Criteria b- 61 Criteria c- 3 Criteria d- 64	Criteria a- 0 Criteria b- 1 Criteria c- 64 Criteria d- 65 Criteria e- 68	Criteria a- 0 Criteria b- 65 Criteria c- 59 Criteria d- 0 Criteria e- 15 Criteria f- 66	Criteria a- 58 Criteria b- 0 Criteria c- 0 Criteria d- 1 Criteria e- 54 Criteria f- 1	Criteria a- 41 Criteria b- 8 Criteria c- 23 Criteria d- 0 Criteria e- 2	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0	

Teacher R showed evidence of the Iowa Teaching Standards for Standard 2, 3, 4, 5, and 6. Teacher R showed the following evidence of the following standards based on specific criteria of the standard. In Standard 2, criteria a, evidence was shown 64 times, in criteria b evidence was shown 61 times, for criteria c evidence was shown 3 times, and for criteria d evidence was shown 64 times within the classroom observations. Specific classroom examples of evidence for the Standard 2 criteria include, but not limited to: teacher makes connections between the vocabulary words in the story to the students' life so they understand the context of the word; students work in a small group with the

teacher; the teacher reads aloud to model fluent reading; and, the teacher asks inference questions to check for comprehension during the reading lesson.

In Standard 3, the following criterion evidence was observed in Teacher R's classroom: criteria c was shown 64 times, criteria d was shown 65 times, and criteria e was shown 68 times. Criteria b was shown only one time, while criteria a was shown zero times. Classroom observations showed exampled in this standard's criteria by the classroom teacher conversing with the other teacher in the classroom about the plan for the afternoon, the teacher collaborating with the other teacher on a lesson comparing 6th grade skills to 5th grade skills, the teacher examines the pages in the textbook for for upcoming lessons and again when the teacher converses with the other teacher in the classroom about what is appropriate pacing for a lesson.

For Standard 4, Teacher R showed the following evidence of the following criteria that is aligned to the standard. Criteria a, evidence was shown 0 times, criteria b had evidence 65 times, for criteria c evidence as shown 59 times, there was 0 pieces of evidence for criteria d, 15 pieces of criteria for criteria e, and for criteria f there were 66 pieces of evidence. Specific classroom examples of evidence for the Standard 4 criteria include, but not limited to: the teacher working with a small group of students; the teacher answers a question of other students on their independent work; and the teacher reexplains and asks prompting questions to the student.

Within the Iowa Teaching Standard 5, Teacher R showed the following evidence of the specific criteria for this standard: criteria a was shown with evidence 58 times, criteria b and criteria c were shown with evidence zero times each. Criteria d was shown evidence 1 time, while criteria e was shown evidence 54 times. There was 1 time criteria

observation include, but is not limited to: the teacher explaining the expectations on the independent work to a student, the teacher recorrecting students when they are reading aloud; the teacher reminding students to be quiet at the end of the table while talking to others; and, the teacher giving feedback on answers and points out where the answers are in the reading.

Lastly, Teacher R showed criterion evidence for Standard 6. For criteria a, the teacher exhibited evidence 41 times, for criteria b there was evidence shown 8 times, criteria c was 23 instances of evidence, 0 times for criteria d, and for criteria e there were 32times evidence was observed. Specific classroom examples of evidence for the Standard 6 criteria include, but not limited to: the teacher tells students what their independent work will be prior to them going back to their seats to work; students go back to their seats to work independently; the teacher updates the assignment board of the work the students will complete that day in school; and when students are dismissed for recess, they all line up to go downstairs without the teacher prompting them to do so.

Like Teacher N, Teacher R had no evidence for Standards 1, 7, and 8 during the classroom observations. However, evidence was given during the teacher interview portion of the data collection. In Standard 1, demonstrates the ability to enhance academic performance and support for implementation of the school district student achievement goals, Teacher R gives two specific examples of this standard. During the interview portion of the data collection, when asked, "I know it's not easy to state clearly, but would you try to explain to me what you try to achieve as a teacher? What are you really trying to do most of all?" Teacher R responds, "See how much we can improve the

children's grades" (personal communication, February 4, 2023). This statement shows evidence for criteria c within Standard 1. Teacher R again shows evidence in Standard 1 of the Iowa Teaching Standards when asked the question in the interview, "What are the major ways in which you tell whether you are doing the kind of job you want to do? What do you watch as an indication of your effectiveness?" Teacher R responds, "We're watching the progress. The pupils are comparing their scores with classmates and it is making them want to do better. [We] see improvement in their grades, motivation, enthusiasm, and their work is right" (personal communication, February 4, 2023). These statements from Teacher R specifically show evidence for criteria a and f of Standard 1.

In Standard 7 of the Iowa Teaching Standards, engaged in professional growth,

Teacher R discusses the yearly Amish Teachers' Meeting she attended.

[There was a teacher who] taught for 15 years. [She was at the] yearly school meeting for all Amish teachers in Iowa. Teachers who were or who are teachers teach us [the current Amish teachers]. This teacher helped me understand the grammar of English. I knew she was a good teacher from being around her (personal communication, February 4, 2023).

Teacher R was able to learn how to understand a part of the English grammar curriculum better to be able to teach and support the learning of the students in her classroom. This professional development opportunity allowed her to engage in conversations with other Amish professional teachers and learn from each other. This example given by Teacher R shows evidence of criteria a, b, and c of Standard 7.

Like Teacher N, Teacher R showed evidence of Standard 8 of the Iowa Teaching Standards when discussing with Teacher N and the families of her students about the curriculum change with the phonics instruction. While more understanding of the Amish school system's expectations for their schools and teachers needs to be explored to continue to find evidence of Standard 8, this example shows evidence is present.

Table 10Teacher E- Total Number of Tallies that Showed Evidence of the Iowa Teaching

Standards from Classroom Observations

Teacher E Classroom observation tallies that show evidence of the Iowa Teaching Standards													
Standard	Standard 1	Standard 2	Standard 3	Standard 4	Standard 5	Standard 6	Standard 7	Standard 8					
Total number of tallies that shows evidence of this standard within the classroom observation	0	48	48	49	51	40	0	0					
Evidence of specific criteria as listed under each teaching standard	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0 Criteria f- 0 Criteria g- 0	Criteria a- 47 Criteria b- 46 Criteria c- 0 Criteria d- 48	Criteria a- 0 Criteria b- 1 Criteria c- 47 Criteria d- 45 Criteria e- 47	Criteria a- 0 Criteria b- 47 Criteria c- 49 Criteria d- 0 Criteria e- 5 Criteria f- 47	Criteria a- 48 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 41 Criteria f- 0	Criteria a-8 Criteria b-2 Criteria c-38 Criteria d-0 Criteria e-5	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0					

Teacher E showed evidence of the Iowa Teaching Standards for Standard 2, 3, 4, 5, and 6. Teacher E showed the following evidence of the following standards based on

specific criteria of the standard. In Standard 2, criteria a, evidence was shown 47 times, in criteria b evidence was shown 46 times, for criteria c evidence was shown 0 times, and for criteria d evidence was shown 48 times within the classroom observations. Specific classroom examples of evidence for the Standard 2 criteria include, but not limited to: the teacher explaining the concept of multiplication to students and how to write the facts two different ways; the teacher helps a student sound out a word using the phonic sounds; specifically the 'th' sound, and when the teacher is teaching; and, re-explaining the concept of time to students.

Evidence in Standard 3, demonstrating competence in planning and preparing for instruction, was found in Teacher E's classroom observations. Criteria c, d, and e was where the most pieces of evidence shown with 47, 45, and 47, respectively. Criteria b had one example of evidence and criteria a with zero times shown. Examples of this standard include, but are not limited to: Teacher E prompting students how on to solve math problems, teacher asks guiding questions that provide scaffolding support to help the student answer the question within their textbooks, and the teacher also repeats and reexplains the task to the student when they appear confused on what to do.

For Standard 4, Teacher E showed the following evidence of the following criteria that is aligned to the standard. Criteria a, evidence was shown 0 times, criteria b had evidence 47 times, for criteria c evidence as shown 49 times, there was 0 pieces of evidence for criteria d, 5 pieces of criteria for criteria e, and for criteria f there was 47 pieces of evidence. Specific classroom examples of evidence for the Standard 4 criteria include, but not limited to: the teacher prompts that student how to do the math problem; the teacher answers clarifying questions of a student; the teacher re-explains the

directions to students; and, the teacher reminds students of their learning from yesterday and how it ties into today's lesson.

Within the Iowa Teaching Standard 5, Teacher E showed the following evidence of the specific criteria for this standard: criteria a was shown with evidence 48 times, criteria b, criteria c, and criteria d were shown with evidence zero times each. While criteria e was shown evidence 41 times. There were 0 times criteria f evidence within this standard. Specific evidence of Standard 5 from the classroom observation include, but is not limited to: the teacher gives feedback on the problem when the student asks a question; the teacher verbally recorrects a student on the error they made; and, when the teacher reteaches the student erases their previous answers and corrects the problems.

Lastly, Teacher E showed criterion evidence for Standard 6. For criteria a, the teacher exhibited evidence 8 times, for criteria b there was evidence shown 2 times, criteria c was 38 instances of evidence, 0 times for criteria d, and for criteria e there were 5 times evidence was observed. Specific classroom examples of evidence for the Standard 6 criteria include, but not limited to: students who are working on independent work have hands raised and the teacher calls on students one-by-one, "(Student name), then (student name),"; students all whisper to the teacher when they come up to ask questions; and, when the teacher rings the bell to start the day, the students enter the classroom, take off their shoes and put them in the entryway, and then move towards their desks.

Specific evidence of the standards that were absent from the classroom observations were Standards 1, 7, and 8. While reflecting on an interview question focused on what she wants to most achieve as a teacher, Teacher E states:

Most of all, get the children taught something. I've had so many teachers and have had good and bad teachers. I know the teachers were not all the same and I learned from them how I want to be. I know I'm not perfect either. First, I want to be a good teacher. Second, I would like to make sure I am using [treating] them all the same. I've had teachers who had siblings in their classroom and [they] got treated better. My goal is to not do that (personal communication, January 16, 2023).

This statement shows evidence of Standard 1, criteria e, creates an environment of mutual respect, rapport, and fairness. One could also argue that because Teacher E states she wants the children to learn something, she is engaging in criteria f, participates in and contributes to a school culture that focuses on improved student learning. Because she wants her students to learn what is being taught, she is focused on improving the learning of her students within her classroom. Teacher E also makes reference to discussing student behaviors with the parents of the child in one of the interview questions. Teacher E also explained that every six weeks the teacher has a parent meeting with each child's parents. This was explained by Teacher E as a time where the teacher and parents discuss any problems. Specifically any problems the teacher may have with the child and any problems the parents may have with the teacher are addressed during this time. The child's progress is also discussed at these parent / teacher meetings. These collaborative meetings between the teacher and parents are examples of criteria a, d, and g of Standard 1.

Teacher E, like Teacher N and Teacher R, discussed in the interview how the annual Amish Teachers' Meeting is a professional development opportunity she has

participated in. She explained how 70 to 100 teachers attend this conference and the Amish teachers are split into groups based on the number of years of teaching experience they have: 1-3 years, 4-5 years, and 10+ years of teaching. She specifically mentioned attending a session she knew about called 'How to Teach.' She did not explicitly state in the interview if this was a session she attended as a new teacher, but she was aware of this session. By attending this professional development geared towards Amish teachers, Teacher E is engaging in Standard 7 of the Iowa Teaching Standards.

While the absence of Standard 8 is common thus far in the data collection through the classroom observations, Teacher E gave a specific example that would show evidence for Standard 8 in the interview portion. Teacher E discusses the needs and wants of a family who have children who struggle in school. In one particular family, one child has a significant learning disability. While the child is of the 5th grade age, the student is academically and socially functioning at the 1st or 2nd grade level. Teacher E and the parents discussed what the child's school day would like like in the Amish school and also the option of being educated at the public school. Through collaboration with the family and the teacher, it was determined that the child would participate in the Amish school classroom and work at a pace that is appropriate for the child. This evidence supports criteria d and e of Standard 8 of the Iowa Teaching Standards.

Table 11Teacher RS- Total Number of Tallies that Showed Evidence of the Iowa Teaching

Standards from Classroom Observations

Teacher RS Classroom observation tallies that show evidence of the Iowa Teaching Standards												
Standard	Standard 1	Standard 2	Standard 3	Standard 4	Standard 5	Standard 6	Standard 7	Standard 8				
Total number of tallies that shows evidence of this standard within the classroom observation	0	54	58	60	62	50	0	0				
Evidence of specific criteria as listed under each teaching standard	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0 Criteria f- 0 Criteria g- 0	Criteria a- 54 Criteria b- 50 Criteria c- 0 Criteria d- 53	Criteria a- 0 Criteria b- 0 Criteria c- 54 Criteria d- 53 Criteria e- 56	Criteria a- 0 Criteria b- 56 Criteria c- 46 Criteria d- 3 Criteria e- 4 Criteria f- 44	Criteria a- 59 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 55 Criteria f- 0	Criteria a- 23 Criteria b- 8 Criteria c- 28 Criteria d- 0 Criteria e- 1	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0	Criteria a- 0 Criteria b- 0 Criteria c- 0 Criteria d- 0 Criteria e- 0				

Teacher RS showed evidence of the Iowa Teaching Standards for Standard 2, 3, 4, 5, and 6. Teacher RS showed the following evidence of the following standards based on specific criteria of the standard. In Standard 2, criteria a, evidence was shown 54 times, in criteria b evidence was shown 50 times, for criteria c evidence was shown 0 times, and for criteria d evidence was shown 53 times within the classroom observations. Specific classroom examples of evidence for the Standard 2 criteria include, but not limited to, include: the teacher reading aloud part of a lesson with students about writing a friendly letter; students reviewing the -ir vowel sounds with the teacher; the teacher re-explaining

the directions and then reviewing the algorithm of solving the problem with students; and, the teacher discussing an academic vocabulary of "deposit" within the math problem with the student.

In Standard 3, the following criterion evidence was observed in Teacher RS's classroom: criterion a and b were shown 0 times. Criteria c was shown 54 times, criteria d 53 times, and criteria e shown 56 times. Classroom observations showed examples in this standard's criteria by the teacher using addition flashcards and engaging students in the review of the facts and also by the teacher organizing the student and teacher materials used in this activity, the teacher reading aloud the materials to the students, and when the teacher provided 1:1 instruction for the student based on their learning needs.

For Standard 4, Teacher RS showed the following evidence of the following criteria that is aligned to the standard. Criteria a, evidence was shown 0 times, criteria b had evidence 56 times, for criteria c evidence as shown 46 times, there was 3 pieces of evidence for criteria d, 4 pieces of criteria for criteria e, and for criteria f there was 44 pieces of evidence. Specific classroom examples of evidence for the Standard 4 criteria include, but not limited to: when a student misspells a word, the teacher prompts the student again; the teacher working 1:1 with a student; and, the teacher checking in on how students are progressing on assignments, even those students who don't have their hands in the air.

Within the Iowa Teaching Standard 5, Teacher RS showed the following evidence of the specific criteria for this standard: criteria a was shown with evidence 59 times, criteria b, criteria c and criteria d were shown with evidence 0 times. Criteria e was shown with evidence 55 times. There was 0 times criteria f evidence within this

standard. Specific evidence of Standard 5 from the classroom observation include, but is not limited to: the teacher giving positive feedback to students; the teacher discussing a student's performance and how it should be better; and the teacher giving a spelling test or practice to older students at their desks.

Lastly, Teacher RS showed criterion evidence for Standard 6. For criteria a, the teacher exhibited evidence 23 times, for criteria b there was evidence shown 8 times, criteria c was 28 instances of evidence, 0 times for criteria d, and for criteria e there was 1 time evidence was observed. Specific classroom examples of evidence for the Standard 6 criteria include, but not limited to: the teacher calling on a student's name for redirection; students have their hands in the air to ask questions; the teacher moving around the room to assist students, moving from student to student; and, the teacher rings the bell outside of the window and the students come to the door, take off their boots, hang their coats, and get a drink while the teacher monitors their behaviors.

Like the other three Amish teachers, evidence for Standards 1, 7, and 8 were not present during the classroom observations. However, through the interview data collection evidence was found for Standard 8. Teacher RS stated that through conversations with one of the school parents, she learned through their feedback that she needed to be more clear in explaining things, especially when she first started teaching. She stated this feedback really influenced her teaching practices. This example is evidence of criteria e within Standard 8.

While evidence for Standards 1 and 7 were not explicitly observed in the classroom observations or stated in the teacher interviews, it should not be assumed that these standards are not being shown throughout the Amish teacher's practice. More

understanding would need to be done to fully comprehend the Amish community's standards and goals for the teachers and their students within their school system.

Themes Within the Evidence of the Apprentice of Observation Model

Lortie (1975) used the Five Towns Interview to understand how concepts from Lorie's Apprenticeship of Observation align with the teachers' decision to enter the teaching profession (pp. 248-253). The Apprenticeship of Observation framework describes the phenomenon of pre-service teachers having already had multiple hours of observation professionals in their field of study prior to beginning any formal course work (Lortie, 1975). Students have long observed their teachers in what they are doing throughout the school day, how they teach, what strategies they use for students to understand the material, and how they interact with the students.

While the attraction to enter the teaching field may vary among teachers, teachers learn how to become teachers through post-secondary education through the study of pedagogy, content knowledge, and teaching strategies. When teachers have been asked to reflect on their experiences with this induction process of formal schooling, mediated entry, and learning-while-doing, many teachers explain through examples how they have used the mediated entry and learn-while-doing. These two methods of the induction process are accessed with teachers because they have been participating in the Apprenticeship of Observation Model since they entered school as students (Lortie, 1975). This is how teachers have learned to be the teachers they are.

Amish teachers are no different. The attraction to becoming an Amish teacher varies among those educators. Teachers in the Amish school system learn how to become teachers from the learning-while-doing model, not a formal apprenticeship method as

most educators participate in. This starts early in a scholar's educational journey. Although Amish teachers have no formal post-secondary education, they utilize their experiences on a learning-by-doing model within this induction system and rely on Lortie's (1975) Apprenticeship of Observation Model to be able to carry out the professional responsibilities of an Amish educator within their schools.

In Lortie's Five Towns Interview, many questions were asked. In this study, questions were scaled down into three subcategories: Questions focused on the background of the Amish teacher; Questions focused on the Lortie's (1975)

Apprenticeship of Observation Model; and Self-reflection on teaching as a profession.

The specific interview questions asked within each subcategory can be found in Appendix E: Amish Teacher Interview Questions- Taken from Dan Lortie's (1975) Five Towns research.

Themes were determined by conducting the analysis process from Braun and Clarke (2006). Their analysis process includes phase three which includes generating codes and labels, phase four which includes identifying concepts from the data, and phase five which uses the data to search for themes and patterns. Based on the evidence gathered from the Amish teachers' interviews, several themes emerged from the data to answer the second research question of this study: Based on the Amish teacher's reflection of their teaching path, why did they decide to teach in the field of education and how were they trained to do so? What evidence exists that their decision and training is related to Dan Lortie's Apprenticeship of Observation Model?

The second piece of data collection focused on conducting interviews with the Amish teachers to determine why they decided to enter the teaching field and also how they learned how to be teachers. Several themes emerged within the interview data that addresses both of the questions in Research Question #2. The first part of Research Question #2 asks: Based on the Amish teacher's reflection of their teaching path, why did they decide to teach in the field of education and how were they trained to do so?

Attraction to the Teaching Field

Each of the four Amish teachers had an Attraction to the Teaching Field. All four of the teachers stated an interpersonal attraction which is an attraction to want to work with people. Teacher N stated his interpersonal attraction was his daughter because she was starting school this year and he wanted to ensure she had a good education from the beginning of her schooling year. Teacher R stated she liked to help children. Teacher E stated she liked to teach younger students and Teacher RS explained how she wanted to help other children get the full potential of what school has to offer.

Another attraction to the profession for all four teachers was continuation.

Teachers N and Teacher R stated they like to learn and figure things out. Teacher R expanded on her thinking that aligned with Teacher E's response to their own school experience. Both teachers stated they liked school when they were in grades 1st-8th and they enjoyed the lessons that were taught. This was a reason they wanted to teach.

Teacher RS shared she could do her schoolwork well.

Teachers N, R, and E also mentioned the attraction to a teaching position was one of service to the community. Teacher N stated they needed a teacher for the school that he is at. He discussed this possibility with his wife and they decided it would be something he should do. Teacher R stated when she first entered the teaching profession, she was 16 years old. She said at that time they needed one and she decided to do it.

Teacher E started teaching this year. Prior to this year, her sister had been the classroom teacher for several years. Her sister wanted to take a break from teaching, and offered the position to Teacher E. Teacher E said because her sister wasn't going to teach, she felt she would then teach in her place. Teacher RS did not give any evidence that service was an attraction for her to enter the teaching field.

All four teachers also stated their family members and past teachers had an influence on their attraction to the teaching profession. Teacher N shared about his daughter entering schooling and that being a major consideration for his role as the classroom teacher. He also reflected on his 2nd-5th grade teacher. He stated, "She was easy-going and quiet. She was fun to be around" (personal communication, February 4, 2023). Teacher R reflected on her non-Amish teacher she had in her formal school years. She states,

She was a real good teacher. The way she taught wanted me to teach. If I had a hard time with a subject, she explained it to me. It was a lot of how she explained it that I liked (with) the subject I was having a time with (personal communication, February 4, 2023).

Teacher E stated her sister and the teachers she had influenced her to be a teacher.

Teacher RS stated her 1st grade, who was her aunt, her parents, and her sisters had an influence on her attraction to teaching. Teacher RS stated she started teaching at the same time her older sister was also teaching. It was Teacher RS's first year of teaching and her sister's 2nd year of teaching.

While the attraction to the teaching professional varies for each individual, there are some similarities. Within this Amish community, these four Amish teachers had two

areas that were similar. The two areas of attraction to the teaching field were interpersonal and continuation. Three of the four Amish teachers mentioned service as an area of attraction for them to enter the teaching field.

Several themes emerged when addressing the second part of the Research

Question #2: What evidence exists that their decision and training is related to Dan

Lortie's Apprenticeship of Observation Model? The themes that materialized from the

interview data collection include: formal school experiences, mediated entry, learningby-doing, and teaching personalities. This section will also address evidence found from
the Iowa Teaching Standards during the classroom observations.

Formal Schooling Experiences

The first theme that materialized was the Amish teachers' formal school experiences. Because these four Amish teachers do not have any education past the 8th grade education, their formal school experiences will be defined as their schooling from grades 1st-8th grade. When the Amish teachers were asked what influenced their decision to become a teacher, the character traits of past teachers emerged from the data. Teacher N shared personal qualities of the teacher such as she was easy going and quiet, yet fun to be around. Teacher E stated the teacher made school fun and Teacher RS stated that the teacher made time for students.

What else emerged from the interview data included that the past teachers, who were considered outstanding by the Amish teachers, had various teaching techniques to use when teaching the students. Teacher N, Teacher R, Teacher E, and Teacher RS stated their past teachers had content knowledge. Teacher N explained more that he feels these teachers were good students themselves when they were in school. Teacher R

continued explaining that her teacher was able to teach and explain things in a way that the students understood because she had the content knowledge to do so. The teacher was also able to reteach to students if they struggled. Teacher E also stated her teacher was able to teach in a way that students understood. While Teacher RS made a more broad statement about her teacher. She stated her teacher was taught in ways that were effective. Two of the teachers, Teacher R and Teacher RS, stated that being a disciplinarian was also a teaching technique their influential teachers had. Teacher E and Teacher RS stated the outstanding teachers they had in their formal school years had positive relationships with their students.

This theme of formal school experience is related to Lortie's (1975)

Apprenticeship of Observation Model through several examples the Amish teachers shared within the interview. Teacher E stated,

I've had so many teachers and have had good and bad teachers. I know the teachers were not all the same and I learned from them how I want to be. I know I'm not perfect either. First, I know I want to be a good teacher. Second, I would like to make sure I'm using (treating) them all the same. I've had teachers who had siblings in their classroom and (they) got treated better. My goal is to not do that" (personal communication, January 16, 2023).

This statement shows evidence of Teacher E observing various teachers through her formal schooling experience and making the decision of what teacher she would like to be based on those observations. Teacher RS stated that being a disciplinarian was a positive teaching technique an outstanding teacher she remembers had characteristics of. She explained in detail during the interview,

In 4th grade I was punished for something I hadn't done. I always thought that wasn't very fair. I also wondered why he (the teacher) didn't find out both sides of what happened. I don't think he was cut out to be a teacher and I think his parents told him it was his duty. In 6th grade my uncle handled things and I wanted to be like what he did- an effective way of teaching. He didn't have any discipline problems (personal communication, February 1, 2023).

In an additional interview question about the knowledge a teacher must possess to be able to do a good job at teaching, Teacher RS explained that knowing how to effectively use discipline was key. She stated that, "They (students) need to know why they're being disciplined" (personal communication, February 1, 2023). These two examples from Teacher RS show evidence that her observations during her formal schooling experiences, specifically around the area of discipline, have had an impact on her views about teachers in the profession.

Teacher R shared in her interview about a teacher she felt had an influence on her wanting to enter the teaching field. She stated, "She was a real good teacher. The way she taught wanted me to teach" (personal communication, February 4, 2023). Once again, evidence of learning through observation, Lortie's (1975) Apprenticeship of Observation Model is visible within this Amish teacher's reflections.

Mediated Entry

Another theme that emerged within the interview data was mediated entry. This is defined as an apprenticeship (Lortie, 1975). Because teachers have been interacting with their own teachers throughout their entire schooling, new teachers likely begin their

careers teaching in ways in which they were taught when they were in school (Kennedy, 1999).

Three of the four of the Amish teachers gave specific examples of mediated entry from their own formal schooling experience. Teacher R shared that she was a helper in the classroom prior to being a teacher herself. By being a helper in the classroom early on, at the age of 16 it solidified for her that she wanted to be a teacher. Teacher E discussed how she had good grades when she was a student. She stated teaching might be harder for someone who didn't have good grades in school. It could be assumed that Teacher E is associating the years of her formal schooling experience to an apprenticeship. Teacher RS discussed her 7th and 8th grade formal schooling years. She states,

I co-taught with the teacher. I would teach the other students arithmetic in my class because my teacher didn't finish all the grades, so I did it. If students had arithmetic questions, they would come to my desk so I could help them" (personal communication, February 1, 2023).

These examples from Teacher R, Teacher E, and Teacher RS show evidence of how mediated entry, a form of apprenticeship, was pronounced within these teachers' formal schooling experiences.

Learning-by-Doing

Learning-by-Doing is another theme that became apparent within the interview data with the four Amish teachers. The learning-by-doing process can be described as learning what to do and needing to learn to do everyday work of the occupation (Lortie, 1975). The responses that aligned with the learn-by-doing model all occurred within the

interview question, "In what ways is teaching different from what you expected when you made the decision to go into the field?" (Lortie, 1975, p. 249). All four of the Amish teachers gave evidence in their interview responses that they are participating in learning-by-doing within their teaching practices.

Teacher N stated he often tries this or that to see what works with his students. He continues on saying when students are confused (about a concept) he tries to figure it out and undo what's been learned in previous years. While Teacher N did not explicitly call this process learning-by-doing, he does go on to explain that he has to be willing to spend time learning something if he or the students don't understand it. He stated he tries to find ways to make learning interesting for his students.

Teacher R also participates in the learning-by-doing process. She states that when teaching, she has to first understand what she is reading. She has to know how to teach the different subject areas an Amish teacher teaches throughout the day. In a typical Amish classroom there are eight grade levels and nine subjects per grade level. This requires a lot of planning and understanding of content. Teacher R also stated that she thinks about and learns what to do when addressing discipline concerns. Because each infraction may be different, each punishment may also be different depending on the student. These examples Teacher R gave in her interview show that the learning-by-doing process is a daily action that she interacts with.

Getting to know the pupils was an area Teacher E stated has something different than what she expected. Because each student is different in their own unique way, it can be assumed that you are using the learning-by-doing model in getting to know their students. While this is not explicitly stated in Teacher E's response and no further

explanation was given to her response, forming relationships with students is an ever changing process from year-to-year in the classroom.

Teacher RS gave several examples of how the learning-by-doing model is evident in her classroom. She describes that having to know the subject well is important to knowing how to be a teacher. She also states being able to relate to the children and make learning interesting for them is important. Being an effective disciplinarian is something that the teacher must be able to learn to do while teaching day-to-day. She also states that, "When students don't know anything, it teaches you to expect the unexpected" (personal communication, February 1, 2023).

Another example of the learning-by-doing theme that appeared within the research was the explanation of the yearly Amish teachers' meeting. This yearly meeting provides learning opportunities for the Amish teachers, which is very similar to ongoing professional development opportunities a public school provides to their teachers throughout a school year. Three of the Amish teachers mentioned this yearly meeting as an opportunity in which they learned about various teaching practices to use within their classrooms. Teacher N discussed learning how to say things in a way for students to have respect. Teacher R shared about the learning she did with another Amish teacher who taught her how to understand the grammar of English. Teacher E gave an overview of the teachers' meeting but specifically mentioned a session on how to teach for beginning teachers. These three examples show the continued learning-by-doing model extends to not only pre-service teachers but also teachers who have been teaching in the field for multiple years. The learning-by-doing model is a part of Lortie's (1975) Apprenticeship of Observation Model.

Reality of Teaching

In Lortie's (1975) research, he discusses the concept of imagination v. imitation within the Apprenticeship of Observation Model. He states that observers have limited viewpoints of the professional they are observing. While the observer may think they know what it takes to perform the duties of an educator, and therefore feel competent to do so, in reality they only see a fraction of what actually occurs. This idea is not absent from the Amish teachers' perceptions of what they thought teaching is and would be.

When the Amish teachers were asked in what ways teaching is different than what they expected it to be, the imagination v. imitation thought-process, various answers were given. Teachers first commented on what was better than they expected. Teacher R and Teacher RS discussed the rewards of teaching. Specifically, being surrounded by the children's enthusiasm and helping them understand concepts within their learning.

However, there are aspects of the reality of teaching that were worse than expected from the viewpoints of the Amish teachers. These examples showcase how the perceptions of teaching observed through the Apprenticeship of Observation Model can be misleading. Teacher N discussed how students being behind in skills and not grasping some skills is something that he was not expecting to be as big of a concern as it is. He categorized this concern as being the worse that he expected. Teacher R stated the school days are longer than she expected and being able to understand how students react to punishment is not something she had perceived prior to teaching. Teacher RS stated that classroom management and disciplining differently was an area that she would categorize as being a worse aspect of teaching she was not expecting. Teacher E stated, "As a

student, it (teaching) did not look like much responsibility as it seems to be" (personal communication, January 16, 2023). These examples support Lortie's (1975)

Lortie (1975) states, "What students learn about teaching, then, is intuitive and imitative rather than explicit and analytical; it is based on individual personalities rather than pedagogical principles" (p. 62). The examples given by the Amish teachers, who have no pedagogical principles to fall back on because of their lack of post-secondary schooling, show that the reality of teaching cannot always be observed. Oftentimes, skills needed on the job are learned through learning-by-doing.

Along with understanding the reality of teaching, oftentimes, this prompts changes needs within a system. The Amish teachers, now that they have a clearer vision of what being a teacher entails, also see changes that could be made within their school system to benefit both the teacher and the students. These changes include having a helper in the classroom to assist with general needs and with struggling students.

Teacher E specifically stated a change she would like to have another adult to help support the students with special needs. Teacher N and Teacher RS also discussed the possibility of a new phonics and to change the 2nd grade curriculum for the younger students. Teacher RS suggested that there be a realignment of schools. She feels having schools for younger students and then schools for older students would assist the teacher with the planning and instructing, while also being able to spend more time with each grade level if there were less grades within a school.

Being able to recognize changes within a school system supports Lortie's (1975) ideas of learning-by-doing. Those who are observing their own teachers, prior to teaching themselves, may not be able to adequately suggest changes that would benefit

the reality of a teacher. These Amish teachers, because they are in the thick of the day-to-day teaching world, recognize changes that would benefit the school system as a whole.

Summary

The Amish teachers were observed four times within their classroom at various parts throughout the school day. Anecdotal notes of the teacher's actions in the classroom observations were completed. Each observation was analyzed and then aligned to the Iowa Teaching Standards. When it was determined what teaching standard the observation segment showed evidence for, specific criterion under each standard was marked to explicitly explain the evidence of the standard that was observed. The evidence from the Iowa Teaching Standard was then tallied and analyzed for an overall view of each teacher's observations as they were aligned to the Iowa Teaching Standards.

Through these observations, Amish teachers showed evidence of the Iowa

Teaching standards, specially in Standards 2, 3, 4, 5 and 6. Examples from the

classrooms were given to support the alignment of the standard and criteria. While

Standards 1, 7, and 8 were not observed in the classroom observations of the teachers, it

does not mean that these standards are not being implemented within the teacher's work.

Evidence was found in the interview data to support that evidence is present with some of
the Amish teachers' classrooms for Standards 1, 7, and 8.

Each Amish teacher was also individually interviewed to discuss aspects of teaching based on Lortie's (1975) Five Towns research. This interview was conducted for each Amish teacher to better understand how these teachers learned how to be teachers.

The Five Towns research was specially used to try to determine if they learned how to be

teachers through Lortie's (1975) Apprenticeship of Observation Model. Evidence was shown that Lortie's (1975) Apprenticeship of Observation Model has affected how the Amish teachers teach in their classrooms and know how to do so without any formal post-secondary education.

The themes of the attraction to the teaching field support how an Amish teacher learns to do the job of a teacher through the daily interactions within the classroom. They learn what to do based on when and how the instances occur in the classroom. This is especially evident because these teachers have no formal post-secondary education where they are able to learn pedagogy, teaching strategies, and effective teaching methods. Everything these teachers know how to do as it relates to their teaching profession is based on observing their previous teachers, mediated entry, and learning-by-doing.

Chapter 5: Findings and Discussion

Introduction

The purpose of this study is to analyze an Amish school system without the modern day technologies and a formally educated teacher. These Amish teachers have not sought a post-secondary degree in education, therefore have no formal education on how to be a teacher. This research was done by conducting interviews and classroom observations of the Amish classrooms for each of the Amish teachers. The intent of this qualitative research study is to understand how specific Amish teachers' instructional techniques show evidence of the Iowa Teaching Standards. Interview questions explore how Amish teachers learn to be instructors of the classroom, while determining if their explanations support Lortie's (1975) Apprenticeship of Observation model.

Response to Research Questions

This qualitative research study was conducted using two separate data collection processes. The first method was to conduct four classroom observations of the four Amish teachers who agreed to be part of this research study. Analysis of this data will address the first research question. The second method of data collection was to interview each of the four Amish teachers in a one-on-one setting to determine why they entered the teaching profession and to find evidence related to Lortie's (1975) Apprenticeship of Observation Model.

This study focused on two research questions. The research questions are:

1) What evidence can be found of the Iowa Teaching Standards within Amish teacher instruction in the Amish classroom? 2) Based on the Amish teacher's reflection of their teaching path, why did they decide to teach in the field of education and how were they trained to do so? What evidence exists that their decision and training is related to Dan Lortie's Apprenticeship of Observation Model?

To address the first research question, within the Amish teacher's instruction in the Amish classroom, evidence was found of the Iowa Teaching Standards. Specifically, evidence of five of the eight of the Iowa Teaching Standards were observed in each of the four Amish teachers' classrooms. Specific criteria of each of the five standards and classroom examples were given to support the evidence observed for each of the standards.

Of the three standards that were not observed in the classroom observations, evidence was found during the one-on-one interviews, whose interview questions were based on Lortie's (1975) Five Towns interviews. Specifically Teacher N, Teacher R, and Teacher E showed interview evidence for Standards 1, 7, and 8. Teacher RS, through interview data, showed explicit evidence of Standard 8. However, though Standard 1 and 7 are absent from the classroom and interview data, it should not be assumed that there is no evidence available. Specific questions would need to be asked to Teacher RS to determine if there is any data to support that she engages with Standard 1 and 7 throughout her daily teaching practices.

While there is data to support that the Amish teachers show evidence for the Iowa Teaching Standards, the second research question of this study examines how these teachers know how to teach without any formal post-secondary education, like most non-Amish educators possess. The themes generated from this study include attraction to the

teaching field, formal schooling experiences, mediated entry, learning-by-doing, and the Reality of Teaching. These themes will be discussed and supported with research from the literature review as it relates to this study.

The four Amish teachers stated their attraction to teaching was interpersonal and continuation of learning. They described their want to help children and also how much they enjoyed learning in school as a student. Three of the four teachers stated a service to the community was an attraction to the field. All of the four Amish teachers stated family members and past teachers as a major influence for entering the field.

Because these Amish stated that they had past teachers that influenced their decision to become a teacher themselves, is a nod to Lortie's (1975) Apprenticeship of Observation Model. This model can be described as the phenomenon of pre-service teachers having already had multiple hours of observation professionals in their field of study prior to beginning any formal coursework (Lortie, 1975). Because the Amish teachers mentioned the various teachers they have observed in their formal schooling years in 1st-8th grade, one can make the inference that those past teachers had an impact on the Amish teachers' professional dispositions.

The second theme found in the data was formal school experiences. On average, a student may have up to 13,000 hours of direct contact with their teachers by the time they finish their high school journey (Högqvist, 2016; Lortie, 1975). This theme of formal school experience is again related to Lortie's (1975) Apprenticeship of Observation Model. While these Amish teachers did not participate in education past the 8th grade, their formal school experiences are reflected on that. The Amish teachers were able to share both positive and negative examples of their own past teachers and how those

experiences influenced their own teaching today. Moodie's (2016) research had teachers share that because of an apprenticeship experience, they realized what behaviors they did not want to exhibit within their own classrooms. Even though the apprenticeship of observation created a desire to be the opposite, it still showed to have an impact on the participants of the study.

The third theme that emerged from the data was mediated entry. This term is defined as part of Lortie's (1975) induction process as part of the Apprenticeship of Observation Model. This is defined as an apprenticeship (Lortie, 1975). Three of the four teachers discussed the mediated entry process from being a helper in the classroom, to a classroom peer tutor, and being a good student. These opportunities of mediated entry support Lortie's (1975) Apprenticeship of Observation Model because these Amish students were learning how to do parts of a teacher's job through mediated entry. These were direct instances of the influence of Lortie's research.

The fourth theme that emerged in connection to Lortie's (1975) Apprenticeship of Observation Model was learning-by-doing. Lortie (1975) states, "Learning-by-doing continues to be important; we shall see that teachers believe work experience is highly influential in shaping their performance" (p.60). This process can be described as learning what to do and needing to learn to do everyday work of the occupation (Lortie, 1975). The Amish teachers shared examples of this learning-by-doing induction process through the difference of what they thought teaching would be like and what it actually is. Examples included students learning, discipline, and learning from others at an annual teachers' meeting. Kennedy (1999) asserts that the student does not observe all that a teacher does. The student does not always see how the teacher plans, analyzes, or

determines specific implications of the classroom. This is seen as a challenge for many (Greenwalt, 2014). The examples given are some of the challenges the Amish teachers have faced and needed to problem solve the various situations through a learning-by-doing model.

The fifth theme derived from this study is the reality of teaching. While Amish teachers have observed for many hours how their teachers taught, there is still a reality that cannot be observed. Lortie addresses this observation by saying it more of an imagination v. imitation viewpoint. Lortie (1975) states, "What students learn about teaching, then, is intuitive and imitative rather than explicit and analytical; it is based on individual personalities rather than pedagogical principles" (p. 62). Because there are no pedagogical principles learned from post-secondary education, Amish teachers shared changes they would make to improve the reality of teaching for them based on their intuitiveness. They stated having a helper in the classroom to support students who are struggling, enough more time within a school day, and also making a change to the organization of the school system. Being able to recognize changes within a school system supports Lortie's (1975) ideas of learning-by-doing. A study conducted by Urmston (2003) found that there was conflict between what students believed and knew v. the reality of what was actually present. This research also supports the belief system compared to the reality of teaching for the Amish teachers in this study.

One would be amiss to not connect the Iowa Teaching Standards to Lortie's (1975) Apprenticeship of Observation Model. Because the Amish teachers were able to show evidence of the Iowa Teaching Standards to a vast degree, one must ask how they do this without any formal post-secondary education? One can conclude it is because

Amish teachers learned how to be educators through Lortie's research on attractions to the teaching profession, their own formal schooling experiences, mediated entry, and participating in the learning-while-doing model.

When teachers have been asked to reflect on their experiences with the induction process, many are using the mediated entry and learn-by-doing. This is because they have been participating in the Lortie's (1975) Apprenticeship of Observation Model since they entered school as students. The Amish teachers have been observers of educators since the 1st grade. This is how these teachers have learned to be the teachers they are. Amish teachers have utilized the learning-by-doing model within this induction system and also rely on the Apprentice of Observation Model to be able to carry out the professional responsibilities of an educator.

Limitations of the Study

Limitations of this study do include the researcher's enhanced positive appreciation for the Amish society and its beliefs. Because of this, unintentional bias may occur within the research due to focusing on the positive attributes of the observations and interviews. In conversation with the Amish religious head, he shared with the researcher that if he allows this to happen, he would like the community to be seen in a positive light to others, and not one that is negative.

Another limitation is the number of Amish teacher participants. Currently, there are four Amish schools, however, not all of the teachers wanted to participate in the study, or may offer only limited explanations when asked the interview questions by the researcher. Only four out of the five Amish teachers agreed to be part of this study. This makes the sample size small for the study. While the researcher has been building a

trusted relationship with various members of the Amish community over the past several years, having an outsider observe the classroom instruction and discuss teaching practices with the Amish teachers is new to this community.

Another factor that may inhibit the study is the high turnover rate of Amish school teachers within this rural area. Amish teachers usually begin teaching shortly after their own 8th grade graduation, but then leave the profession because of household duties or the prospect of marriage is near (Fischel, 2012). Some of the current teachers who are part of this study, have limited experiences in the classroom and are considered first year teachers.

Because data is being collected through observation of the classroom and interviews with the teachers, due to the cultural philosophies, videotaped observation and interviews were prohibited. Observations were conducted in real-time by the researcher and were relied on note-taking. Interviews were conducted by note-taking, with written statements verified by the Amish teacher. Because of the limits of technology within this study, the data collected will be as accurate as possible, but human error may unintentionally provide inaccurate accounts of observations and interviews.

Lastly, evaluator perceptions may be a limitation within this study. Because the researcher has limited observational experience with the Amish school system, knowing the Amish district's standards and procedures of its students and teachers is limited. Also because varied segments of observations were done throughout a month-long observation period, understanding the entirety of a school day in the Amish schools is limited. The researchers explanations are based on anecdotal notes and one-on-one teacher interviews.

Implications

There were four main takeaways from this study of the Amish school system, and in particular studying these Amish classrooms and teachers. First, having content knowledge of the subjects the teachers teach is a major priority of all the teachers. Knowing what to teach, how to teach the content, and implement strategies that are aligned to the content ensures students learn what is expected of them at their grade levels (CCSSO, 2013; NBPTS, 2016; State of Iowa Department of Education, 2019; Stronge, 2007). This is an essential practice, not only in Amish schools, but in all schools. Teachers must know what they are teaching and how it relates to the learning progressions of the students' educational journey.

Because the Amish teachers continually work in small groups and provide 1:1 assistance for students in their classroom, meeting the needs of students is also a major aspect of a classroom. To help students understand academic concepts and meet behavioral expectations, teachers must reteach, provide additional examples and practice within their explanations, and scaffold instruction for students to learn (Hamsa, 1998; Rutherford et al., 2011; Stronge, 2007). This is evident within the classrooms of these Amish teachers and in additional research in other non-Amish schools and classrooms.

A third implementation for this study includes the use of professional development for educators. Three of the four Amish teachers discussed the positive effect of the annual teacher meeting they have attended. Continued teacher professional development is essential for teachers to continue to improve in their teaching craft, learn new ways to implement academic concepts, increase engagement in lessons, use student assessment data to guide instruction, and also to learn ways in which to meet the needs of

various learners (Barley & Beesley, 2007; CCSSO, 2013; NBPTS, 2016; State of Iowa Department of Education, 2019).

To the research, one of the most important implications of this study is to identify and understand the impact one can have on others, in both a personal life and a professional one. All of the Amish teachers mentioned the influence of family members and previous teachers in their own personal journey to become educators within the community. Non-Amish schools invest in mentorships for teachers and professional learning communities (PLCs) to support collaborative professional learning for each other. While the Amish teachers don't have specially these types of collaborative techniques within their Amish schools or districts, the support of the students' parents and the community as a whole is one that enhances the success of the teachers, schools, and students. The teaching field cannot be an isolated profession, whether it be an Amish school or a public or private school. Effective educators continue to have an impact on students, the teachers they work with and the communities they serve (Stronge, 2007).

Recommendations for Future Study

There are several aspects that could be explored within the Amish schools, in particular this Amish community of schools. Research to understand the Amish district's standards for students and for teachers would be an interesting conversation to have with the teachers. Knowing what student learning standards are expected at each grade level and in what content areas would provide a better understanding of the learning progressions for Amish students educated in Amish school systems. Data gathered from those learning standards could then be used in comparison to the common core standards

used in Iowa for their students. These comparisons could be analyzed by specific content areas and grade levels.

Another aspect of the Amish schools that could provide continued research is the district standards of Amish teachers. After discussing those standards, understanding the process in which Amish teachers are evaluated and by whom are they evaluated. Data gathered from the Amish teaching standards could then be compared to the another set of teaching standards to find similarities and differences between the standards and also the evaluation process of Amish teachers and non-Amish teachers.

Amish schools, in particular those that were part of this study, are also functioning as English-Language Learner classrooms. Their 1st grade students start the school year not speaking the English language. Amish students are immersed into the English classroom with the English language spoken throughout the school days, specially through classroom instruction on Mondays through Thursdays. On Fridays, all of the classrooms that were observed, teachers shared that on Fridays, all instruction in the classroom is spoken in German (Pennsylvania Dutch). Content related to the home language of the students that is learned on these school days include reading, writing, vocabulary, and spelling. Additional research can be completed to understand what specific ELL strategies are implemented in the classrooms on the days of German instruction and also what strategies are used to ensure students continue as bilingual students in this school system.

Amish schools are not without struggling students. Several teachers in this study shared their strategies and concerns about students who are not progressing academically with the rest of the grade level peers. While special education identification is not a

characteristic of this Amish school system, the Amish teachers vary in ways they support students who may have a learning disability. Continued research on the decision making factors of retention and also specialized education within the Amish schools could be an additional area of research.

Public schools focus much of their secondary students' exploration on postsecondary goals for after high school graduation. This is completed through exploring
careers, job shadows, apprentices, work-based learning opportunities, and taking a variety
of classes based on strengths and interests. Because Amish students graduate after the 8th
grade, future research could be conducted to understand the transition from school to the
work-based learning experiences the community has to offer to its graduates.
Understanding how those work paths are chosen, what model is used to train those
students in their chosen path, and what continued support is available to these graduate
students to be successful in the fields of their choice.

Lastly, understanding more in-depth about the professional development offered to teachers on a continual basis is an area of exploration. While teachers in this study mentioned the yearly teachers' meetings, knowing and understanding what other teacher professional development is available could be researched. Also determine what formal professional development is planned and attended and what individual professional development is completed by the individual teacher based on their own personal interests to learn more about their chosen professional field.

Conclusion

Throughout this research process, the researcher continued to be amazed by what was observed in theAmish classrooms, especially the teaching strategies the Amish

teachers were implementing within their school day. The researcher has spent many years of formal post-secondary education learning and honing the craft as an educator. This has included learning specific techniques to understand a content area as it is aligned to the grade level standards, meet the needs of various student groups, providing professional development for other teachers, and continue to be not only an instructional leader but a good human in the eyes of others, both students and adults.

And what the researcher has learned from this process, is that these Amish educators want the same things for their students, their own family members, and for their community. Through the observations and the interviews, the Amish teachers shared how they want their students to learn, they want to be the educator that helps their students learn, improve the students' skills, and help their students be productive people within their community. This is because they also had teachers who wanted this for them. The researcher has come to the conclusion that while our school systems look vastly different, our post-secondary education is on opposite ends of the spectrum, the Amish teachers and myself are very much the same. We want to be good teachers and we want our students to learn.

References

- Alignment of InTASC principles, Iowa Teaching Standards, and conceptual framework goals. (n.d.). Graceland University.

 <a href="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_IA_CF_Aligned_6_2014.pdf?target="https://my.graceland.edu/ICS/icsfs/InTASC_
- Anderson, C. (2015). Amish education: A synthesis. *Journal of Amish and Plain Anabaptist Studies*, 3(1), p. 1-24.
- Astleitner, H. (2005). Principles of effective instruction- general standards for teachers and instructional. *Journal of Instructional Psychology*, 32(1), p. 3-8.
- Bailey, K. M., Bergthold, B., Braunstein, B., Fleischman, N. J., Holbrook, M. P., Tuman, J., Waissbluth, X., & Zambo, L. J. (1996). The language learner's autobiography: Examining the "apprenticeship of observation." In D. Freeman & J. C. Richards (Eds.), *Teacher learning in language teaching* (pp. 11-29). Cambridge University Press.
- Barley, Z. A., & Beesley, A. D. (2007, January 10). Rural school success: What can we learn? *Journal of Research in Rural Education*, 22(1), 1-16.
- Bishops, Committeemen, and Others In Conference. (1983). *Minimum Standards for the*Amish Parochial or Elementary Schools of the State of Iowa as a Form of

 Regulations. Gordonville, PA: Print Shop.
- Boyd, W. L., & Reese, J. P. (2006). Great expectations: The impact of the National Board for Professional Teaching Standards. *Education Next*, 6(2), 51-57.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa

- Conley, D. T., Drummond, K. V., de Gonzalez, A., Rooseboom, J., & Stout, O. (2011).

 Reaching the goal: The applicability and importance of the common core state standards to college and career readiness. Educational Policy Improvement

 Center. https://files.eric.ed.gov/fulltext/ED537872.pdf
- Conner, J., & Vary, G. (2017, May). Confronting apprenticeships of observation: How student-faculty pedagogical partnership complicates conceptualization, understanding, and practice of effective pedagogy. *International Journal for Students as Parents*, 1(1), 1-6.
- Council of Chief State School Officers. (2013, April). InTASC model core teaching standards and learning progressions for teachers 1.0 [PDF file].

 https://ccsso.org/sites/default/files/2017-12/2013_INTASC_Learning_Progressions_for_Teachers.pdf
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal for Teacher Education*, 40(3), 291-303.
- Dewalt, M. (2006). *Amish education in the United States and Canada*. Lanham, Maryland: Rowman & Littlefield Education.
- Ediger, M. (2005). Old Order Amish philosophy of education. *Education*, 125(3), 422-426.
- Elkins, A., Chonko, D., Dirscherl, B., Hall, D., & Mitchell, K. (2010, May/June).

 Professional excellence: Becoming a national board certified school librarian.

 Knowledge Quest, 38(15), 12-17.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to

- strengthen and sustain teaching. Teachers College Record, 103(6), 1013-1055.
- Fischel, W. A. (2012). Do Amish one-room schools make the grade? The dubious data of "Wisconsin v. Yoder." *The University of Chicago Law Review*, 79(1), 107-129.
- Greenwalt, K. A. (2014). Frustrated returns: Biography, parental figures, and the apprenticeship of observation. *Curriculum Inquiry*, *44*(3). 306-331.
- Gutiérrez Almarza, G. (1996). Student foreign language teacher's knowledge of growth.

 In D. Freeman & J. C. Richards (Eds.), *Teacher learning in language teaching*(pp. 50-78). Cambridge University Press.
- Hamsa, I. S. (1998, Spring). The role of the National Board for Professional Teaching Standards. *Education*, 118(3), 452+.
- Harroff, S. (1998). Value-oriented teaching in a contemporary Indiana Amish parochial school: Preparations for adult fife through faith, responsible behavior, and community interaction. *International Journal of Educational Reform*, 7(3). 243-254.
- Harroff, S. (2004). *The Amish school of Indiana: Faith in education*. West Lafayette, Indiana: Purdue University Press.
- Högqvist, M. (2016, Fall). Chinese English major students and the apprenticeship of observation: The influence of previous student experiences on current beliefs about English language teaching. Karlstads Universitet.
- Hostetler, J. A. (1993). Child nurturing and training. *Amish Society* (3rd ed., pp. 172-189). Baltimore, MD: John Hopkins University Press.
- Hostetler, J., & Huntington, G. (1992). Amish children: Education in the family, school and community (2nd ed.). Harcourt Brace Jovanovich College.

- Iowa Department of Education. (2018). *Iowa Teaching Standards & Criteria* [PDF file]. https://educateiowa.gov/documents/teacher-quality/2019/07/iowa-teaching-standards-and-criteria
- Iowa Department of Education. (2021a). 2021-2022 certified enrollment by district.

 https://educateiowa.gov/documents/school-district-certified-enrollment/2021/12/

 021-2022-certified-enrollment-district
- Iowa Department of Education. (2021b). Become an educator. <u>https://educateiowa.gov/pk-12/educator-quality/become-educator</u>
- Kachel, D. (1989). How the Amish educate their children: Can we learn from them? *Educational Horizons*, 67(3), p. 92-97.
- Karge, B. D., & Moore, R. K. (2015). Common Core: Teaching Optimum Topic
 Exploration (TOTE). Contemporary Issues in Education Research, 8(1), 45-48.
- Kennedy, M. (1999). The role of preservice teacher education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of teaching and policy* (p. 54-86). San Francisco: Jossey Bass.
- Lortie, D. C. (1975). School-teacher: A sociological study. University of Chicago Press.
- McConnell, D. L., & Hurst, C. E. (2006, September). No "Rip Van Winkles" here:

 Amish education since "Wisconsin v. Yoder". *Anthropology & Education*Quarterly, 37(3), 236-254.
- Merriam, S. B. (2009). Qualitative research: A guide to design and implementation.

 Revised and expanded from qualitative research and case study applications in education. San Francisco, CA: Jossey-Bass.
- Mewborn, D. S., & Tyminski, A. M. (2006). Lortie's apprenticeship of observation

- revisited. For the Learning of Mathematics, 26(3), 30-33.
- Mississippi State University. (2017, May). The impact of National Board Certification

 Teachers on the literacy outcomes of Mississippi kindergartners and third graders.

 National Strategic Planning and Analysis Research Center, 1-20.
- Moodie, I. (2016). The anti-apprenticeship of observation: How negative prior language learning experiences influence English language teachers' beliefs and practices. System, 60(5), 29-41.
- National Board for Professional Teaching Standards. (2016). What teachers should know and be able to do [PDF file]. www.nbpts.org
- National Center for Educational Statistics. (2006). *Rural education in America*. https://nces.ed.gov/surveys/ruraled/definitions.asp#how
- National Board for Professional Teaching Standards. (2022). *National board* certification. https://www.nbpts.org
- National Governors Association Center for Best Practices, & Council of Chief State School Officers. (2019). *Common Core State Standards Initiative*.

 http://www.corestandards.org/
- Nolt, S. M. (2016). Family and schooling. *The Amish: A Concise Introduction*. (pp. 66-79). Baltimore, MD: Johns Hopkins University Press.
- Payne, J. I. (1971). Analysis of teacher-student classroom interaction in Amish and non-Amish schools. *Social Problems*, 19(1), 79-90.
- Rutherford, P., Kaylor, B., Kwit, H. C., McVicker, J., Oliver, B., Stephens-Carter, S., & West, T. (2011). *Creating a culture of learning*. Virginia: Just ASK publications.
- Sinnema, C., Meyer, F., & Aitken, G. (2017). Capturing the complex, situated, and active

- nature of teaching through inquiry-oriented standards for teaching. *Journal of Teacher Education*, 68(1), 9-27.
- State of Iowa Department of Education. (2019-20). *The Iowa model educator evaluation* system [PDF file].
 - https://educateiowa.gov/sites/default/files/documents/IaMEES2122.pdf
- Stronge, J. H. (2007). *Qualities of effective teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Urmston, A. (2003). Learning to teach English in Hong Kong: The opinions of teachers in training. *Language & Education: An International Journal*, 17(2), 112-137.
- U.S. Department of Education. (2009). *State regulation of private schools* [PDF file]. https://www2.ed.gov/admins/comm/choice/regprivschl/regprivschl.pdf
- Waite, D., & Crockett, D. (1997). Whose education? Reform, culture and an Amish Mennonite community. *Theory Into Practice*, *36*(2), 117-122.
- Wyman, A. (1996). Amish women teachers. In *Rural women teachers in the United States* (pp. 108-129). Lanham, MD: Scarecrow Press.
- Zehr, H., Moss, G., & Nichols, J. (2005). Amish teacher dialogues with teacher educators: Research, culture, and voices of critique. *The Qualitative Report*, 10(3), 593-620. https://doi.org/10.46743/2160-3715/2005.1843

Appendix A: Interstate Teacher Assessment and Support Consortium (InTASC) Standards

The Learner and the Learning

Standard #1: Learner Development. The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

Performances

- 1(a) The teacher regularly assesses individual and group performance in order to design and modify instruction to meet learners' needs in each area of development (cognitive, linguistic, social, emotional, and physical) and scaffolds the next level of development 1(b) The teacher creates developmentally appropriate instruction that takes into account individual learners' strengths, interests, and needs and that enables each learner to advance and accelerate his/her learning.
- 1(c) The teacher collaborates with families, communities, colleagues, and other professionals to promote learner growth and development.

Essential Knowledge

- 1(d) The teacher understands how learning occurs--how learners construct knowledge, acquire skills, and develop disciplined thinking processes--and knows how to use instructional strategies that promote student learning.
- 1(e) The teacher understands that each learner's cognitive, linguistic, social, emotional, and physical development influences learning and knows how to make instructional decisions that build on learners' strengths and needs.

- 1(f) The teacher identifies readiness for learning, and understands how development in any one area may affect performance in others.
- 1(g) The teacher understands the role of language and culture in learning and knows how to modify instruction to make language comprehensible and instruction relevant, accessible, and challenging.

- 1(h) The teacher respects learners' differing strengths and needs and is committed to using this information to further each learner's development.
- 1(i) The teacher is committed to using learners' strengths as a basis for growth, and their misconceptions as opportunities for learning.
- 1(j) The teacher takes responsibility for promoting learners' growth and development.
- 1(k) The teacher values the input and contributions of families, colleagues, and other professionals in understanding and supporting each learner's development.

Standard #2: Learning Differences. The teacher uses an understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

Performances

2(a) The teacher designs, adapts, and delivers instruction to address each student's diverse learning strengths and needs and creates opportunities for students to demonstrate their learning in different ways.

- 2(b) The teacher makes appropriate and timely provisions (e.g., pacing for individual rates of growth, task demands, communication, assessment, and response modes) for individual students with particular learning differences or needs.
- 2(c) The teacher designs instruction to build on learners' prior knowledge and experiences, allowing learners to accelerate as they demonstrate their understanding.
- 2(d) The teacher brings multiple perspectives to the discussion of content, including attention to learners' personal, family, and community experiences and cultural norms.
- 2(e) The teacher incorporates tools of language development into planning and instruction, including strategies for making content accessible to English language learners and for evaluating and supporting their development of English proficiency.
- 2(f) The teacher accesses resources, supports, and specialized assistance and services to meet particular learning differences or needs.

- 2(g) The teacher understands and identifies differences in approaches to learning and performance and knows how to design instruction that uses each learner's strengths to promote growth.
- 2(h) The teacher understands students with exceptional needs, including those associated with disabilities and giftedness, and knows how to use strategies and resources to address these needs.

- 2(i) The teacher knows about second language acquisition processes and knows how to incorporate instructional strategies and resources to support language acquisition.
- 2(j) The teacher understands that learners bring assets for learning based on their individual experiences, abilities, talents, prior learning, and peer and social group interactions, as well as language, culture, family, and community values.
- 2(k) The teacher knows how to access information about the values of diverse cultures and communities and how to incorporate learners' experiences, cultures, and community resources into instruction.

- 2(l) The teacher believes that all learners can achieve at high levels and persists in helping each learner reach his/her full potential.
- 2(m) The teacher respects learners as individuals with differing personal and family backgrounds and various skills, abilities, perspectives, talents, and interests.
- 2(n) The teacher makes learners feel valued and helps them learn to value each other. 2(o) The teacher values diverse languages and dialects and seeks to integrate them into his/her instructional practice to engage students in learning.
- Standard #3: Learning Environments. The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self motivation.

Performances

- 3(a) The teacher collaborates with learners, families, and colleagues to build a safe, positive learning climate of openness, mutual respect, support, and inquiry.
- 3(b) The teacher develops learning experiences that engage learners in collaborative and self-directed learning and that extend learner interaction with ideas and people locally and globally.
- 3(c) The teacher collaborates with learners and colleagues to develop shared values and expectations for respectful interactions, rigorous academic discussions, and individual and group responsibility for quality work.
- 3(d) The teacher manages the learning environment to actively and equitably engage learners by organizing, allocating, and coordinating the resources of time, space, and learners' attention.
- 3(e) The teacher uses a variety of methods to engage learners in evaluating the learning environment and collaborates with learners to make appropriate adjustments.
- 3(f) The teacher communicates verbally and nonverbally in ways that demonstrate respect for and responsiveness to the cultural backgrounds and differing perspectives learners bring to the learning environment.
- 3(g) The teacher promotes responsible learner use of interactive technologies to extend the possibilities for learning locally and globally.
- 3(h) The teacher intentionally builds the learner capacity to collaborate in face-to-face and virtual environments through applying effective interpersonal communication skills.

- 3(i) The teacher understands the relationship between motivation and engagement and knows how to design learning experiences using strategies that build learner self-direction and ownership of learning.
- 3(j) The teacher knows how to help learners work productively and cooperatively with each other to achieve learning goals.
- 3(k) The teacher knows how to collaborate with learners to establish and monitor elements of a safe and productive learning environment including norms, expectations, routines, and organizational structures.
- 3(1) The teacher understands how learner diversity can affect communication and knows how to communicate effectively in differing environments.
- 3(m) The teacher knows how to use technologies and how to guide learners to apply them in appropriate, safe, and effective ways.

Critical Dispositions

- 3(n) The teacher is committed to working with learners, colleagues, families, and communities to establish positive and supportive learning environments.
- 3(o) The teacher values the role of learners in promoting each other's learning and recognizes the importance of peer relationships in establishing a climate of learning.
 - 3(p) The teacher is committed to supporting learners as they participate in

decision-making, engage in exploration and invention, work collaboratively and independently, and engage in purposeful learning.

- 3(q) The teacher seeks to foster respectful communication among all members of the learning community.
- 3(r) The teacher is a thoughtful and responsive listener and observer.

Content

Standard #4: Content Knowledge. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.

Performances

- 4(a) The teacher effectively uses multiple representations and explanations that capture key ideas in the discipline, guide learners through learning progressions, and promote each learner's achievement of content standards.
- 4(b) The teacher engages students in learning experiences in the discipline(s) that encourage learners to understand, question, and analyze ideas from diverse perspectives so that they master the content.
- 4(c) The teacher engages learners in applying methods of inquiry and standards of evidence used in the discipline.
- 4(d) The teacher stimulates learner reflection on prior content knowledge, links new concepts to familiar concepts, and makes connections to learners' experiences.

- 4(e) The teacher recognizes learner misconceptions in a discipline that interfere with learning, and creates experiences to build accurate conceptual understanding.
- 4(f) The teacher evaluates and modifies instructional resources and curriculum materials for their comprehensiveness, accuracy for representing particular concepts in the discipline, and appropriateness for his/her learners.
- 4(g) The teacher uses supplementary resources and technologies effectively to ensure accessibility and relevance for all learners.
- 4(h) The teacher creates opportunities for students to learn, practice, and master academic language in their content.
- 4(i) The teacher accesses school and/or district-based resources to evaluate the learner's content knowledge in their primary language.

- 4(j) The teacher understands major concepts, assumptions, debates, processes of inquiry, and ways of knowing that are central to the discipline(s) s/he teaches.
- 4(k) The teacher understands common misconceptions in learning the discipline and how to guide learners to accurate conceptual understanding.
- 4(1) The teacher knows and uses the academic language of the discipline and knows how to make it accessible to learners.
- 4(m) The teacher knows how to integrate culturally relevant content to build on learners' background knowledge.
- 4(n) The teacher has a deep knowledge of student content standards and learning progressions in the discipline(s) s/he teaches.

Critical Dispositions

- 4(o) The teacher realizes that content knowledge is not a fixed body of facts but is complex, culturally situated, and ever evolving. S/he keeps abreast of new ideas and understandings in the field.
- 4(p) The teacher appreciates multiple perspectives within the discipline and facilitates learners' critical analysis of these perspectives.
- 4(q) The teacher recognizes the potential of bias in his/her representation of the discipline and seeks to appropriately address problems of bias.
- 4(r) The teacher is committed to work toward each learner's mastery of disciplinary content and skills.

Standard #5: Application of Content. The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

Performances

- 5(a) The teacher develops and implements projects that guide learners in analyzing the complexities of an issue or question using perspectives from varied disciplines and cross-disciplinary skills (e.g., a water quality study that draws upon biology and chemistry to look at factual information and social studies to examine policy implications).
- 5(b) The teacher engages learners in applying content knowledge to real world problems through the lens of interdisciplinary themes (e.g., financial literacy, environmental literacy).
- 5(c) The teacher facilitates learners' use of current tools and resources to maximize content learning in varied contexts.

- 5(d) The teacher engages learners in questioning and challenging assumptions and approaches in order to foster innovation and problem solving in local and global contexts.
- 5(e) The teacher develops learners' communication skills in disciplinary and interdisciplinary contexts by creating meaningful opportunities to employ a variety of forms of communication that address varied audiences and purposes.
- 5(f) The teacher engages learners in generating and evaluating new ideas and novel approaches, seeking inventive solutions to problems, and developing original work.
- 5(g) The teacher facilitates learners' ability to develop diverse social and cultural perspectives that expand their understanding of local and global issues and create novel approaches to solving problems.
- 5(h) The teacher develops and implements supports for learner literacy development across content areas.

- 5(i) The teacher understands the ways of knowing in his/her discipline, how it relates to other disciplinary approaches to inquiry, and the strengths and limitations of each approach in addressing problems, issues, and concerns.
- 5(j) The teacher understands how current interdisciplinary themes (e.g., civic literacy, health literacy, global awareness) connect to the core subjects and knows how to weave those themes into meaningful learning experiences.
- 5(k) The teacher understands the demands of accessing and managing information as well as how to evaluate issues of ethics and quality related to information and its use.

- 5(l) The teacher understands how to use digital and interactive technologies for efficiently and effectively achieving specific learning goals.
- 5(m) The teacher understands critical thinking processes and knows how to help learners develop high level questioning skills to promote their independent learning.
- 5(n) The teacher understands communication modes and skills as vehicles for learning (e.g., information gathering and processing) across disciplines as well as vehicles for expressing learning.
- 5(o) The teacher understands creative thinking processes and how to engage learners in producing original work.
- 5(p) The teacher knows where and how to access resources to build global awareness and understanding, and how to integrate them into the curriculum.

- 5(q) The teacher is constantly exploring how to use disciplinary knowledge as a lens to address local and global issues.
- 5(r) The teacher values knowledge outside his/her own content area and how such knowledge enhances student learning.
- 5(s) The teacher values flexible learning environments that encourage learner exploration, discovery, and expression across content areas.

Instructional Practice

Standard #6: Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

Performances

- 6(a) The teacher balances the use of formative and summative assessment as appropriate to support, verify, and document learning.
- 6(b) The teacher designs assessments that match learning objectives with assessment methods and minimizes sources of bias that can distort assessment results.
- 6(c) The teacher works independently and collaboratively to examine test and other performance data to understand each learner's progress and to guide planning.
- 6(d) The teacher engages learners in understanding and identifying quality work and provides them with effective descriptive feedback to guide their progress toward that work.
- 6(e) The teacher engages learners in multiple ways of demonstrating knowledge and skill as part of the assessment process.
- 6(f) The teacher models and structures processes that guide learners in examining their own thinking and learning as well as the performance of others.
- 6(g) The teacher effectively uses multiple and appropriate types of assessment data to identify each student's learning needs and to develop differentiated learning experiences.
- 6(h) The teacher prepares all learners for the demands of particular assessment formats and makes appropriate accommodations in assessments or testing conditions, especially for learners with disabilities and language learning needs.
- 6(i) The teacher continually seeks appropriate ways to employ technology to support assessment practice both to engage learners more fully and to assess and address learner needs.

Essential Knowledge

- 6(j) The teacher understands the differences between formative and summative applications of assessment and knows how and when to use each.
- 6(k) The teacher understands the range of types and multiple purposes of assessment and how to design, adapt, or select appropriate assessments to address specific learning goals and individual differences, and to minimize sources of bias.
- 6(l) The teacher knows how to analyze assessment data to understand patterns and gaps in learning, to guide planning and instruction, and to provide meaningful feedback to all learners.
- 6(m) The teacher knows when and how to engage learners in analyzing their own assessment results and in helping to set goals for their own learning.
- 6(n) The teacher understands the positive impact of effective descriptive feedback for learners and knows a variety of strategies for communicating this feedback.
- 6(o) The teacher knows when and how to evaluate and report learner progress against standards.
- 6(p) The teacher understands how to prepare learners for assessments and how to make accommodations in assessments and testing conditions, especially for learners with disabilities and language learning needs.

- 6(q) The teacher is committed to engaging learners actively in assessment processes and to developing each learner's capacity to review and communicate about their own progress and learning.
- 6(r) The teacher takes responsibility for aligning instruction and assessment with learning goals.

- 6(s) The teacher is committed to providing timely and effective descriptive feedback to learners on their progress.
- 6(t) The teacher is committed to using multiple types of assessment processes to support, verify, and document learning.
- 6(u) The teacher is committed to making accommodations in assessments and testing conditions, especially for learners with disabilities and language learning needs.
- 6(v) The teacher is committed to the ethical use of various assessments and assessment data to identify learner strengths and needs to promote learner growth.

Standard #7: Planning for Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Performances

- 7(a) The teacher individually and collaboratively selects and creates learning experiences that are appropriate for curriculum goals and content standards, and are relevant to learners
- 7(b) The teacher plans how to achieve each student's learning goals, choosing appropriate strategies and accommodations, resources, and materials to differentiate instruction for individuals and groups of learners.
- 7(c) The teacher develops appropriate sequencing of learning experiences and provides multiple ways to demonstrate knowledge and skill.
- 7(d) The teacher plans for instruction based on formative and summative assessment data, prior learner knowledge, and learner interest.

- 7(e) The teacher plans collaboratively with professionals who have specialized expertise (e.g., special educators, related service providers, language learning specialists, librarians, media specialists) to design and jointly deliver as appropriate effective learning experiences to meet unique learning needs.
- 7(f) The teacher evaluates plans in relation to short- and long-range goals and systematically adjusts plans to meet each student's learning needs and enhance learning. Essential Knowledge
- 7(g) The teacher understands content and content standards and how these are organized in the curriculum.
- 7(h) The teacher understands how integrating cross-disciplinary skills in instruction engages learners purposefully in applying content knowledge.
- 7(i) The teacher understands learning theory, human development, cultural diversity, and individual differences and how these impact ongoing planning.
- 7(j) The teacher understands the strengths and needs of individual learners and how to plan instruction that is responsive to these strengths and needs.
- 7(k) The teacher knows a range of evidence-based instructional strategies, resources, and technological tools and how to use them effectively to plan instruction that meets diverse learning needs.
- 7(l) The teacher knows when and how to adjust plans based on assessment information and learner responses.
- 7(m) The teacher knows when and how to access resources and collaborate with others to support student learning (e.g., special educators, related service providers, language learner specialists, librarians, media specialists, community organizations).

- 7(n) The teacher respects learners' diverse strengths and needs and is committed to using this information to plan effective instruction.
- 7(o) The teacher values planning as a collegial activity that takes into consideration the input of learners, colleagues, families, and the larger community.
- 7(p) The teacher takes professional responsibility to use short- and long-term planning as a means of assuring student learning.
- 7(q) The teacher believes that plans must always be open to adjustment and revision based on learner needs and changing circumstances.

Standard #8: Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop a deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Performances

- 8(a) The teacher uses appropriate strategies and resources to adapt instruction to the needs of individuals and groups of learners.
- 8(b) The teacher continuously monitors student learning, engages learners in assessing their progress, and adjusts instruction in response to student learning needs.
- 8(c) The teacher collaborates with learners to design and implement relevant learning experiences, identify their strengths, and access family and community resources to develop their areas of interest.
- 8(d) The teacher varies his/her role in the instructional process (e.g., instructor, facilitator, coach, audience) in relation to the content and purposes of instruction and the needs of learners.

- 8(e) The teacher provides multiple models and representations of concepts and skills with opportunities for learners to demonstrate their knowledge through a variety of products and performances.
- 8(f) The teacher engages all learners in developing higher order questioning skills and metacognitive processes.
- 8(g) The teacher engages learners in using a range of learning skills and technology tools to access, interpret, evaluate, and apply information.
- 8(h) The teacher uses a variety of instructional strategies to support and expand learners' communication through speaking, listening, reading, writing, and other modes.
- 8(i) The teacher asks questions to stimulate discussion that serves different purposes (e.g., probing for learner understanding, helping learners articulate their ideas and thinking processes, stimulating curiosity, and helping learners to question).

- 8(j) The teacher understands the cognitive processes associated with various kinds of learning (e.g., critical and creative thinking, problem framing and problem solving, invention, memorization and recall) and how these processes can be stimulated.
- 8(k) The teacher knows how to apply a range of developmentally, culturally, and linguistically appropriate instructional strategies to achieve learning goals.
- 8(l) The teacher knows when and how to use appropriate strategies to differentiate instruction and engage all learners in complex thinking and meaningful tasks.
- 8(m) The teacher understands how multiple forms of communication (oral, written, nonverbal, digital, visual) convey ideas, foster self expression, and build relationships.

- 8(n) The teacher knows how to use a wide variety of resources, including human and technological, to engage students in learning.
- 8(o) The teacher understands how content and skill development can be supported by media and technology and knows how to evaluate these resources for quality, accuracy, and effectiveness.

- 8(p) The teacher is committed to deepening awareness and understanding the strengths and needs of diverse learners when planning and adjusting instruction.
- 8(q) The teacher values the variety of ways people communicate and encourages learners to develop and use multiple forms of communication.
- 8(r) The teacher is committed to exploring how the use of new and emerging technologies can support and promote student
- 8(s) The teacher values flexibility and reciprocity in the teaching process as necessary for adapting instruction to learner responses, ideas, and needs.

Professional Responsibility

learning.

Standard #9: Professional Learning and Ethical Practice. The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner. *Performances*

- 9(a) The teacher engages in ongoing learning opportunities to develop knowledge and skills in order to provide all learners with engaging curriculum and learning experiences based on local and state standards.
- 9(b) The teacher engages in meaningful and appropriate professional learning experiences aligned with his/her own needs and the needs of the learners, school, and system.
- 9(c) Independently and in collaboration with colleagues, the teacher uses a variety of data (e.g., systematic observation, information about learners, research) to evaluate the outcomes of teaching and learning and to adapt planning and practice.
- 9(d) The teacher actively seeks professional, community, and technological resources, within and outside the school, as supports for analysis, reflection, and problem-solving.

 9(e) The teacher reflects on his/her personal biases and accesses resources to deepen his/her own understanding of cultural, ethnic, gender, and learning differences to build stronger relationships and create more relevant learning experiences.
- 9(f) The teacher advocates, models, and teaches safe, legal, and ethical use of information and technology including appropriate documentation of sources and respect for others in the use of social media.

- 9(g) The teacher understands and knows how to use a variety of self- assessment and problem-solving strategies to analyze and reflect on his/her practice and to plan for adaptations/adjustments.
- 9(h) The teacher knows how to use learner data to analyze practice and differentiate instruction accordingly.

- 9(i) The teacher understands how personal identity, worldview, and prior experience affect perceptions and expectations, and recognizes how they may bias behaviors and interactions with others.
- 9(j) The teacher understands laws related to learners' rights and teacher responsibilities (e.g., for educational equity, appropriate education for learners with disabilities, confidentiality, privacy, appropriate treatment of learners, reporting in situations related to possible child abuse).
- 9(k) The teacher knows how to build and implement a plan for professional growth directly aligned with his/her needs as a growing professional using feedback from teacher evaluations and observations, data on learner performance, and school- and system- wide priorities.

- 9(1) The teacher takes responsibility for student learning and uses ongoing analysis and reflection to improve planning and practice.
- 9(m) The teacher is committed to deepening understanding of his/her own frames of reference (e.g., culture, gender, language, abilities, ways of knowing), the potential biases in these frames, and their impact on expectations for and relationships with learners and their families.
- 9(n) The teacher sees him/herself as a learner, continuously seeking opportunities to draw upon current education policy and research as sources of analysis and reflection to improve practice.
- 9(o) The teacher understands the expectations of the profession including codes of ethics, professional standards of practice, and relevant law and policy.

Standard #10: Leadership and Collaboration. The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Performances

- 10(a) The teacher takes an active role on the instructional team, giving and receiving feedback on practice, examining learner work, analyzing data from multiple sources, and sharing responsibility for decision making and accountability for each student's learning.

 10(b) The teacher works with other school professionals to plan and jointly facilitate learning on how to meet diverse needs of learners.
- 10(c) The teacher engages collaboratively in the school-wide effort to build a shared vision and supportive culture, identify common goals, and monitor and evaluate progress toward those goals.
- 10(d) The teacher works collaboratively with learners and their families to establish mutual expectations and ongoing communication to support learner development and achievement.
- 10(e) Working with school colleagues, the teacher builds ongoing connections with community resources to enhance student learning and well being.
- 10(f) The teacher engages in professional learning, contributes to the knowledge and skill of others, and works collaboratively to advance professional practice.

- 10(g) The teacher uses technological tools and a variety of communication strategies to build local and global learning communities that engage learners, families, and colleagues.
- 10(h) The teacher uses and generates meaningful research on education issues and policies.
- 10(i) The teacher seeks appropriate opportunities to model effective practice for colleagues, to lead professional learning activities, and to serve in other leadership roles.
- 10(j) The teacher advocates to meet the needs of learners, to strengthen the learning environment, and to enact system change.
- 10(k) The teacher takes on leadership roles at the school, district, state, and/or national level and advocates for learners, the school, the community, and the profession.

- 10(l) The teacher understands schools as organizations within a historical, cultural, political, and social context and knows how to work with others across the system to support learners.
- 10(m) The teacher understands that alignment of family, school, and community spheres of influence enhances student learning and that discontinuity in these spheres of influence interferes with learning.
- 10(n) The teacher knows how to work with other adults and has developed skills in collaborative interaction appropriate for both face-to- face and virtual contexts.
- 10(o) The teacher knows how to contribute to a common culture that supports high expectations for student learning.

Critical Dispositions

- 10(p) The teacher actively shares responsibility for shaping and supporting the mission of his/her school as one of advocacy for learners and accountability for their success.
- 10(q) The teacher respects families' beliefs, norms, and expectations and seeks to work collaboratively with learners and families in setting and meeting challenging goals.
- 10(r) The teacher takes initiative to grow and develop with colleagues through interactions that enhance practice and support student learning.
- 10(s) The teacher takes responsibility for contributing to and advancing the profession.
- 10(t) The teacher embraces the challenge of continuous improvement and change.

Appendix B: Iowa Teaching Standards and Criteria

Standard 1

Demonstrates ability to enhance academic performance and support for implementation of the school district student achievement goals.

Criteria

The teacher:

- a. Provides multiple forms of evidence of student learning and growth to students, families, and staff.
- b. Implements strategies supporting student, building, and district goals.
- c. Uses student performance data as a guide for decision making.
- d. Accepts and demonstrates responsibility for creating a classroom culture that supports the learning of every student.
- e. Creates an environment of mutual respect, rapport, and fairness.
- f. Participates in and contributes to a school culture that focuses on improved student learning.
- g. Communicates with students, families, colleagues, and communities effectively and accurately.

Standard 2

Demonstrates competence in content knowledge appropriate to the teaching position.

Criteria

The teacher:

a. Understands and uses key concepts, underlying themes, relationships, and different perspectives related to the content area.

- b. Uses knowledge of student development to make learning experiences in the content area meaningful and accessible for every student.
- c. Relates ideas and information within and across content areas.
- d. Understands and uses instructional strategies that are appropriate to the content area.

Standard 3

Demonstrates competence in planning and preparing for instruction.

Criteria

The teacher:

- a. Utilizes student achievement data, local standards, and the district curriculum in planning for instruction.
- b. Sets and communicates high expectations for social, behavioral, and academic success of all students.
- c. Uses students' developmental needs, background, and interests in planning for instruction.
- d. Selects strategies to engage all students in learning.
- e. Uses available resources, including technologies, in the development and sequencing of instruction.

Standard 4

Uses strategies to deliver instruction that meet the multiple learning needs of students.

Criteria

The teacher:

a. Aligns classroom instruction with local standards and district curriculum.

- b. Uses research-based instructional strategies that address the full range of cognitive levels.
- c. Demonstrates flexibility and responsiveness in adjusting instruction to meet student needs.
- d. Engages students in varied experiences that meet diverse needs and promote social, emotional, and academic growth.
- e. Connects students' prior knowledge, life experiences, and interests in the instructional process.
- f. Uses available resources, including technologies, in the delivery of instruction.

Standard 5

Uses a variety of methods to monitor student learning.

Criteria

- a. Aligns classroom assessment with instruction.
- b. Communicates assessment criteria and standards to all students and parents.
- c. Understands and uses the results of multiple assessments to guide planning and instruction.
- d. Guides students in goal setting and assessing their own learning.
- e. Provides substantive, timely, and constructive feedback to students and parents.
- f. Works with other staff and building and district leadership in analysis of student progress.

Standard 6

Demonstrates competence in classroom management.

Criteria

The teacher:

- a. Creates a learning community that encourages positive social interaction, active engagement, and self-regulation for every student.
- b. Establishes, communicates, models, and maintains standards of responsible student behavior.
- c. Develops and implements classroom procedures and routines that support high expectations for learning.
- d. Uses instructional time effectively to maximize student achievement.
- e. Creates a safe and purposeful learning environment.

Standard 7

Engages in professional growth.

Criteria

The teacher:

- a. Demonstrates habits and skills of continuous inquiry and learning.
- b. Works collaboratively to improve professional practice and student learning.
- c. Applies research, knowledge, and skills from professional development opportunities to improve practice.
- d. Establishes and implements professional development plans based upon the teacher needs aligned to the Iowa Teaching Standards and district/building student achievement goals.
- e. Provides an analysis of student learning and growth based on teacher-created tests and authentic measures as well as any standardized district-wide tests.

Standard 8

Fulfills professional responsibilities established by the school district.

Criteria

The teacher:

- a. Adheres to board policies, district procedures, and contractual obligations.
- b. Demonstrates professional and ethical conduct as defined by state law and individual district policy.
- c. Contributes to efforts to achieve district and building goals.
- d. Demonstrates an understanding of and respect for all learners and staff.
- e. Collaborates with students, families, colleagues, and communities to enhance student learning.

Appendix C: Comparison of InTASC Teaching Standards to the Iowa Teaching

Standards

Iowa Teaching Standards	InTASC Standards
Iowa Standard 1: Demonstrates ability to enhance academic performance and support for implementation of the school district's student achievement goals. 1g. Communicates with students, families, colleagues, and communities effectively and accurately.	InTASC Standard 1: Learner Development The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
	1(h) The teacher respects learners' differing strengths and needs and is committed to using this information to further each learner's development. 1.2 Knows and identifies child/adolescent developmental levels. 1.3 Promotes intellectual, social, and personal development. 1.4 Encourages learners to assume responsibility for shaping their own learning.
	InTASC Standard 5: Application of Content The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
	 5.1 Engages learners in questioning and challenging assumptions and approaches in order to foster innovation and problem solving in local and global contexts. 5.2 Values flexible learning environments that encourage learner exploration, discovery, and expression across content areas. 5.3 Understands how to use digital and interactive technologies to achieve learning goals.
Iowa Standard 2: Demonstrates competence in content knowledge appropriate to the teaching position 2a. Understands and uses key concepts, underlying themes, relationships, and different perspectives related to the content area. 2b. Uses knowledge of student development to	InTASC Standard 4: Content Knowledge The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of discipline accessible and meaningful for learners to assure mastery of the content.
make learning experiences in the content area meaningful and accessible for every student. 2c. Relates ideas and information within and across content areas.	4.1 Understands major concepts, assumptions, debates, processes of inquiry, and ways of knowing. 4.2 Uses multiple strategies that capture key ideas in the discipline, guide learners through

2d. Understands and uses instructional strategies that are appropriate to the content area

learning progressions, and promote each learner's achievement of content standards.

- 4.3 Appreciates multiple perspectives within the discipline and facilitates learners' critical analysis of these perspectives.
- 4.4 Stimulates learner reflection on prior content knowledge and makes connection to familiar concepts and learners' experiences.

Iowa Standard 3:

Demonstrates competence in planning and preparing for instruction

- 3a. Uses student achievement data, local standards, and the district curriculum in planning for instruction. 3b. Sets and communicates high expectations for social, behavioral, and academic success of all students.
- 3c. Uses a student's developmental needs, backgrounds, and interests in planning for instruction. 3d. Selects strategies to engage all students in learning.
- 3e. Uses available resources including technologies, in the development and sequencing of instruction.

InTASC Standard 7: Planning for Instruction

The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

- 7.1 Demonstrates teaching practice grounded on current research in the field and maintains an ongoing assessment of those practices.
- 7.2 Designs learning experiences coherent with subject matter, learners abilities, and community and curriculum goals
- 7.3 Demonstrates flexibility and responsiveness in planning instruction.
- 7.4 Demonstrates knowledge of resources for leading instruction.

Iowa Standard 4:

Uses strategies to deliver instruction that meets the multiple learning needs of students.

- 4a. Aligns classroom instruction with local standards and district curriculum.
- 4b. Uses research-based instructional strategies that address the full range of cognitive levels.
- 4c. Demonstrates flexibility and responsiveness in adjusting instruction to meet student needs.
- 4d. Engages students in varied experiences that meet diverse needs and promote social, emotional, and academic growth.
- 4e. Connects students' prior knowledge, life experiences, and interests in the instructional process. 4f. Uses available resources, including technologies, in the delivery of instruction.

InTASC Standard 2: Learner Differences

The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

- 2.1 Knows when and how to access specialized services to meet student needs.
- 2.2 Promotes cross-cultural understanding.
- 2.3 Connects instruction to students' prior experiences and family, culture, and community.2.4 Makes learners feel valued and helps them
- learn to value each other.

InTASC Standard 8: Instructional Strategies

The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

8.1 Uses strategies and resources to adapt instruction to the needs of individuals and groups of learners. 8.2 Understands how content and skill development can be supported by media and technology and knows how to evaluate these resources for quality, accuracy, and effectiveness.

8.3 Provides multiple models and representations of concepts and skills with opportunities for learners to demonstrate their knowledge through a variety of products and performances.

8.4 Varies his/her role in the instructional process in relation to the content and purposes of instruction and the needs of learners.

Iowa Standard 5:

Uses a variety of methods to monitor student learning.

- 5a. Aligns classroom assessment with instruction.
- 5b. Communicates assessment criteria and standards to all students and parents.
- 5c. Understands and uses the results of multiple assessments to guide planning and instruction.
- 5d. Guides students in goal setting and assessing their own learning.
- 5e. Provides substantive, timely and constructive feedback to students and parents.
- 5f. Works with other staff and building and district leadership in analysis of student progress.

InTASC Standard 6: Assessment

The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

- 6.1 Knows when and how to evaluate and report learner progress against standards.
- 6.2 Balances use of formative and summative assessment to support, verify, and document learning.
- 6.3 Seeks appropriate ways to use technology to support assessment practice both to engage learners and to assess and address learner needs. 6.4 Guides learners in examining their own thinking and learning as well as the performance of others.

Iowa Standard 6:

Demonstrates competence in classroom management.

- 6a. Creates a learning community that encourages positive social interaction, active engagement, and self-regulation for every student.
- 6b. Establishes, communicates, models, and maintains standards of responsible student behavior. 6c.Develops and implements classroom procedures and routines that support high expectations for student learning.
- 6d. Uses instructional time effectively to maximize student achievement.
- 6e. Creates a safe and purposeful learning environment.

InTASC Standard 3: Learning Environments

The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.

- 3.1 Seeks to foster respectful communication among all members of the learning community.
 3.2 Understands the relationship between motivation and engagement and knows how to engage learners in self-direction and ownership of learning.
- 3.3 Manages time, space, and activities effectively.
 3.4 Collaborates with learners, families, and colleagues to create a safe, positive learning environment.

Iowa Standard 7:

Engages in professional growth.

- 7a. Demonstrates habits and skills of continuous inquiry and learning.
- 7b. Works collaboratively to improve professional practice and student learning.
- 7c. Applies research, knowledge, and skills from professional development opportunities to improve practice.
- 7d. Establishes and implements professional

InTASC Standard 9:

Professional Learning and Ethical Practice

The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

9.1 Takes responsibility for student learning and uses ongoing analysis and reflection to improve

development plans based upon the teacher's needs aligned to the Iowa teaching standards and district/building student achievement goals. planning and practice.

- 9.2 Seeks professional, community, and technological resources as support for analysis, reflection, and problem-solving.
- 9.3 Practices and reflects on professional, and ethical, and legal obligations
- 9.4 Knows how to use learner data to analyze practice and differentiate instruction.

Iowa Standard 8:

Fulfills professional responsibilities established by the school district.

- 8a. Adheres to board policies, district procedures, and contractual obligations.
- 8b. Demonstrates professional and ethical conduct as defined by state law and district policy.
- 8c. Contributes to efforts to achieve district and building goals.
- 8d. Demonstrates an understanding of and respect for all learners and staff.
- 8e. Collaborates with students, families, colleagues, and communities to enhance student learning

InTASC Standard 10: Leadership and Collaboration

The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

- 10.1 Respects families' beliefs, norms, and expectations and seeks to work collaboratively with learners and families in setting and meeting challenging goals.
- 10.2 Knows how to collaborate with other adults in both face-to-face and virtual contexts.
- 10.3 Uses and generates meaningful research on education issues and policies.
- 10.4 Takes leadership roles at the school, district, state, and/or national level and advocates for learners, the school, the community, and the profession.

Appendix D: Classroom Observation Recording Tool

Observation #	
Teacher:	
School:	
Date:	
Time of Observation:	
Total Observation Time:	
Subjects being taught:	

	Iowa Teaching Standards							
	1	2	3	4	5	6	7	8
Time:								
Anecdotal notes:								
Time:								
Anecdotal notes:								
Time:								
Anecdotal notes:								
Time: Anecdotal notes:								
Time:								
Anecdotal notes:								
Time:								
Anecdotal notes:								
Time:								
Anecdotal								

notes:								
Time: Anecdotal notes:								
	Iowa Teaching Standards							
	Standard 1	Standard 2	Standard 3	Standard 4	Standard 5	Standard 6	Standard 7	Standard 8
Number of times the teaching standard was observe d								
Criteria Covered Under Each Standar d	a- b- c- d- e- f- g-	a- b- c- d-	a- b- c- d- e-	a- b- c- d- e- f-	a- b- c- d- e- f-	a- b- c- d- e-	a- b- c- d- e-	a- b- c- d- e-

Appendix E: Amish Teacher Interview Questions

Taken from Dan Lortie's (1975) Five Towns research

Amish Teacher:

Questions focused on background of Amish teacher:

- 1. In what year were you born?
- 2. In what community were you born?
- 3. How long have you been teaching?
- 4. What grades do you teach?
- 5. What subjects do you teach?
- 6. At what point did you make the definite decision to enter teaching?
- 7. What were the major attractions that teaching held for you at the point you decided to enter teaching?

Questions focused on the Apprenticeship of Observation:

- What persons do you think influenced you in your decision to become a teacher (family, teachers, others, etc.)
- 2. Looking back to today, what do you think were the most important factors in your decision to become a teacher?
- 3. Can you recall what you thought about yourself when you decided to enter teaching? What I mean is, Can you remember what qualities you felt would fit well with teaching as a line of work for you?

- 4. In what ways is teaching different from what you expected when you made the decision to go into the field? (How is it better than what you expected? How is it worse than what you expected?)
- 5. Of the teachers you had yourself at one time or another, which do you consider were outstanding? Could you describe one of them for me?
- 6. What kind of knowledge do you think a teacher must possess- what does he/she have to know- to be able to do a good job of teaching of the kind you do?
- 7. What experiences do you think have been most influential in teaching you how to teach?

Self-reflection on teaching as a profession:

- 1. Of teachers you know who are working today, are there any you consider to be outstanding teachers? Would you describe one of them for me?
- 2. Every so often, teachers tell me they have a really good day. Could you tell me what a good day is like for you? What happens?
- 3. I know it's not easy to state clearly, but would you try to explain to me what you try most to achieve as a teacher? What are you really trying to do most of all?
- 4. What changes- of any kind that occurs to you- would allow you to do a better job of what you are really trying to do?
- 5. What are the major ways in which you tell whether you are doing the kind of job you want to do? What do you watch as indication of your effectiveness?
- 6. What would you say are your greatest strengths as a teacher?