THE STORY OF TEACHER SKILL DEVELOPMENT:
AN INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

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Abstract

An abundance of research identifies teacher quality as a major, if not dominant, factor that contributes to student achievement. Although some research has identified specific characteristics of effective teachers in certain situations, there is little common agreement on which, or how, specific teacher characteristics improve student outcomes. The purpose of this interpretative phenomenological analysis study was to explore the lived experiences of teachers at an independent, East Coast high school that have contributed to their skill development over time, as well as to understand how these teachers make sense of these experiences. Using the theoretical frameworks of incremental and entity theory as well as skill development theory, this study sought to answer the following research question: What are the experiences of teachers in an independent, East Coast high school that have contributed to their skill development over time and how do these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom? Data analysis showed that when teachers were able to find a sense of stability after the first year in the classroom, meaningful and relevant professional development and the support provided by colleagues and mentors contributed significantly to helping teachers develop their practice and perspectives over time. Implications for practice and future research are discussed.

Keywords: skill development, teacher efficacy, professional development, mentoring, student outcomes
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This thesis is dedicated to those teachers who strive every day to shape the world, to influence history, and to change lives. You are the stars of schools everywhere. Our society owes you a great debt of gratitude for the extraordinary work you do each and every day. Keep pushing forward!
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Chapter I: Introduction

Statement of the Problem

The late Malcolm Forbes once proclaimed, “The purpose of education is to replace an empty mind with an open one” (Top Tweets, 2016). Although teachers may not necessarily consider students’ minds empty, the role of the teacher is to help students develop skills and acquire knowledge of a variety of topics. One could say how teachers accomplish this speaks to the art and science of teaching and learning.

Teachers who enter the teaching profession typically complete a teacher-certification program in which prospective teachers develop a minimal understanding of appropriate pedagogy (Hanushek, 2011). Because such teacher-preparation programs are ubiquitous in the Unites States and serve as the starting point for those pursuing a teaching career, understanding the specific characteristics that distinguish good teachers from poor ones becomes increasingly important if we are to understand how to increase student achievement. Although an abundance of evidence in the literature identifies teacher quality as a major, if not dominant, factor that influences student achievement (Darling-Hammond, 2000; Sanders, Wright, & Horn, 1997; Stronge, Ward, & Grant, 2011), Hanushek (2011) claimed that there is a lack of evidence in the literature about how and which specific teacher characteristics influence student achievement. Therefore, if we want to help students achieve at higher levels, we need to better understand the specific characteristics that teachers bring to the teaching profession.

Topic

What steps can we, as educators, take to increase the achievement levels of our students? With community, state, and national pressure due to mandates such as the No Child Left Behind Act (NCLB) and with decades of declining scores on international benchmarks such as the
Programme for International Student Assessment (PISA), the focus on how to increase student achievement has been and continues to be a critical component of the dialog within the education world. Although federal mandates are often associated with public education, private schools rely on past and present student achievement levels as a means of effective recruitment for admissions and development offices. Regardless of the type of education—public or private—student achievement is one reflection of the quality of the students’ experiences within schools.

Understanding how to increase student achievement requires an understanding of the factors that influence student achievement from a social, emotional, and cognitive perspective. With teacher quality serving as a major influential factor on student achievement, identifying the underlying characteristics of teacher quality becomes increasingly important. Specifically, a better understanding of how teachers’ skills develop over time might allow us to better understand some of the specific characteristics of teacher quality.

**Research Problem**

The terms *student learning* and *student achievement* are often used interchangeably and are naturally linked to *teacher efficacy, teacher quality, or accomplished teaching*. The National Board for Professional Teaching Standards has provided a clear distinction between these terms:

*Student achievement* is the status quo of subject-matter knowledge, understandings and skills at one point in time. *Student learning* is growth in subject-matter knowledge, understandings and skills over time. In essence, a change in achievement constitutes learning. It is student learning—not student achievement—that is most relevant to defining and assessing accomplished teaching. *Accomplished teaching* reflects skilled practice and contributes to student learning. (2011, p. 28)
The National Board for Professional Teaching Standards elaborated further on the notion of teacher quality:

Drawing conclusions on teacher performance requires an understanding of how the teacher influences a student’s progress. The impact of teacher instruction can be understood by first understanding the student’s achievement prior to instruction, an analysis of the quality and nature of the instruction, and an assessment of student achievement after instruction. (p. 30)

Multiple studies show that numerous factors affect student learning. Among these factors, teacher quality has been identified as a significant, if not dominant, factor that influences student achievement within schools (Darling-Hammond, 2000; Sanders et al., 1997; Stronge et al., 2011). However, the notion of teacher quality is a somewhat elusive construct. Identifying the specific components of teacher quality might be better accomplished by analyzing qualitative data, because the overreliance of quantitative data to identify and define teacher quality fails to adequately capture the experiences and nuances of this human experience (Kleinsasser, 2014).

Education researcher Eric Hanushek provided a succinct definition of teacher quality in terms of good versus bad teachers: “Good teachers are the ones who get large gains in student achievement; bad teachers are just the opposite” (2002, p. 3).

Personal qualities, including teachers’ sense of self-efficacy and assumptions of their own abilities, have been positively correlated with higher quality instruction (Holzberger, Philipp, & Kunter, 2013). Teachers who are aware of the assumptions that govern their teaching practices and relationships with students are more likely to modify the way they think about their abilities and, in turn, modify the way they think about their role as educators in a manner that helps students become more successful (Brooks & Goldstein, 2008).
Research has shown that teachers and students alike who believe that their intelligence, talents, and sense of self-efficacy are malleable and that they can grow a growth mindset are more likely to experience success (Dweck, 2015). Furthermore, those teachers who possessed a strong sense of positive self-efficacy were more likely to have students with higher levels of motivation and achievement (Mojavezi & Tamiz, 2012). This sense of positive self-efficacy and a growth mindset contribute to a teacher’s level of perseverance in challenging situations. This perseverance, along with other contributing factors, supplies teachers with more experience, knowledge, and eventual expertise in their profession, thereby helping them to increase their skills over time.

If we could better understand the lived experiences of teachers that have contributed to their skill development over time and how they make sense of these experiences, then we might be able to better understand how to develop teachers’ skills, thereby increasing student outcomes. Therefore, the purpose of this interpretative phenomenological analysis (IPA) study was to explore the lived experiences of teachers at an independent, East Coast high school that have contributed to their skill development over time, as well as to understand how these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom, using the theoretical frameworks of incremental/entity theory and skill development theory.

**Justification for the research problem.** One of the most influential factors on student achievement is teacher quality (Sanders et al., 1997). Research suggests that teacher quality is positively associated with different levels of student achievement, both among different schools within the same school district and among different subjects (such as reading and mathematics) within the same school (Goddard, Hoy, & Hoy, 2000). Thus, knowing what factors influence
teacher quality is fundamental to understanding how to increase student achievement.

With the heavy emphasis on teacher professional development as a primary means to increase student achievement, attention should be paid to the quality and type of development made available to teachers. Teachers in different stages of their careers, for example, require different levels of professional development. Like mastering any skill, developing teacher talent takes time and involves a buildup of skills; it is a fallacy to assume that beginning teachers at a basic level of instruction can easily master more advanced forms of teaching demonstrated by experienced educators (Antoniou & Kyriakides, 2013). Furthermore, “critical and guided reflection on the knowledge and skills which correspond to the developmental stage of teachers are of fundamental importance to the professional development of teachers” (Antoniou & Kyriakides, 2013, p. 10).

**Deficiencies in the evidence.** Extensive research exists in support of the claim that teacher quality affects student achievement. Closer inspection of the literature, however, identifies a lack of consistency regarding which specific teacher characteristics influence student achievement. In a qualitative/quantitative analysis to identify the characteristics of effective high school teachers, Schulte, Slate, and Onwuegbuzie (2008) identified 24 specific characteristics such as caring, creative, flexible, motivating, and others. Hanushek (2011), on the other hand, claimed that although teachers are a major influence on student achievement, “it has not been possible to identify any specific characteristics of teachers that are reliably related to student outcomes. Understanding these findings is central to the subsequent discussions of policies and their underlying economics” (p. 467).

Only recently has teachers’ awareness of their sense of self-efficacy been identified as a focal point for teacher-quality improvement. Mindfulness training, or the development of
teachers’ habits of mind, has recently been incorporated into teacher professional development opportunities. The desired outcome of such training is for teachers to develop greater levels of flexibility and persistence in the face of challenges related to the profession as a means to increase their efficacy (Roeser, Skinner, Beers, & Jennings, 2012). Mindfulness training helps teachers to become aware of their own attitudes, dispositions, and behaviors in the classroom and, therefore, helps them to become more effective; correspondingly, having teachers understand and identify their own implicit beliefs about their own talents and intelligence (i.e., their mindsets) can also help them become more effective and increase student achievement (Brooks & Goldstein, 2008). Additionally, Dweck (2015) stated

It might be difficult for teachers to create contexts of growth for students if the teachers do not believe in growth for themselves and are not rewarded for their own growth. If teachers have fixed mindsets about their own teaching ability, they are likely to be threatened by low-performing students (who are not responding to their current teaching methods) and may be tempted to blame the students or the students’ ability for their poor showing. If, however, teachers believe that their own skills can be developed, each student provides an opportunity for them to learn more about their craft. (p. 244)

Thus, helping teachers to understand and develop growth mindsets for themselves and subsequently develop their skills as educators has only recently been identified as a way that teachers can help increase student achievement. However, little, if any, research exists that explores the relationship between teacher mindsets and how they are reflected in and transferred to the classroom.

**Relating the discussion to audiences.** To develop a better understanding of teacher quality, many stakeholders within the education profession could benefit from a deeper
understanding of the relationship between teachers’ skill development and their engagement in professional development opportunities. Certainly, education policy makers and school administrators have a vested interest in teacher quality as a means to increase student achievement. Teachers have the greatest direct impact on student achievement within a school setting, whereas the effects of school administrators are not as direct. School administrators’ abilities to lead, support, and develop teachers’ capacities tend to be indirect influential factors on student achievement (Ross & Gray, 2006). Strong arguments exist for improving the quality of teacher professional development opportunities as a means of improving teacher skills and quality overall (Darling-Hammond, 2000; Roser et al., 2012).

**Significance of the Research Problem**

According to the latest findings by the PISA (Organisation for Economic Co-operation and Development, 2016), out of 35 countries assessed, the United States ranked 31st in mathematics, 20th in reading, and 19th in science. Such results have fueled decades’ worth of rhetoric over the concern for the poor academic performance of the United States as compared to other developed economies. *A Nation at Risk: The Imperative for Educational Reform* (U.S. National Commission on Excellence in Education, 1983) provided the roots of this concern at the federal level, going so far as to claim “if an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might have well viewed this as an act of war” (p. 469). Furthermore, the authors of *A Nation at Risk* asserted that one of the reasons why the American public education system was failing was due to the lack of highly skilled teachers, with “many” new teachers being drawn from the bottom quartile of their graduating class in college. Although teacher preparation programs were created to produce teachers who could demonstrate proficient amounts of discipline-specific content knowledge, the
authors of *A Nation at Risk* paid little attention to the effective teaching methods that teachers must acquire and develop in order to convey this knowledge to their students (Borek, 2008).

A more recent response at the federal level to declining student achievement results was the NCLB, a highly controversial and far-reaching piece of legislation that requires schools to show adequate yearly progress (AYP) in terms of students’ standardized test scores. Sanctions and publicity have been used as motivators for schools failing to make AYP in a timely manner. The effects of NCLB on student achievement have been mixed, with statistically significant increases in math but no significant increases in reading (Dee & Jacob, 2011). Other research has shown that test-based accountability measures such as NCLB yield absolutely no benefit to student achievement (Koretz, 2009).

**Positionality Statement**

My experiences as a student throughout middle and high school have shaped my views on teaching and learning in such a way as to have impacted my professional life. I struggled with math throughout my time as a student and eventually attributed my struggles to something internal about myself: I simply was not good at math. Because of this belief, I adopted the mindset that I would never be good at math in the future, regardless of my effort. Unbeknownst to me at the time, this disdain for mathematics as a child was also coupled with the desire that one day I would become a teacher. The academic subject was unknown at the time, but I was sure I would never become a math teacher.

I was born and raised on the Big Island of Hawaii as the middle child of three children. I attended the Hawaii public school system until I entered seventh grade. My parents, who were not convinced that I would receive a high-quality public education at the time, enrolled me in a private college-preparatory school. I then entered college in upstate New York—my very first
time on the East Coast—and became the first in my immediate family to receive a 4-year college degree. I attribute being able to attend this specific university to the opportunities that were afforded to me throughout high school. Even as an undergraduate student, I held on to the belief that I was just short of having a math disability, so I avoided every math class that I could. As a result, I earned an undergraduate degree in a foreign language and then moved back to Hawaii with my fiancée who graduated from the same university and who pursued a career as a music teacher. This became my connection to the teaching profession.

Shortly after moving back to Hawaii, the public school where my wife was teaching suddenly needed to hire a part-time middle school history teacher in the middle of the school year. I applied for the job and suddenly found myself immersed in a classroom of 32 eighth-grade students and beginning my career in education. The following year was similar, although the sudden need in the middle of the school year was now for a math teacher. Having fallen in love with teaching the previous year, I could not resist the offer, even though I feared the subject matter. To do my job, however, I not only had to become comfortable with the material but also learn how to present it in a meaningful way to seemingly disinterested middle school students. By doing so, I realized that I could understand math (albeit simple algebraic concepts) in a way that I never did as a student. It was this pivotal experience that led me to further my education. I decided that I wanted to become a math teacher.

After living in Hawaii for a few years after college and getting a taste of the teaching life, my wife and I explored the possibility of living in northern New England. On a whim, we visited and subsequently relocated nearly 20 years ago. It was here that I decided to become a student again by majoring in mathematics and earning a master’s degree in education. A few years later, I was hired to teach math at a nearby high school. In this capacity, I vowed to help students
overcome their dislike and fear of mathematics. If I could learn math, then so could they. Several years later, I moved into an administrative role at the school and was charged with overseeing all academic programs. Once again, I felt the need to become more knowledgeable about education in general and subsequently enrolled in Northeastern University’s Doctor of Education program.

After realizing that I had the ability to learn and subsequently teach mathematics, my desire for furthering my education was driven by something much more personal than the requirements of my job. How I thought about my capabilities and myself began to change when I began my career in education. This sense of self-efficacy was further shaped by my ongoing learning experiences at the beginning and throughout my professional career. It is this sense of self-efficacy that allowed me to help students overcome their own challenges in the classroom. In other words, my mindset was shaped by my own learning and, therefore, allowed me to become a more effective educator. Furthermore, developing (or recognizing) a growth mindset allowed me to further my education, which, in turn, contributed to my skill development as a teacher. Thus, a positive-feedback loop formed between the way I thought about my own abilities and the desire to continue my education, which, I hope, had a positive impact on my students.

This change in how I thought about my abilities as a student of math was reflected in the way I approached my role as a math teacher. I perceived my own experiences as a struggling high school math student as a straightforward battle between two entities: my intellectual abilities versus the subject matter of algebra or trigonometry. As a teacher, I tried to help students avoid this conflict. First, I created an environment that was supportive and the least intimidating as possible, mostly through sharing stories of my own struggles blended with an infusion of humor. Second, I discussed with students not just the specific content of a particular
math course but also how they viewed themselves and their own abilities. My hope was that struggling students might eventually be able to see in themselves what I saw in me: that you do not have to be born with a gift to think mathematically in order to be a successful math student: “If I can do it, so can you, and I’ll help you get there.”

The school setting where my research was conducted was my former place of employment; I am now a principal at a nearby public elementary school. After several years as a high school teacher, I eventually transitioned into a senior administrator position and was charged with overseeing the school’s academics. This included curricular oversight as well evaluating teacher quality, among other responsibilities. I have worked closely with several of this study’s participants, originally as colleagues and later as their direct supervisor.

My own experiences as an educator led me to examine the experiences of other teachers in order to better understand how they evolved from first-year teachers into the educators they are today. If teacher quality is the predominant factor that influences student achievement (Sanders et al., 1997), then understanding how teacher quality is developed and improved becomes an important step in understanding how to increase student achievement. My biases lie within my own personal and professional experiences: If I am able to increase my effectiveness as a teacher by wielding a growth mindset and partaking in meaningful professional development opportunities throughout my career and ultimately increasing my teaching skills, then should not this also be true for others in the field? This assumption of others, which is based on my observations of myself in the roles of student, teacher, and school administrator, needs to be questioned, hence the purpose of this study. As a result, I realize that I need to proceed with caution by carefully and honestly scrutinizing and analyzing my data, taking care not to project an outcome that is based primarily on my own perceptions.
Central Research Question

The study was guided by the following research question: What are the experiences of teachers at an independent, East Coast high school that have contributed to their skill development over time and how do these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom?

Theoretical Framework

Most of us have a notion of mindsets based on the book The Little Engine That Could, written and published in 1930 by Arnold Munk (under the pen name Watty Piper). The premise of this story is simple: hard work and optimism will eventually lead to success. The path toward success, however, requires a closer examination of the factors that constitute this journey. In most cases, an individual must be willing to spend the necessary time and effort in terms of repeated practice in order to develop the necessary skills and knowledge that are required to be successful. Although practice may not necessarily make perfect, it might very well make individuals (teachers, in this case) better as their skills and talent develop over time. To better understand how teachers make sense of the experiences that have shaped them into the teachers they presently are, this study uses the theoretical frameworks of implicit theories of intelligence (i.e., incremental/entity theory) and dynamic skill development theory.

Mindsets. In essence, Munk’s book is a simplistic but accurate portrayal of a growth mindset (incremental theory): Persistence, hard work, and belief in your ability to succeed all lead to success. A fixed mindset is characterized by pessimism and the lack of persistence, which is less likely to lead to success (entity theory). Basically, incremental and entity theories form two sides of the same coin, collectively referred to as mindsets or implicit theories of intelligence. Implicit theories of intelligence have historical roots grounded in the field of
psychology.

Although the roots that underpin the notion of mindsets have developed over several decades, it was Stanford University psychologist and researcher Carol Dweck who popularized the term with the publishing of her book *Mindsets: The New Psychology of Success* in 2006. Dweck (2008) described mindsets as beliefs that “are central to the way in which people package their experiences and carry them forward, and [claimed] that beliefs should play a more central role in the study of personality” (p. 391). Students’ sense of their abilities and talents has an influence on how much they achieve in school, because higher levels of student self-confidence often lead to higher levels of achievement, and vice versa (Huang, 2011). Similarly, teachers’ sense of self-efficacy—the sense of how effective they are within the classroom—has been positively correlated with higher quality instruction. The inverse has also been shown to be true: Higher quality instruction has been shown to have a positive effect on teacher self-efficacy (Holzberger et al., 2013). In other words, teachers’ sense of self-efficacy should be viewed as a cause and a consequence of higher quality instruction. Naturally, then, it should be no surprise that higher levels of teacher self-efficacy lead to higher levels of student motivation and achievement (Mojavezi & Tamiz, 2012). Further work by Dweck (2015) supports this relationship between teacher self-efficacy and student achievement, in that teachers who possess a growth mindset are more likely to have students who achieve at higher levels than teachers with a fixed mindset.

**Evolution of mindset theory.** Several complimentary theories help to explain the components of teacher motivation: attribution theory, achievement goal theory, the construct of self-efficacy from social-cognitive theory, and implicit theories of intelligence. These theoretical frameworks, taken together with insight provided by research on teacher affect, future time
perspective theory, and the construct of professional engagement, can be used to provide a framework for understanding teachers’ motivation to increase their efficacy as educators.

**Attribution theory.** Many preservice teachers anticipate having immediately fulfilling and rewarding experiences near the beginning of their teaching career. However, many enthusiastic newcomers to the classroom have had their dreams of anticipated success (from implementing a seemingly well-designed lesson to fully engaged students) squashed as the reality of the classroom became apparent. This shattered-image effect (Cole & Knowles, 1993) is not atypical for many new teachers and often leaves them wondering why such great plans went so wrong. In other words, people will naturally look for an explanation for their failures, according to attribution theory (Weiner, 2008, 2010). The model of attribution theory provides two opposing branches of thought for attributing failure: environmental or external factors, and personal or internal factors. Teachers who embrace the external view of failure believe that teaching ability is something that one is born with and it cannot be learned. Conversely, teachers who embrace the personal view of failure believe that good teachers are developed and that one can improve with continued effort, reflection, and refinement.

**Achievement goal theory.** Achievement goal theory dovetails with attribution theory, in that goal orientations—the behavioral intentions that determine how students approach and engage in learning (Meece, Blumenfeld, & Hoyle, 1988)—arise in part from attributions (Dweck, 1975; Dweck & Leggett, 1988). Goal orientations can be categorized into mastery goals and performance goals (Ames, 1992). Individuals who embrace mastery goals seek to master a subject or task for the sake of learning, meaning that the act of learning itself is the end goal. Students who embrace mastery goals are concerned with the process of learning and self-improvement and, as a result, experience increased levels of self-efficacy (Ames & Archer,
1988). On the other hand, students who embrace performance goals do so because they are more concerned with the final outcome or product, and not the learning that leads up to that final outcome.

**Self-efficacy.** The construct of self-efficacy from social-cognitive theory speaks directly to mastery-oriented learning, in that students who display higher levels of self-efficacy tend to set more challenging goals for themselves (Zimmerman, Bandura, & Martinez-Pons, 1992). This makes sense because students who believe that they possess greater capabilities will set their goals at higher levels than those who believe that they possess lesser capabilities. Efficacy beliefs refer to the judgment of one’s own capabilities as opposed to outcome expectations, which refer to the perceived results of an action. Bandura (1982) created a $2 \times 2$ matrix between high and low self-efficacy and high and low outcome expectations and claimed that a high self-efficacy paired with a high outcome expectation helped to define the optimal level of learner engagement.

**Implicit theories of intelligence.** Continued exploration of attribution theory paved the way for the introduction of implicit theories of intelligence. Specifically, two theories emerged: incremental theory (growth mindset), which describes an individual’s belief that talent and intelligence are malleable traits; and entity theory (fixed mindset), which describes an individual’s belief that talent and intelligence are nonmalleable traits. Dweck (2006, 2015) described someone with a growth mindset as an individual who believes that hard work and perseverance are the keys to increasing ability. As a result, growth-mindset individuals are more likely not to let failure prevent them from reaching their goals. Conversely, individuals who possess a fixed mindset believe that because talent and intelligence cannot be changed with effort, there is little reason to persevere in the face of failure (see Figure 1). Research has shown
that individuals who possess a fixed mindset are more likely to be maladaptive than those individuals who possess a malleable or growth mindset (King, 2012).

**Dynamic skill theory.** Dynamic skill theory complements implicit theories of intelligence (specifically incremental theory) by providing a framework for the intersection of emotional and cognitive development of skill in terms of a person’s activities and the context or venue in which these activities occur. In other words, skill is a property of both the person and a specific context (Ayoub et al., 2006; Fischer & Farrar, 1987). Skill development, then, cannot be studied without equal consideration to the person who develops the skill and the context in which the skill is developed.

In 1968, Romiszowski defined skill as “the capacity to perform a given task or activity with a given degree of effectiveness, efficiency, speed or other measures of quantity or quality” (as cited in Liu, 2010, p. 202). While knowledge is gained, skills develop through a step-by-step process of hierarchical levels divided into three tiers: sensory-motor skills, representational skills, and abstract skills (Fischer, 1980). These skills, according to Fischer (1980), are subsequently built one atop the other with increasing complexity, with skills at each level constructed via the interaction between the individual and the surrounding environment. Skill development is induced by the surrounding environment; those skills that are induced most consistently eventually form the highest skill levels an individual is capable of (Fischer, 1980).
The evolution of skill-development theory. A dynamic skill framework rejects the notion that thinking and learning are represented as steps in a developmental ladder. Instead, dynamic skill theory posits that development is highly variable and flexible, demonstrating many complex, dynamic patterns of change (Fischer & Rose, 1998). Furthermore, people’s skills are not static and, instead, vary across a broad range of levels and from moment to moment (Lewkowicz & Lickliter, 2002). A basketball player, for example, may be more successful shooting free-throws while practicing alone than in front of an audience. Likewise, some students can perform a task with little or no trouble in practice but struggle to perform the same or a similar task during a test.

The framework of dynamic skill theory was first conceived in Kurt Fischer’s 1971 doctoral dissertation titled The Structure and Development of Sensory-Motor Actions. This study yielded laboratory results in which rats or pigeons would slowly begin a new task such as running through a maze or pecking a pattern. As the animals began to learn more about how to effectively complete their tasks, the time of task completion decreased and the animals had difficulty interrupting their actions in order to attend to new changes in their situations. The animals showed mastery of the task at hand when the task was easily completed and the animals could be interrupted to attend to new business (Lewkowicz & Lickliter, 2002).

The intersection of implicit theories of intelligence and dynamic skill theory. Because skill development is highly contextual and depends on both the individual and the surrounding environment, specific characteristics of the individual must be considered as driving factors that influence the skill levels attained. Specifically, Dweck’s notion of the growth mindset provides the framework for understanding how individuals think about their own abilities and talents (i.e., skills); if one believes that these skills can improve with effort and practice, then one is more
likely to persist even in the face of failure, allowing for future opportunities for skills to develop. Dynamic skill-development theory describes how skills develop, increase in level, and are often built on one another. However, skill development is contingent on the characteristics of the individual and the environment, as well as on psychological processes in terms of the individual’s sense of self-efficacy, motivation, and a growth mindset; therefore, if this initial motivation to increase a skill level was lacking to begin with, any skill-building progress would be undermined.

Perhaps the findings by Holzberger et al. (2013) best demonstrate the intersection between implicit theories of intelligence and dynamic skill theory: When teachers tend to believe in their own abilities (incremental theory) as educators, they are more likely to provide higher quality instruction (dynamic skill theory) to their students. Correspondingly, teachers’ engagement in higher quality of instruction is likely to increase their sense of self-efficacy. Thus, a positive-feedback loop seems to exist between the two theories in the context of teaching and learning (see Figure 2).

*Figure 2.* The reciprocal relationship between a growth mindset and skill development.

**Summary**

The theoretical frameworks of implicit theories of intelligence and dynamic skill theory have a complementary and reciprocal relationship. Skill development is built over time and requires motivation and effort. Incremental theory supplies the motivation to apply this effort, providing an individual with the belief that the time and effort required to build a skill is
worthwhile. Further, skill development bolsters an individual’s sense of self-efficacy, thereby providing even more motivation to persevere, even in the face of occasional failure.

Although this premise may be generally applicable to various groups of individuals, it seems specifically relevant to teachers. Teachers new to the career will likely struggle as their initial skill levels are just beginning to be established. As a result, teachers early in their careers should expect numerous challenges. Those who believe that they can overcome these challenges with time and effort will likely persevere, providing them with opportunities to develop their teaching skills over time. This skill development will affirm teachers’ motivation to persevere and increase their sense of self-efficacy. Eventually, this pattern leads to skilled teachers, resulting in greater levels of student success.

This study sought to answer the following research question: What are the experiences of teachers in an independent, East Coast high school that have contributed to their skill development over time and how do these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom?

Given that skill development is contextual and depends, to a degree, on both an individual’s belief of self-efficacy and the surrounding environment, exploring teachers’ experiences that contribute to their skill building, as well as how they make sense of these experiences in terms of their roles as teachers, can be effectively accomplished by means of IPA.
Chapter II: Literature Review

Introduction

Teachers and students occupy two different sides of the educational coin; without one, the other cannot exist, at least in many traditional school settings. As Polk (2006) stated, “A major component of teaching is that of learning” (p. 23). To closely examine one component often implies examination of the other. If educators are concerned about students’ learning, then an examination of a variety of factors that influence student learning must occur, including understanding how teachers view their own roles and efficacy and how they increase their skills as educators over time. Of the wide variety of factors that influence student achievement, the influence of one factor is very clear: Teacher quality has a large influence on student outcomes (Sanders et al., 1997), and teachers’ content knowledge as well as pedagogical knowledge combine to serve as a major factor in influencing student achievement (Trimble, 2003).

Numerous factors influence student achievement. Many of these factors do not influence student achievement individually; often there is a complicated and dynamic interplay of various factors, some of which have reciprocal effects. Lee and Shute (2010), for example, have identified four major categories of interrelated variables that directly contribute to student achievement: student engagement, learning strategies, school climate, and social-familial influences. Wang and Eccles (2013) further described student engagement as a construct of three variables: behavioral, emotional, and cognitive. When students have the opportunity to make decisions, see the personal relevance in what they learn, and feel supported by teachers and peers, they are more likely to value the learning at their school.

In an effort to better understand the factors that affect student achievement, this review of the literature focuses on three interrelated topics: the influence of environmental factors,
including schools and family (extrinsic factors); self-concept, motivation, and goal-setting (intrinsic factors); and the influence of teachers’ practices and attitudes regarding their students and themselves.

**School, Family, and Culture: Extrinsic Influences on Student Achievement**

**Classroom environments.** A variety of factors, several of which are interconnected, create the school environment. Not surprising is that the structure and management of classrooms, as well as academic programming, can have an impact on several aspects of students’ experiences. Early adolescents in middle school, for example, experience changes that are associated with increased levels of teacher control and decreased levels in teacher efficacy, resulting in a deleterious effect on the quality of student–teacher relationships, thereby decreasing student motivation (Eccles, Lord, & Midgley, 1991). This decrease in student motivation is the result of a mismatch between typical middle school environments and students’ developmental stages at the time (Eccles et al., 1993). On the other hand, students’ motivation can be bolstered by classroom environments that support and commend students for their efforts over their abilities (Ames, 1992). Furthermore, classroom environments that afford students the opportunity to provide feedback to their teachers regarding teacher performance have been shown to increase student achievement (Olina & Sullivan, 2002).

**Ethnic and gender diversity.** Ethnic and gender diversity are other school-environment factors that influence student achievement. For example, gender-gap grading differences are, in part, related to teacher characteristics. The interactions between teacher and individual students during coursework tend to favor girls in grading practices over boys (Falch & Naper, 2013). A natural response to such biases along with concerns of distractions between boys and girls, especially during adolescence, might be to seek support for single-sex classrooms. Research,
however, does not support this idea. Strain (2013) provided evidence linking single-sex classrooms to lower student math scores and to no improvement in reading scores. Further research by Goodkind, Schelbe, Joeseph, Beers, and Pinsky (2013) refuted previous claims that single-sex classrooms help to prevent distractions between boys and girls or cater to learning differences within each gender. Notably, just as research seems to support gender diversity in the classroom, the same is true for ethnic diversity. Students who have attended ethnically diverse high schools tend to earn slightly higher grade point averages during their first year of college compared to students who attend ethnically homogenous high schools (Tam & Bassett, 2004). It has also been found that students who have been marginalized by their ethnic minority status and/or their socio-economic status are more likely to struggle academically than their nonmarginalized peers (Benner & Wang, 2014).

**Extracurricular participation.** Various studies show that student participation in extracurricular activities is positively linked to improved student outcomes (e.g., Bartko & Eccles, 2003; Cooper, Valentine, Nye, & Lindsay, 1999). Research from Fredricks and Eccles (2006) showed that 11th-grade students who participated in either athletics or school-sponsored clubs or both showed greater levels of academic and psychological adjustment than those who did not participate in extracurricular activities. However, more participation in extracurricular activities is not necessarily better. A study by Knifsend and Graham (2012) identified four domains of extracurricular activities: academic/leadership groups, arts activities, clubs, and sports. Eleventh-grade students who participated in two of these domains gained the most in terms of academic achievement, whereas the gains for students were smaller when the number of domains participated in was greater or fewer than two (2012). Similar to Knifsend and Graham’s 2012 study, Eccles and Barber (1999) identified various domains of extracurricular activity:
prosocial (i.e., church and volunteer activities), team sports, school involvement, performing arts, and academic clubs. Like the studies that examined the positive relationship between extracurricular participation and student achievement, Eccles and Barber found that “participation in extracurricular activities during the high school years provides a protective context in terms of both academic performance and involvement in risky behaviors” (p. 25). One exception to this finding is related to student participation in school-related sports teams—these students tend to be at greater risk for at least some risky behavior, namely the consumption of alcohol (Eccles & Barber, 1999).

Extracurricular participation can also help to deter some students from dropping out of high school. Mahoney and Carins (1997) have shown that those students who were identified as being at high risk for dropping out of school were often the very students who benefitted from extracurricular participation. Mahoney and Carins explained that this occurrence was likely due to the fact that students who are more likely to drop out of school tend to have fewer positive connections to their school, unlike other students who are more engaged with their school environment.

But why should participation in a single school extracurricular activity be strongly associated with lower rates of school dropout for students at risk? For students whose prior commitment to the school and its values has been marginal, such participation provides an opportunity to create a positive and voluntary connection to the educational institution. (p. 248)

**School and class size.** Studies that examine the effects of school and class size on student achievement have presented mixed and somewhat contradictory results. Many parents and students might find the prospect of a relatively smaller school advantageous over a larger one, in
that a smaller school might seem to be more personal and provide individual attention to each student. Some research appears to support this belief. Finn, Gerber, and Boyd-Zaharias (2005) found that students who have attended relatively smaller classes between kindergarten and third grade for 3 or more years had a higher likelihood of graduating from high school. Likewise, smaller schools, although generally more expensive to operate, can help to increase student achievement, as measured by daily attendance rates and math scores (Kuziemko, 2006).

However, the belief that smaller schools have the ability to overcome other powerful influential factors of student achievement such as poverty has been shown to be false (Coldarci, 2006). In fact, larger schools tend to outperform smaller schools in terms of student achievement gains (Barnett, Glass, Snowdon, & Stringer, 2002), implying that measurements and opinions on overall school performance should consider school size as a factor. Although the effects of school size are inconclusive, other factors that influence student achievement are likely more important. Perhaps the biggest influence that school size has on student achievement is financial: Larger schools tend to have a lower cost per pupil than smaller schools and, therefore, tend to have a greater supply of resources to enhance teaching and learning (Stevenson, 2009).

**School leadership.** School leadership plays a significant yet indirect role in student achievement. School principals often impact student achievement by supporting the individual and collective capacity of teachers and staff (Ross & Gray, 2006). In other words, principals can positively influence student achievement by identifying and creating the necessary conditions within a school that optimize effective teaching and learning. The research of Leithwood, Jantzi, and Steinbach (1999) highlights this point succinctly: school leaders who essentially flatten out organizational hierarchy structures and incorporate teachers into some of the goal-setting and improvement plans for the school tend to have teachers who are more committed to the school.
and student outcomes (Sugrue, 2000). Effective principals who are able to promote gains in student achievement tend to have the ability to both correctly identify the specific focus for achievement and understand how the resulting changes interface with the existing culture and norms of the school (Nettles & Herrington, 2007).

Although effective school leaders are often associated with helping to create and sustain optimal teaching and learning environments, thereby helping to increase student achievement, those teaching and learning environments that leave much to be desired may struggle to attract and retain capable school leaders. Lower achieving schools tend to have more difficulty recruiting capable and talented school leaders, whereas higher achieving schools are better able to attract principal recruits (Winter & Morgenthal, 2002). Thus, school leadership and student achievement can be viewed as interrelated variables, whereby one has the ability to influence the other, and vice versa.

**Parental and cultural influences.** Parental involvement and cultural capital also have been shown to influence student achievement. Parents’ perceptions of their children’s abilities have been shown to be a mediating factor between grades earned in school and children’s self-views (Frome & Eccles, 1998), and relationships between children and their parents that are based on high-brow levels of cultural capital had similar effects (Tramonte & Willms, 2010).

**Student Self-Concept, Motivation, and Goal-Setting: Intrinsic Influences on Student Achievement**

Understanding what academic self-concept is and how it interfaces with academic achievement can be an effective way to help students become more successful in school. Academic self-concept can serve as a focal point, such that increased student perceptions of competence in school can lead to more autonomous behaviors (as shown by increased student
choice, decision making, etc.) instead of the pressure of obligations, thereby increasing student achievement (Guay, Ratelle, Roy, & Litalien, 2010).

Academic self-concept should not be confused with general self-concept, because academic self-concept is considered a specific example of general self-concept. Perhaps the best way to understand academic self-concept is to look at examples of what it is not. Nonacademic self-concept refers to one’s view of oneself in terms of nonacademic traits such as athletic, artistic, social, and so forth. Academic self-concept is specifically associated with academic achievement as opposed to other nonacademic self-concepts and self-esteem (Green et al., 2012). The relationship between academic self-concept and academic achievement is reciprocal: Prior academic achievement affects subsequent academic self-concept (Marsh & Yeung, 1997), which, in turn, has an influence on future academic achievement (Chen, Yeh, Hwang, & Lin, 2013; Huang, 2011; Preckel, Niepel, Schneider, & Brunner, 2013).

Understanding the interplay between academic self-concept and academic achievement can serve as a way to help students experience greater levels of success in the classroom. Furthermore, understanding which self-concepts students hold for themselves in terms of their perceived levels of intelligence provides further insight into how to help students succeed. Research has shown that middle school students, for example, who believed that their intelligence could be developed with time and effort earned higher grades and enrolled in more advanced math classes (Romero, Master, Paunesku, Dweck, & Gross, 2014). The same research showed that those students who believed that their emotions could be controlled showed fewer signs of depression (Romero et al., 2014).

When students are struggling and in need of intervention, helping them to remain motivated to persevere through their academic challenges is often more effective when such
interventions are discipline specific rather than global in perspective (Green, Martin, & Marsh, 2007). Looking at academic achievement in terms of the different grades that students earn in different subjects, it might seem that different academic self-concepts for the same student could apply to different subject areas. This idea is supported by the student who claims “I’ve never been good at math, but I’m gifted at writing” or by different teachers of the same student who have contrasting observations of that student’s motivation, achievement, and attitude. Educators who are able to identify a student’s academic self-concept might be able to use this information as a way to predict future success or as an indicator to provide intervention (Erten & Burden, 2014).

**Students’ mindsets.** The influence of one’s mindset has the ability to affect multiple aspects of one’s life. Although a growth mindset is commonly associated with success, and a fixed mindset with seemingly insurmountable challenges, these successes and setbacks occur within a variety of factors, including emotions, personality, racial and social biases, and, of course, academic achievement. Adolescents’ who possess the belief that they can change aspects of these traits fare better in school academically and emotionally (Romero et al., 2014). These implicit theories of intelligence also tend to predict how well adapted an individual is in terms of self-esteem, relationships, and emotions (King, 2012).

**Emotions and personality.** The notion of mindsets is often applied to general intelligence and/or talents. Research has shown that beyond intelligence in general, individuals possess specific beliefs about the malleability of specific intelligences and talents. Musical intelligence, for example, is often believed to be less malleable than creative intelligence (Furnham, 2014). Not surprising, a growth mindset is strongly positively associated with a creative self-concept (Karwowski, 2014).
How these traits are attributed—that is, whether people are naturally endowed with them and, therefore, change is not possible (the fixed mindset) or they are able to develop them (the growth mindset)—also has an influence on a person’s overall personality, including aspects related to relationships and socialization (Dweck, 2008). Social settings, for example, can be viewed as potential learning opportunities for shy individuals who possess a growth mindset (Beer, 2002). Likewise, individuals’ mindsets can serve as a lens through which they see their own personal emotions (as opposed to emotions in general). Those individuals with a fixed mindset who believe that they cannot learn to shape their own emotions tend to have fewer emotional coping strategies and increased levels of stress and depression (De Castella et al., 2013). Logically, educators and counseling support staff should take note of this, especially in consideration of the turbulent emotional seas of adolescence; teaching students how to develop a growth mindset regarding their emotions can be a way to help students manage depression and stress.

Just as a fixed mindset can predict increased levels depression and stress, implicit theories of personality also have the ability to predict aggressive behaviors (Yeager, Miu, Powers, & Dweck, 2013). Again, by understanding this, aggressive behavior in teens might be avoidable. By teaching students to believe that social attributes can be learned, adolescents are able to lower levels of aggression and stress and, subsequently, enhance school performance (Yeager & Dweck, 2012). The association between mindsets and aggression extends beyond school and social settings into the realm of interracial and ethnic differences between different peoples. Growth mindsets also have the ability to improve race relations and lower aggression in long-standing adversaries (Dweck, 2012). Those who believe that prejudice is a fixed trait, even if these individuals are not necessarily prejudiced themselves, tend to shy away from interracial
interactions (Carr, Dweck, & Pauker, 2012). Logically, then, it becomes increasingly important to understand how our mindsets influence how we perceive others around us.

Whether the notion of mindsets is applied to the contexts of emotions, personalities, race relations, or academics, one thing is clear: Fixed mindsets can promote unhealthy and sometimes dangerous situations for adolescents. When students believe that their situation in school will not improve, they tend to engage in a series of self-defeating behaviors, creating an ongoing cycle of negative attitudes and behaviors (Brooks, 2001) and can sink into a downward spiral of despair. Therefore, understanding mindsets can serve as one way to prevent such undesirable situations for students in the first place.

**Mindsets and student achievement.** As discussed previously in this literature review, the factors that affect student achievement are numerous and often interconnected. Research has established positive associations between (a) student interests and academic achievement, (b) academic achievement and self-concept of ability, and (c) student interests and self-concept of ability (i.e., student mindsets), with the lowest level of association occurring between the first pair and the strongest association occurring in the third pair (Denissen, Zarrett, & Eccles, 2007). It is interesting to note that the pair forming the strongest association (student interests and self-concept of ability) denotes intrinsic traits found within the personality of the student, whereas the weakest association (student interest and academic achievement) is a coupling of one intrinsic and one extrinsic trait. Similarly, the notion of mindsets is applicable to a variety of inter- and intrapersonal factors. A growth mindset, for example, has been positively associated with goal setting and the behaviors of self-regulation required for goal achieving (Burnette, O’Boyle, VanEpps, Pollack, & Finkel, 2013). Not surprising, fixed mindsets are predictive of a lower endorsement of achievement goals, a greater sense of helplessness, truancy, and disengagement.
from school (De Castella & Byrne, 2015). In addition, students’ dreams of achievement are often mitigated by a fixed mindset (Kappes, Stephens, & Oettingen, 2011).

Again, teaching students how to understand and embrace a growth mindset can help to boost motivation and may be used as an intervention technique (Blackwell, Trzesniewski, & Dweck, 2007; Good, Aronson, & Inzlicht, 2003) and can be useful in deterring disengaged students from dropping out of high school (Paunesku et al., 2015). Learning to embrace a growth mindset can also help students overcome other academic obstacles, such as the effects of stereotype threats on standardized tests. Specifically, when low-income minority students are taught to embrace a growth mindset, they tend to outperform their low-income minority peers in the arena of standardized testing (Good et al., 2013).

While it is becoming increasingly clear that the promotion of growth mindsets in students can yield greater levels of student achievement and serve as a means of intervention for struggling students, also noteworthy are the factors that can have an influence on students’ mindsets, with particular attention paid to the influences exerted by parents. Research has shown that when mothers are induced to embrace a fixed mindset, they tend to display greater levels of control and negative affect while helping their children tackle a set of challenging problems, resulting in poorer results on the student’s behalf (Moorman & Pomerantz, 2010).

**The Effects of Teachers on Student Outcomes**

Although the factors that affect student achievement are numerous, few compare to the effects of teachers on student performance. The effects that a well-prepared teacher can have on a student’s learning can be stronger than the factors influencing the student’s background, such as poverty and linguistic and minority status (Darling-Hammond, 2000). In fact, no other influential factor on student learning is as important as the quality of teachers (Hanushek, 2011).
Thus, understanding the practices and characteristics of effective and highly skilled teachers becomes increasingly important if we are to better understand how to increase student achievement levels.

**Characteristics of effective teachers.** There is no shortage in the variety of the characteristics possessed by effective teachers. Under the U.S. Department of Education’s definition of what constitutes a Highly Qualified Teacher, several characteristics are clearly defined: teachers must hold at least a bachelor’s degree, possess a state-issued teaching license, and be able to prove proficiency in all subject areas that they teach (Berry, Hoke, & Hirsch, 2004). An analysis of data from North Carolina collected over 10 years seems to support this claim. Measurable teacher credentials have been found to have a significant effect on student achievement levels, accounting for as much as 25–50% of the overall effect of teacher quality on student outcomes (Clotfelter, Ladd, & Vigdor, 2007). The assumption that tangible teacher credentials eventually lead to better teachers is certainly not unique to the United States. A review of 40 national education plans for developing nations suggested a wide range of strategies for increasing teacher quality, including the reliance of teacher-preparation programs, in-service training, and the establishment of overall higher qualification standards to enter and remain in the teaching profession (Hunt, 2015).

Contradicting these findings, other research has shown that graduate degrees, the amount of teaching experience (with the exception of the first few years of teaching), teacher certification, professional development, college entrance scores, and traditional teacher training programs have no real bearing on student achievement (Hanushek, 2011; Harris & Sass, 2011; Yeh, 2009). Furthermore, Hanushek (2002) argued against the idea that increasing the requirements to become a teacher leads to higher quality teachers, claiming that requiring a
master’s degree and increasing the expectations of course load, certification, and standardized testing of general and content knowledge have served to restrict the supply of available teachers. The assertion that teacher-training programs are noninfluential factors on student achievement suggests that policy makers need to take a closer look at how we are preparing our future teachers, because so many public school teachers seek their teaching credentials through these programs.

Research has identified other characteristics of effective teachers that are not so readily measured or shaped by teacher preparation programs or standardized test scores. As a case in point, Mills (2003) identified a strong link between the personality styles of effective teachers and the achievement levels of their gifted and talented students, even though most of these teachers, as Mills described, did not have any specific training for teaching gifted and talented students. In addition, high-quality teachers have been found to possess a relatively high level of creativity in both their personal and professional lives, leading to intellectual risk taking, real-world learning approaches, and interdisciplinary teaching (Henriksen & Mishra, 2015).

Looney (2011) described the characteristics of effective teachers not by credentials, test scores, or personality styles, but by what they do in the classroom:

- Demonstrate intellectual capability, particularly in verbal skills.
- Exhibit a solid understanding of content knowledge and various teaching strategies.
- Show empathy toward students and help students set goals.
- Possess strong classroom-management skills in terms of clarity of presentation of information, pacing, and knowledge of typical student misconceptions.
- Use formative assessment techniques to gauge student understanding in real time.
- Collaborate with peers to foster a positive school culture and climate.
Similar descriptions of effective teachers have been defined as ways to formally evaluate teachers’ performances. Danielson (2017) identified four domains and their respective components that constitute effective teaching: planning and preparation, classroom environment, instruction, and professional responsibilities. Marzano’s (2017) framework for teacher evaluation is similar to Danielson’s, also consisting of four domains, each with a variety of components: standards-based planning, conditions for learning, standards-based instruction, and professional responsibilities.

**Teachers’ beliefs.** In contrast to the public definition of a strong and qualified teacher, many college students early in their enrollment in teacher-preparation programs describe effective teachers as those who love children and who are warm and caring; they believe that these traits alone are sufficient for teachers to be effective (Brown, Morehead, & Smith, 2008). Teacher preparation programs will challenge such beliefs as the teachers-in-training are exposed to new ways of thinking and to various situations. Many of the preconceived notions of what constitutes effective and ineffective teaching come from the prior learning experiences of new teachers (Walls, Nardi, von Minden, & Hoffman, 2002). Student-teacher internships are a typical initial venue for new teachers to be formally exposed to the classroom in the role of teacher. However, such short-term exposure to the teaching profession is often not adequate to meet the needs of various school settings, including those schools that are poverty stricken (McKinney, Haberman, Stafford-Johnson, & Robinson, 2008).

With new teachers’ early beliefs and relatively brief exposures to the classroom in mind, helping them find their way in the profession by means of teacher mentoring programs can be beneficial. Effective teacher-mentoring programs have the ability to improve teaching and prevent teacher attrition so long as decision makers such as school administrators understand that
mentoring is a complex, nonlinear process for which there is no simple list of factors that describe an effective mentoring program (Waterman & He, 2011).

Although there is no definite formula for what makes an effective teacher, a variety of factors should be acknowledged, including nonverbal communication, the sense of teacher self-efficacy, and servant leadership as a way of putting the needs of others and the institution ahead of oneself (Steele, 2010). Effective teachers also maintain high expectations of students’ growth (Fuchs, Fuchs, & Phillips, 1994) and are often described as warm, friendly, and caring, whereas ineffective teachers create a tense classroom environment and are described as cold, abusive, and uncaring (Walls et al., 2002). Other characteristics of effective teachers include the ability to support understanding through cognitive engagement, establish and maintain rapport through emotional engagement, and manage the classroom through behavioral engagement (Anderman, Andrzewski, & Allen, 2011). Other research implies that effective teachers are characterized as those who possess a strong working knowledge within their content areas of instruction, possess an acute awareness of changes within education, and display patience, caring, and social-emotional intelligence (Schulte et al., 2008).

**Pedagogy.** In addition to prior experiences and beliefs that contribute to effective teaching, the practices of effective teachers also warrant close examination, because any attempt to improve student achievement must start with developing effective teaching practices (Brophy, 1986). It is not surprising that students are more likely to achieve when teachers possess strong content knowledge in conjunction with proven teaching processes (Irvin & Trimble, 2003). To keep abreast of changes in education (e.g., the proliferation of technology), teachers must not only continually reexamine their roles and beliefs as educators but also see firsthand how such changes can benefit students (Ertmer & Ottenbriet-Leftwich, 2010). Logically, it behooves
policy makers and stakeholders to invest in relevant professional development opportunities for teachers as a way to help increase student achievement. Indeed, investments made in providing “more effective professional development strategies are producing evidence of the stronger effects on teaching and learning of approaches that strengthen teachers’ abilities to teach diverse learners” (Darling-Hammond, 2000, p. 33). Such findings are not new. For several decades, experts in education have drawn similar conclusions that emphasize the importance of developing effective pedagogical practices within teachers as a basis for increasing student achievement (Brophy, 1986). Furthermore, teacher content knowledge, in addition to instructional practices, has been shown to closely align with student achievement (Polly et al., 2015).

The design of the lessons and activities that students will engage in will also influence how successful students will be in the classroom. Teachers who design challenging and relevant learning tasks might be able to help students achieve at higher levels, depending on students’ assumptions about their own intelligence (Dweck, 2010). Students need to understand that fast learning is not necessarily deeper learning and that deeper learning can often take more time than originally expected (Dweck, 2010). Cognitive tasks should not be the only consideration of effective teachers when designing engaging lessons. Students’ physical engagement needs to be considered as well. It has been found that students’ academic performance can improve with incremental breaks for physical exercise during class time (Howie, Schatz, & Pate, 2015).

Good teaching considers more than good planning and execution. Teachers must also make efforts to understand who their students are. In other words, teachers need to better understand how students think and feel, not just what they think. Teachers’ alignment of their teaching style with the learning styles of their students has been shown to be significant: those
teachers whose teaching styles diverge from the learning styles of their students tend to produce diminished student achievement results and less positive student attitudes (Charkins, O’Toole, & Wetzel, 1985). To help struggling students, teachers should look beyond how they can improve their teaching—they should also try to understand a struggling student’s perspective and take a first step in providing some form of psychological intervention (Yeager, Walton, & Cohen, 2013). This sense of understanding a student’s perspective plays a role in a teacher’s delivery of criticism. Unbuffered criticism has the potential to elicit the perception of stereotype bias and to undermine motivation in minority students (Cohen, Steele, & Ross, 1999). However, when teachers help students understand that high standards are accompanied with the belief in the students’ capacity to improve, such negative effects can be mitigated (Cohen et al., 1999).

As the landscape of education continues to change, teachers, like other professionals, need to keep up-to-date and become students themselves. Schools should facilitate lifelong learning initiatives in which teachers embrace their own learning by planning, carrying out, and summarizing their own professional development (Polk, 2006). Teachers who engage in meaningful and relevant professional development and who change their beliefs to align with new education reform initiatives are more likely to experiment with the teaching methods of their colleagues (Meirink, Meijer, Verloop, & Bergen, 2009). Such changes in classroom practices lead to changes in student learning outcomes, which, in turn, lead to changes in teacher beliefs (Mitchell, 2013).

The literature shows that as teachers’ initial beliefs about the teaching profession are developed, reshaped, and challenged, those who make an effort to become better at what they do tend to do better so long as they are engaged in their own learning and growth. This process can lead to teachers who possess a higher sense of self-efficacy, which, in turn, can lead to teachers
providing more support to students and, subsequently, increased levels of student achievement (Guo, Connor, Yang, Roehrig, & Morrison, 2012). An interesting finding is that as teachers improve their instructional techniques, they are likely to have more difficulty in predicting achievement for individual students (Guskey, 1982) but tend to have better student outcomes overall (Kyriakides, Creemers, & Antoniou, 2009).

**Teachers’ sense of self-efficacy.** Teacher self-efficacy is a construct that exists across wide array of culturally diverse settings (Klassen et al., 2009) and, therefore, appears to be nearly universal in its relationship to teachers’ job satisfaction and effective classroom practices (Vieluf, Kunter, & van de Vijver, 2013). The literature implies the existence of a certain logic behind these facts that transcends cultural settings: people tend to feel more effective in their jobs when they are satisfied with their jobs. When teachers and teaching become the focal point, it logically makes sense that a more satisfied teacher is more efficacious in the classroom, thereby helping to increase student achievement, because teacher self-efficacy is a predictor of instructional quality, and vice versa (Holzberger et al., 2013). It is difficult to overstate the importance of teacher self-efficacy. Teacher self-efficacy predicts classroom practices, which, in turn, predict student outcomes above and beyond the influences of teacher experience and level of formal education (Guo et al., 2012).

Although the general construct of teacher self-efficacy is universal, it should be noted that teachers’ working environments play a role in job satisfaction. In other words, differences in levels of teacher self-efficacy may very well be related to different school organizational designs (Dembo & Gibson, 1985). For example, school cultures that emphasize progress, effort, and meaningful learning help teachers to embrace achievement goals for themselves and, subsequently, for their students (Cho & Shim, 2013). Furthermore, collective efficacy in teachers
exists when teachers’ visions and goals are in line with those of their schools, and it can assist in teacher retention efforts; a greater sense of efficacy is associated with greater effort, persistence, and resilience (Yost, 2006). Not surprising, this sense of collective efficacy on behalf of teachers as a whole has a positive effect on student achievement and has been positively linked to student outcomes (Goddard et al., 2000) in the same manner that personal teacher efficacy has (Yost, 2006).

By understanding that a link exists between teacher self-efficacy and student achievement, determining how to increase the sense of teacher self-efficacy can be a path to increasing student achievement. Although teacher self-efficacy has been found to be positively associated with teacher support for learning and negatively associated with time in direct instruction (Guo et al., 2012), it has been shown to consequently have a positive influence on students’ motivation and achievement (Mojavezi & Tamiz, 2012), demonstrating the shift of focus from the teacher’s teaching to the students’ learning.

Professional development is one way to help increase teacher self-efficacy, because a positive relationship has been shown to exist between the two. According to Kennedy and Hui (2006), quality professional development that helps teacher leaders develop deep beliefs in their ability to affect change in their classrooms and in their schools is a direct way to increase the sense of teacher self-efficacy. Other recommendations for increasing teachers’ sense of self-efficacy include (a) exposing preservice teachers to a wide range of experiences in different social contexts, (b) ensuring that teachers have established strategies to deal with student failure, (c) providing teachers with accurate feedback regarding their performance that accurately highlights strengths and challenges, and (d) evaluating administrative leadership styles to determine how they affect teacher involvement in the decision-making process (Dembo &
Gibson, 1985). This last point is congruent with previous findings of the effects of school leadership on teachers: When teachers are included in some of the goal-setting and school improvement plans, these teachers tend to be more committed to the school and to the achievement of its students (Leithwood et al., 1999; Sugrue, 2000).

**Teachers’ mindsets.** Although certainly related to one another, self-efficacy and mindsets (as represented by implicit theories of intelligence, either incremental or entity) should not be confused. Whereas perceived self-efficacy is concerned with people’s beliefs in their ability to influence the events that affect their lives and is a core belief that serves as the foundation of motivation (Bandura, 2010), mindsets are self-beliefs of intelligence, talent, and ability. Specifically, Dweck (2007) identified individuals who possess a growth mindset (incremental theory) as those who believe that their talent can improve with effort, whereas individuals who possess a fixed mindset (entity theory) believe that their talent is fixed and cannot be changed.

Teachers who possess a growth mindset hold a belief that “every student has something to teach me” (Dweck, 2015, p. 14). Whether or not the challenges that accompany teaching are embraced depends on a teacher’s mindset. Teachers with a growth mindset who embrace challenges willingly and believe that they can grow their skills tend to see each student as a means by which to learn more about their profession (Dweck, 2015). Consequently, they are likely to feel a greater sense of self-efficacy, which, in turn, has been shown to boost student achievement (Caprara, Barbaranelli, Steca, & Malone, 2006), thus reinforcing the teacher’s sense of efficacy and creating a positive-feedback loop. Other research has yielded similar findings: teachers who believe in their ability to help their students succeed, including struggling students,
tend to set and maintain high standards for those students and, therefore, help to increase student achievement (Archambault, Janosz, & Chouinard, 2012).

On the other hand, teachers with a fixed mindset about their own teaching ability are more likely to be threatened by lower performing students and may blame students for their lack of achievement (Dweck, 2015). Furthermore, teachers with a fixed mindset tend to view others in terms of observed behaviors and traits (Dweck, Chiu, & Hong, 1995; Hong, Chiu, Dweck, & Sacks, 1997), akin to making a snap judgment about a student’s character and ability based on external factors such as looks, speech patterns, and so forth. These teachers also tend to lower the standards for struggling students who, as a consequence, become demotivated (Rattan, Good, & Dweck, 2012) and, in turn, do worse over time. The influence of teachers’ expectations of students’ achievements should not be underestimated. Such expectations may actually influence students’ performance and self-judgment of their performance (Jussim & Eccles, 1992). These expectations, if not conveyed correctly to students, can also have unintended adverse effects. For example, when teachers provide more positive feedback to minority students as compared to White students for written work of equal merit, it has been shown to result in the minority students receiving less clarity about where to exert effort, sensing less challenge to excel, putting less faith in genuine praise, and, ultimately, experiencing less academic growth (Harber et al., 2012).

**The role of teacher-efficacy in skill development.** General teaching efficacy has been shown to be significantly related to teachers’ skill development, whereas pedagogical knowledge and teacher training activities were not (Ruys, Van Keer, & Aelterman, 2011). Therefore, including the framework of self-efficacy in professional development can lead to higher skilled teachers (Bray-Clark & Bates, 2003). Specifically, job-embedded professional development
delivered over time, coupled with the framework of teacher self-efficacy, has the potential to significantly contribute to teachers’ skill development (Hunzicker, 2012). Because teachers with greater levels of self-efficacy tend to employ teaching techniques that result in greater levels of student gains in learning (Knoblauch & Hoy, 2008), helping to build teachers’ sense of self-efficacy will eventually lead to more skillful teachers (Siwatu, Frazier, Osaghae, & Starker, 2011). In addition, to develop and improve the teaching skills required for today’s increasingly heterogeneous student body, teachers need to view themselves as researchers and constantly try new methods and seek supporting evidence to improve their teaching (Niemi & Nevgi, 2014).

**Summary**

A Japanese proverb succinctly underscores the importance of teachers: *Better than a thousand years of diligent study is one day with a great teacher.* Even though a student may be able to ascertain facts and knowledge independently, this proverb emphasizes the value of the relationship between students and effective teachers. Great teachers are much more than repositories of information; as the literature shows, they have the ability to influence students in a variety of ways, including how students think about themselves and their abilities. Because this sense of academic self-efficacy has been linked to greater levels of achievement, and because teachers have been shown to be a dominant influential factor in student achievement, understanding how teachers think about their own abilities, how these abilities develop over time, and how these beliefs are reflected into teaching practices within the classroom can provide a way to determine how to help students become more successful.
Chapter III: Research Design

What are the experiences of teachers in an independent, East Coast high school that have contributed to their skill development over time and how do these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom? By understanding how teachers make sense of the experiences that have contributed to their skill development over time, we may be able to better understand which teacher behaviors, attitudes, and practices contribute to students’ learning, as well as how they contribute.

Introduction

Because this study sought to understand how individuals make sense of their experiences, a qualitative study design was chosen. A variable such as how teachers make sense of their lived experiences that have contributed to their growth as educators over time is difficult, if not impossible, to clearly quantify. Furthermore, because the goal of this study was to gain insight into how teachers make sense of their experiences and how they believe these experiences influence their practice, no hypothesis was created or tested. Therefore, a qualitative design made the most sense for this study.

Constructivists believe that reality is a construct of the individual; therefore, as many multiple and equally valid realities exist as there are individuals to experience them (Ponterotto, 2005). Although the interpretation of these phenomena may not lead to any specific action, it does provide an opportunity to reflect on specific lived experiences and can, therefore, inform us about them (Van der Zalm & Bergum, 2000). Because such a reflection and understanding was the goal of this thesis, IPA was chosen as a research strategy. Researchers who use IPA seek to investigate how individuals make sense of their experiences by focusing on how people perceive or talk about their experiences, as opposed to providing descriptions of phenomena against
prescribed categorical systems (Callary, Rathwell, & Young, 2015; Pietkiewicz & Smith, 2014). As noted by Smith, Flowers, and Larkin (2009), “IPA shares the view that human beings are sense-making creatures, and therefore the accounts which participants provide will reflect their attempts to make sense of their experiences” (p. 3).

Reid, Flowers, and Larkin (2005) succinctly described some of the key elements of IPA:

- Participants are experts on their own experiences, and by conveying these experiences, they provide researchers with insight into how they make sense of such experiences.
- Data collected via IPA are rigorously and systematically analyzed on two levels: first by the participant discussing these experiences and then by the researcher who interprets these experiences.
- The results of using IPA are not meant to provide or infer generalizations of groups of people. As a result, IPA is typically idiographic in nature and focuses on a relatively small number of individuals rather than large groups of participants, allowing in-depth examinations of individuals’ experiences.

**Philosophical Roots of IPA**

IPA has its roots in the philosophical movement of phenomenology founded by German mathematician and philosopher Edmund Husserl in the early 20th century (Reiners, 2012). Husserl employed a descriptive approach to phenomenology that involved eidetic reduction of experiences (Smith et al., 2009). In other words, Husserl was concerned with the description of how one experiences an object or event, not just the description of the object or event itself. He maintained that recognizing this level of experience was truly personal in nature and that this intentional reflection of an event or object by an individual formed the necessary precursor to
collective scientific understanding (Smith et al., 2009). Thus, Husserl founded descriptive
phenomenology, in which everyday conscious experiences can be described and any potentially
interfering preconceived notions held by the researcher can be identified and put aside by means
of bracketing (Reiners, 2012).

Building on and even deviating from Husserl’s work, Martin Heidegger, a student of
Husserl’s, eventually rejected Husserl’s epistemological position and adopted a more ontological
position: the science of being (Reiners, 2012). Heidegger believed that knowledge could not
exist beyond the realm of individual interpretation of experiences, objects, and events (Smith et
al., 2009); thus, we see the beginning of interpretative phenomenology, which involves how
individuals make sense of the world around them.

IPA, then, considers how individuals make sense of their experiences, making this an
appropriate choice of methodology for this study. A hermeneutic approach was employed
because these experiences are interpreted by the individual through thoughtful reflection. The
researcher then conducts extensive interviews with the individuals to collect data that describe
these experiences. The data are then carefully analyzed by the researcher for emergent themes
that provide the details of how individuals make sense of their lived experiences, providing a
second layer of interpretation using a double hermeneutic approach. Because of the in-depth
nature of the data collected, as well as the objective to make sense of individually lived
experiences, IPA employs an idiographic approach with a relatively small number of
participants; IPA seeks to provide an understanding of the experiences of individuals, not
generalizations of groups of people.

Although relatively new compared to other qualitative research methodologies, IPA is
beginning to gain popularity among qualitative researchers (Reid et al., 2005). The initial use of
IPA took place in fields such as nursing and health psychology, in which traditional quantitative methodologies were deemed to be inadequate approaches to studying human life experiences (Van der Zalm & Bergum, 1999). For example, the world of medicine often relies on results obtained after applying treatments to groups of people, not individuals; the results pertaining to an individual, even in the best controlled environment, may likely be quite different than the group results (Lakshman, Sinha, Biswas, Charles, & Arora, 2000). Thus, due to its interpretative nature, IPA does not seek to prescribe treatment or induce a response to a specific situation because it does not seek to establish one single answer or truth (Pringle, Drummond, McLafferty, & Hendry, 2011). Beyond the worlds of nursing and health psychology, the use of IPA can be found in a variety of fields such as genetics, sexual identity, sexual health, quality-of-life measurement, personal and cultural identity, and others (Reid et al., 2005).

IPA employs an inductive approach; therefore, research questions are broadly constructed to allow for the emergence of unanticipated themes (Callary et al., 2015). This inductive nature, coupled with IPA’s idiographic approach, allows for the generation of rich and detailed descriptions of how individuals experience various phenomena (Pietkiewicz & Smith, 2014). Because IPA seeks to investigate people’s experiences, research questions should be structured in a manner that is exploratory, not explanatory. In other words, research questions in IPA should be designed to generate meaning rather than to identify differences, correlations, or causations among variables (Smith et al., 2009).

**Site and Participants**

The participants of this study were teachers in an independent, East Coast high school. Although this high school is independent and governed by a head of school who, in turn, is governed by a self-perpetuating board of trustees, it also serves as a public option for local
students and families because no other public high school exists nearby. This allows students who live in any town that has school choice to attend the school and have their tuition paid by their town of residence. However, because the school is independent, it is not bound by many of the rules and regulations associated with most public schools, even though a significant portion of the school’s revenue is publicly funded. This implies, among other things, that the school is free to hire anyone who is determined best for the job—from support staff to teachers to administrators—regardless of licensure. Furthermore, although the school must measure the performance of its student body on an annual basis by means of state-mandated standardized tests, public funding is not linked to such results. In essence, with only a few exceptions (e.g., special education and technical/vocational education), the school’s independence allows for nearly full autonomy when determining its staff, standards, curriculum, and pedagogy.

The student body comprises approximately 550 students, including approximately 100 residential students from over a dozen countries. The school is comprehensive, meaning that it serves students from nearly all backgrounds and who have a wide variety of achievement levels, intellectual abilities, and future aspirations. Teachers at this school, therefore, often serve students within the same classroom who have very different backgrounds.

The purpose of this study was to understand how teachers make sense of the experiences that have contributed to their skill development over time as they relate to teaching, learning, and assessment in the classroom. At the time of this study, there were 68 teachers at the school, consisting of 32 men and 36 women. Of the 68 teachers, 60 are considered full-time and eight are considered part-time. All but three of the 68 teachers are White. The average age of all 68 teachers is 37 years.
In an attempt to stratify the sampling population in order to include as much homogeneity as possible (Creswell, 2014), this study focused on six full-time teachers who volunteered as members of a professional development cohort. The school’s administration recommended this cohort as a potential source of participants. Convenience sampling was used within this recommended group. Of the 10 original cohort members, six agreed to be a part of the study. Although this process may not necessarily provide a true representative cross-section of the entire teaching staff, it does allow for the gathering of valuable data (Creswell, 2014). Helping to maximize variation within the sample group, research participants represented diversity in terms of sex, age, years of teaching experience, and disciplines taught (see Table 1).

Table 1

*Characteristics of Participants*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age, y</th>
<th>Years working in education</th>
<th>Current role</th>
<th>Other roles</th>
<th>Other settings or schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bob</td>
<td>53</td>
<td>32</td>
<td>Science teacher: AP Chemistry, Chemistry, and Physics</td>
<td>Coach of cross-country, track &amp; field, and soccer; technology committee; and student club sponsor</td>
<td>Several public high schools in California and New England</td>
</tr>
<tr>
<td>John</td>
<td>45</td>
<td>10</td>
<td>“Flexible Pathways” teacher: helps students find alternative routes to satisfy graduation requirements</td>
<td>High school Social Studies teacher</td>
<td>One public high school in New England</td>
</tr>
<tr>
<td>Kimberly</td>
<td>41</td>
<td>20</td>
<td>Social Studies teacher</td>
<td>Student Council advisor, mentor to new teachers, and department chair</td>
<td>One public high school in New England</td>
</tr>
<tr>
<td>Lucy</td>
<td>28</td>
<td>6</td>
<td>Science teacher: Chemistry and Environmental Science</td>
<td>Paraprofessional, both in-class and one-on-one</td>
<td>K-8 public school in New England</td>
</tr>
<tr>
<td>Mark</td>
<td>31</td>
<td>9</td>
<td>Social Studies teacher</td>
<td>Substitute teacher, paraprofessional, Latin teacher, and Teacher of English for Speakers of Other Languages</td>
<td>Various K-12 public/private schools, higher/adult education, and various international settings</td>
</tr>
</tbody>
</table>
There are no rules that dictate the sample size used in IPA; sample sizes have varied from one to 15 (Pietkiewicz & Smith, 2014). However, because of IPA’s idiographic nature and the desire to capture rich, in-depth data, the target number of participants for this study was eight to 10. This sample size is commensurate with other studies that have used IPA (e.g., Back, Gustafsson, Larsson, & Berterö, 2011; Bricker-Katz, Lincoln, & Cumming, 2013; Powell, Overton, & Simpson, 2014). Furthermore, this sample size embraces the spirit of qualitative research, as opposed to quantitative research, as best described by Baker and Edwards (2012):

Quantitative researchers capture a shallow band of information from a wide swath of people and seek to objectively use their correlations to understand, predict, or influence what people do. Qualitative researchers generally study many fewer people, but delve more deeply into those individuals, settings, subcultures, and scenes, hoping to generate a subjective understanding of how and why people perceive, reflect, role-take, interpret, and interact. (p. 8)

Data were collected by the researcher via one-on-one interviews with individual participants. Interviews were conducted at a time and location convenient to each participant. Depending on the participants’ preferences, these interviews were held in their classrooms after school, at different locations within the school, or at a nearby coffee shop. As stated earlier, participants were six full-time teachers. Because the purpose of IPA is to elicit rich, detailed

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Gender</th>
<th>Occupation</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tara</td>
<td>43</td>
<td>16</td>
<td>English teacher</td>
<td>Department chair, president of the Faculty Association, mentor, adjunct at a nearby college, independent tutor, and special education teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nearby state college and one other high school in New England</td>
</tr>
</tbody>
</table>
descriptions of how individuals experience phenomena, a series of approximately six to 10 open-ended research questions (Smith et al., 2009) were used to interview each participant.

**Data Collection**

This study was conducted as an IPA and, therefore, sought to understand how teachers make sense of the experiences that have shaped them into the teachers they are today. An interviewing approach similar to that of Seidman (2013) was used because “at the root of in-depth interviewing is an interest in understanding the lived experiences of other people and the meaning they make of that experience” (p. 9). Seidman cautioned against one-time interviews when using IPA because the full context in which the phenomena are being explored may not be fully understood. As Seidman suggested, a series of up to three interviews per participant was conducted, allowing “both interviewer and participant to explore the participant’s experience, place it into context, and reflect on its meaning” (p. 20). In this study, the first interview lasted for approximately 30 min and allowed for the gathering of background and demographic data; it also served as an opportunity for the researcher to share with participants the nature of the interview questions in the second interview. The second interview lasted for approximately 60–80 min and focused on collecting the participants’ responses to a series of open-ended interview questions. Transcriptions and initial summaries of the first two interviews were then shared with each participant via email. Participants were invited to meet with the researcher once again to discuss these initial findings; none decided that further discussion was necessary, although one participant asked a clarifying question via email. The few follow-up questions that remained on the researcher’s behalf were also asked and responded to via email.
Data Analysis

Creswell (2014) described an iterative analysis of gathered qualitative data that consisted of several steps commonly found in most qualitative research: the transcripts of interviews are organized and analyzed for emergent themes through coding; the text is aggregated into small categories of information; and these codes are further condensed and represented in figures and/or tables and subsequently discussed.

Here, initial data were gathered in the form of recorded interviews between the researcher and individual participants. These interviews were digitally recorded and stored as MP3 files and then transcribed into text using a secure transcription service (RefWorks) for analysis. Both audio and text files were stored on the researcher’s personal computer, with backup copies stored on storage devices owned by the researcher and separate from the researcher’s computer (e.g., a thumb drive). The text was initially read and then coded for each participant. The specific coding technique used was in vivo coding, which assigns codes according to the exact words used by participants (Creswell, 2014). Iterative categorization was also used, which is a process that allows researchers to code and analyze their data by topic, date, event, theme, and so forth, and is compatible with common analytical approaches such as IPA (Neale, 2016). To assist with this coding process, secure software (Dedoose) specifically designed for analysis of qualitative data was used.

Smith et al. (2009) recommend a specific step-by-step process of analysis for first-time IPA researchers. The initial step involves immersing oneself in the original data by means of reading and rereading the transcriptions of the interviews of each participant. This level of engagement with the data allows the researcher to “begin the process of entering the participant’s world” (p. 82).
After the data are read and reread, Smith et al. (2009) suggested that the researcher begin the semantic examination of the content and language of the data, with initial noting and subsequent coding. According to Smith et al., this notation provides the opportunity for the researcher to provide comments on various passages within the text as a means of coding the data. Such commentary might include descriptive comments in which the content of the text is described; linguistic comments that might provide insight into how the meaning of the text’s content is supported by the use of specific language; and conceptual comments in which the participant’s words are interpreted by the researcher.

From this commentary and coding, Smith et al. (2009) suggested that the researcher next develop emergent themes. Such analysis requires that the researcher reduce the volume of information presented in the transcripts and the notes while simultaneously “maintaining the complexity, in terms of mapping interrelationships, connections and patterns between exploratory notes” (p. 91). In this study, after developing the emergent themes, connections were identified across those themes within the transcript for a specific participant. The entire process was repeated with the transcript for the next participant, until each transcript was analyzed. At this point, the researcher looked for patterns between the different cases.

**Ethical Considerations**

The use of human subjects in research presents a variety of ethical considerations. In accordance with *The Belmont Report* (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1978), this study adhered to three basic principles: respect for persons, beneficence, and justice. All participants were reminded that their participation was completely voluntary and that they could choose to end their participation at any time without repercussion. Participants were informed of the purpose of this study: to better
understand the lived experiences of teachers that have contributed to their skill development and how teachers make sense of these experiences as they pertain to teaching, learning, and assessment in the classroom. Participants were also informed of the potential benefits of the study: a better understanding of how teachers develop their skills can help us to better understand how to improve teaching and, therefore, students’ learning. Every effort was made to minimize any burden for all participants. Although participants were faculty members at one specific school, their characteristics, such as sex, age, years of teaching experience, and disciplines taught, were broadly represented in such a way that no one specific population of the school’s faculty was the focus of this study. Any beneficial information or insight that resulted from this study was shared with all faculty members within this school and with anyone else interested in this research topic.

**Trustworthiness**

Lincoln and Guba (1985) highlighted the need to establish trustworthiness in qualitative research by means of identifying credibility, dependability, and transferability. Somewhat parallel (but not necessarily equivalent) criteria in quantitative research can be found in internal validity, reliability, and external validity, respectively (Lincoln & Guba, 1985; Morrow, 2005; Schwandt, Lincoln, & Guba, 2007).

**Credibility.** The notion of credibility concerns establishing confidence in the truth of a study’s findings (Lincoln & Guba, 1985). Although there are multiple ways to establish credibility, this study used two specific methods: prolonged engagement and member checking.

Prolonged engagement entails the researcher being immersed in the specific research setting long enough to adequately understand the cultural and social setting, as well as the phenomena of interest (Cohen & Crabtree, 2008). To do so, the researcher must be able to
establish a rapport and a sense of trust with research participants. This study took place at the researcher’s former place of employment for the past 17 years. As such, it is understood that a rapport and a sense of trust (or at least a sense of familiarity) had already been established between the researcher and the participants.

Cohen and Crabtree (2008) defined member checking as the process of testing data, interpretations, and conclusions against the perceptions of individual members of the participant group. Lincoln and Guba (1985) posited that member checking is the most crucial method for establishing credibility in qualitative studies. Because researchers are often influenced by their own lived experiences, member checking by means of soliciting participants’ perspectives is one way to help ensure that any biases of the researcher are challenged (Kornbluh, 2015).

**Transferability.** Transferability refers to the applicability of research findings to contexts other than that of the original research site (Cohen & Crabtree, 2008). Transferability can be established when the researcher creates a “thick and rich description” when providing details of the research setting and/or participants (Creswell, 2014). Thick and rich description in this case implies that the researcher describes in great detail such factors as physical characteristics and any movement and/or activity (2014). This study developed thick and rich description by ensuring that all the data collected by audio recording of interviews with each participant were accurately reflected in the transcripts with as much detail as possible. For example, careful attention was paid to the sighs, pauses, and laughter of each participant, and these were reflected in the transcripts. These details, in addition to the recorded and transcribed words of each participant, were considered in the analysis for emergent themes.

**Dependability.** To demonstrate the dependability of the research findings, Lincoln and Guba (1985) suggested establishing an audit trail. This audit trail consists of a record of all steps
taken and data collected so that one could easily follow the chain of evidence and arrive at the same conclusions. Examples of the audit trail include the initial research questions, research journals and notes, audio recordings, annotated transcript draft reports, and the final report (Morrow, 2005).

**Limitations and Threats to Validity**

Because this study was conducted at the researcher’s former place of employment, potential research participants were easily accessible. However, Seidman (2013) described the perils of such easy access. Participants who are, for example, supervised by a researcher or who are considered friends of the researcher may provide data that are potentially biased based on their relationship with the researcher. In this study, the researcher was a teacher and administrator at the study site for nearly 17 years but was employed at a different school at the time of the research.

**Protection of Human Subjects**

A fundamental responsibility of every researcher is to ensure, as much as possible, that no physical or psychological harm or discomfort comes to the research participants (Fraenkel, Wallen, & Hyun, 2012). All participants of this study were teachers and, therefore, adults; no minors participated in this study. Participants were recruited via email (see Appendix A). Participation was completely voluntary and all participants completed an informed consent form before data were collected (see Appendix B). Two series of open-ended interview questions commensurate with IPA were developed and approved by the researcher and faculty members of Northeastern University before any data were collected (see Appendices C and D). Furthermore, the researcher successfully completed the National Institutes of Health Office of Extramural Research course *Protecting Human Research Participants* (see Appendix E).
Each participant’s identity remained confidential at all times. The data collected were in the forms of recorded audio interviews and the written transcriptions of those interviews. Both forms of data were stored on the researcher’s password-protected personal computer. All data were backed up on external storage devices and stored in a locked fireproof storage box. Only the researcher had access to these data, including the backup files.
Chapter IV: Findings and Analysis

This interpretative phenomenological study was conducted in order to examine the experiences of teachers in an independent, East Coast high school that have contributed to their skill development over time, as well as to understand how these teachers make sense of those experiences as they relate to teaching, learning, and assessment in the classroom.

Research Question

What are the experiences of teachers at an independent, East Coast high school that have contributed to their skill development over time and how do these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom? All participants described the numerous challenges they faced during their first year in the classroom. These teachers also identified two influential factors on their growth over time beyond their first year of teaching: what they learned in their own formal-education professional development and the support received from their colleagues and mentors.

Characteristics of the Study’s Participants

The participant group consisted of three men and three women. Participants were members of a professional-development cohort within the school, and cohort membership was determined by the school’s administration. Although the school’s administration identified and invited cohort members to partake in the professional-development opportunity, the decision of whether to do so was left to individual teachers.

The focus of this professional development was to help teachers learn and develop ways to gauge their students’ learning and achievement through a proficiency-based model of teaching and assessment. In essence, members of this cohort worked to develop their capacity to design, orchestrate, and report learning that is based on the proficiencies that students are able to
demonstrate over time in various academic disciplines. These practices were grounded on four principles of learning design:

- Engaging students socially and emotionally in ways that increase their commitment to their learning and the learning of their peers.
- Engaging students in the more targeted practice of skill development when needed in order to accelerate learning.
- Providing students with an abundance of ongoing, informed, and specific feedback about their work.
- Helping students to cultivate a shared mental model of the why, what, and how of the learning that lies ahead of them.

The motivation behind this professional development was to take some initial steps in the move away from the traditional model of the Carnegie Unit, which awards a student credit for time in class and for work completed. The long-standing practice of graduating students by credits earned will eventually be replaced by graduation based on students’ academic proficiencies.

The average age for the group was just over 40 years, with the oldest participant being 53 years old and the youngest being 28 years old. The average time spent in education as a profession was 15.5 years, with a maximum of 32 years and a minimum of 6 years. All participants possessed a master’s degree in education, with the most experienced teacher holding a second master’s degree in his content area. Two of the participants taught physical and/or life sciences, two participants taught social studies, one taught English, and one worked with students by designing alternate routes toward successfully completing high school. A career in
education was the only career path for five of the six participants. Pseudonyms were used in order to preserve anonymity.

Bob. Bob, 53 years old, has been working as a science teacher for over three decades. His teaching experience began on the West Coast somewhat by accident, because he had no concrete plans to become a high school teacher during his time as an undergraduate student. Bob, whose father was a high school science teacher, was considering continuing his studies in graduate school and wanted to study botany. Shortly before he graduated, he came across a poster that invited individuals interested in a teaching career to interview for teaching positions at a nearby public school district. Bob described coming across this poster as “serendipitous,” even though his undergraduate work did not include any sort of teacher-preparation program. Bob attended the interview and was offered a job on the spot. Within a year, Bob enrolled in a graduate program in education that ran concurrently with the start of his career as a high school teacher. This program helped Bob obtain the necessary licensure for teaching, as well as a master’s degree in education.

Bob cited his father as an influence on his decision to consider becoming a high school science teacher. As a young child, Bob recalled often tagging along with his father and was no stranger to the high school science classroom environment. In addition, Bob was a relatively high achiever during high school and college, maintaining average grades of A and B throughout his student career. Bob described a time when he and his father were hiking along a trail in the mountains when a voice called out to them. It was a former student of Bob’s father who made a point to say hello and ask if Bob’s father remembered him. Bob’s exposure to his father’s life as a science teacher is what likely nudged Bob to consider pursuing that interview near the end of his undergraduate studies. This decision eventually became the start of his 32-year career as a
Bob also recalled some of his most memorable positive learning experiences as a student that he believes influence his teaching today.

When I was an undergraduate at U.C. Santa Barbara, I was also a student-researcher, so I got matched with a professor and actually got to do, you know, actual genetic research, and that was the same idea— it was very hands-on, you know, you had to make a lot of decisions based on what you were experiencing and finding. Those were good learning experiences.

For Bob, these experiences were real and relevant, making it a much more meaningful learning experience for him as a student. Bob has made a concerted effort to provide his own students with similar opportunities that are both real and relevant to their lives and to the content.

The kids know that there’s always going to be something that they’re doing in the lab that’s relevant to what we’re learning in class and I let them practice and use some of the skills we’re learning in class and some of the information. So, I’ve done that throughout 99% of my career.

John. John, 45 years old, described himself when he as a high school student as one who was not terribly engaged with the learning opportunities presented to him but who did well enough to remain eligible to participate in sports. John always knew that he wanted to be a teacher one day but did not pursue a college education immediately after high school because, at the time, he did not believe that graduating from college was a reality for him. Instead, John transitioned directly into the work force, working in a variety jobs within the building trades. Concurrently, John pursued his interest in athletics and started coaching area sports teams comprising student-aged players. John eventually married a teacher and had children. With mounting financial pressures and sensing a need for a defined career path, John decided to enroll
in college and pursue a career in teaching at the age of 30. As a nontraditional college student, John considered various focuses within the field of education, including becoming a counselor or an English teacher. Eventually, John decided he wanted to be a social studies teacher and achieved his goal.

In recalling his experiences as a high school student, John considered the traditional school system as something that students needed to learn how to navigate, but not necessarily by embracing the traditional learning opportunities presented in the typical classroom. As a result, John has grown to “question the system.” As a classroom teacher, he was more interested in helping students find their purpose in life than earn good grades or test scores. John recalled a successful moment early in his teaching career with one of his students who never made a meaningful connection to what was being taught in school. John made an extra effort to tailor his lessons in history class to the young man’s personal interests. Then, one day in March, this student abruptly closed his book in the middle of class and asked to speak with John out in the hallway.

And I went out and he thanked me for taking the time to listen to him and he realized that this whole school stuff was not for him and appreciated my work and my help. Hand me back my book and shook my hand and walked out the door. And it’s an odd thing to call a success, I mean he, he dropped out…but he went on, he joined the National Guard, he actually got his GED. He is now a mechanic, um, and happy as a clam.

John deemed this event a success because he believed that he helped the student take action to find his passion and pursue it. John built on this experience and pursued his current position known as a flexible pathways coordinator. In essence, John helps students tap into their personal interests and then works with them and the school to try to develop a flexible way to
help the student meet graduation requirements through an academic program tailored to that student’s unique needs and interests. In this capacity, John sees his role as more of an advisor than a teacher and believes that his responsibility is to problem solve and challenge the traditional school system on behalf of the students for whom this system does not work. Through his own experiences as a student in high school, as well as early on in his teaching career, John has embraced a role in which it has, to some extent, become his professional obligation to question the system on behalf of what is best for students.

**Kimberly.** Kimberly, 41 years old, is an alumna of the school where she has been teaching for nearly two decades. As a high school student, Kimberly was well aware of the expectations set forth by her parents that hard work was the norm. With a record of high achievement throughout high school, Kimberly’s first semester of college quickly made her realize that this new phase of her student career was going to be more demanding than she initially expected. This was a humbling experience for Kimberly and she subsequently set out to essentially relearn how to learn in order to be successful in her new role as a college student. Kimberly soon began working with other struggling college students by teaching them new strategies for studying and learning. It was from this experience that Kimberly began to understand the value of differentiated instruction, in that no two people learn the same way.

I was teaching other people how to study because they would come in, and learning different methods from other people helped me [figure out] how to identify the things that were most beneficial to my learning. So, I think that helped me to really think about the fact that everyone learns differently and that strategies that work for one person don’t work for the next and, um, so that was very eye opening.
Kimberly’s passion for history began at an early age. As a child, her room was decorated primarily with maps as opposed to “kitties and puppy posters” and she would play map games at night with her family. Kimberly’s father was a veteran of the Vietnam War and became the subject of one of her high school U.S. History assignments. Kimberly interviewed her father to try to better understand his perspective as a soldier in the war. As a result, Kimberly began to realize that various figures throughout history were far more than names, dates, and specific roles—they were real people with their own personal stories. Kimberly found this humanizing factor of historical figures fascinating. According to Kimberly, this particular experience was one her most memorable learning experiences as a student and a major influence as to why she decided to study history.

Kimberly recalled negative feelings about her ability with mathematics in elementary school. She described a classroom routine in which students would line up for lunch in the order in which they completed a math problem. “Guess who was always last?” she recalled with some light laughter. This discomforting experience as a young student has carried over into her teaching career. As a result, Kimberly is always mindful of what she asks of her students and cognizant not to place them in uncomfortable situations.

Lucy. At 28 years old, Lucy is the youngest participant in the study. Although she has worked in education for the past 6 years, Lucy is currently in her second year as a full-time high school science teacher. Her previous years in the field of education consisted of working at a nearby elementary and middle school as a paraprofessional, either assisting a teacher in the classroom or engaging one-on-one with a specific student. Lucy never originally intended to become a teacher. Shortly after graduating with an undergraduate degree in geology, Lucy followed her mother’s footsteps and served as a paraprofessional as a way to find immediate
employment after college. It was here that Lucy recognized her love of working with students, and was often encouraged to pursue a teaching career by the teachers with whom she initially worked. After several years, Lucy decided to pursue a master’s of education degree that culminated in her student-teaching experience at the same school where she is currently teaching.

Lucy, a self-described procrastinator, recalled a time during her years as a high school student when the deadline for a long-term project was fast approaching. Lucy’s graduation from high school depended on her successful completion of this project. When Lucy met with her teacher to discuss her progress, he responded in manner that was blunt and unsympathetic by saying that it was unlikely she would graduate. Lucy took issue with the way she had been spoken to; her teacher knew she was in jeopardy but did not seem to really care. But in the end, Lucy successfully completed the project and graduated.

In contrast, Lucy’s fondest memory of school centered on a project assigned by her fifth-grade teacher. The students were asked to complete a writing assignment in which they had to describe a place they most wanted to visit. Lucy enjoyed this assignment because she knew it was individual to her personal experiences and she had a choice of what to write about.

Lucy related that she actively recalls both of these memories while working with her students and works to provide them with extra help and allow them to have some sense of choice in the work they do.

When I see kids who start to fall behind in class, who aren’t getting their work in or meeting deadlines, I pull them aside and check in with them. I try to keep tabs on them and help them not let everything pile up so that then they feel like they can’t get the work done. Basically, I help these students to learn how to not procrastinate… I like to give my students choices. That way, they have a chance to be genuinely interested in what they’re
learning. For example, in my environmental science class, students had to make presentations on various issues. They had the choice of how they’d make their presentations. One student made a video with a voice-over. Someone else made a Power Point…another made a Prezi because it’s a little more interactive.

These are approaches to teaching that Lucy has learned to use only in the past year or so. Lucy wants to provide more support for her students than she received when she was a student, as well as engage her students in their learning as much as she can by allowing them choice.

**Mark.** Mark is a social studies teacher and an alumnus of his school of employment. Mark, age 31, enthusiastically recalled his days as a high school student, citing his eagerness to learn and the inspiration he received from several of his teachers. Those reasons, he said, were why he was happy to be teaching at the school he graduated from. During his senior year of high school, Mark attended a trip to Greece and Italy as part of a college course at the nearby state college. This trip, along with his affinity for studying Latin and history, was what planted the seed for Mark to fall in love with traveling.

Mark followed his academic interests in college and pursued classical studies and archeology but did not necessarily intend to become a teacher. Driven by his interests, Mark took as many advanced courses in classical studies that he could during the beginning of his college career. As much as he loved the subject matter, Mark found the course load more challenging than he expected but persevered nonetheless. After graduating from college, he happened on an opportunity to teach Latin at a nearby high school for 1 year. Again, this was a challenging and humbling experience—it was his first time teaching and he had no teaching background. Although Mark had done well enough in his high school Latin classes, he soon realized that his subject knowledge was not as deep as it should be in order to effectively teach it. “So, probably
one of my first experiences was realizing that in order to teach, you do really have to know your subject well.” At the end of that first year of teaching, Mark decided he wanted to travel and found his way to Prague where he enrolled in a training course and began to study how to teach English to speakers of other languages. Armed with this new knowledge and a year of teaching under his belt, Mark once again realized that being an effective teacher was more difficult than he originally anticipated.

I was humbled. And that’s a little bit different type of teaching than [the] regular classroom, but it was a good experience because I think it just made me realize that teaching wasn’t going to just happen. You got to work to be good at it.

Mark then decided that he needed more formal education on how to be a teacher and enrolled in graduate school at the same nearby state college with which he initially traveled to Greece and Italy. After earning his master’s degree in education, Mark traveled again to various countries and primarily taught English to speakers of other languages. After returning to home and his alma mater, Mark is now in his first full year of teaching social studies.

**Tara.** Tara, 43, has been teaching English at her alma mater for the past 15 years. Before this, Tara taught for 1 year at another school in New England and served as an adjunct instructor at the nearby state college. In her present venue, Tara has served as a chairperson for the English department, a mentor for new teachers, and president of the school’s faculty association, and worked briefly in the school’s special education department.

Tara described herself in high school as a student who was smart and worked to please her teachers but who never really pushed herself in her coursework, especially during the first half of high school. However, Tara began to make a connection with her high school English courses and discovered her passion.
And it was… I had insights in my English classes [and that] is when things really started to click, and that’s where I had those “ah-ha” moments and those kinds of things, and I realized I could write and I got sort of that— that kind of feedback that fed that type of interest.

This positive feedback from Tara’s teachers left a significant impression on her. Her teachers’ sudden and unexpected acknowledgement of her abilities and encouragement fostered Tara’s growing passion for English. “You know, it’s just sort of those moments where people have recognized something in me that I perhaps didn’t even recognize myself.” However, it was Tara’s college experiences that helped to solidify her choice to major in English. Tara recalled being unexpectedly summoned by her college professor for whom she had just completed an exam.

You know, what does she want to see me for? And, so I made an appointment and I went in and, she’s like “So, what’s up?” And I said, “Well, you asked me to see you.” And she said, “Oh, I just wanted to get you in my office. I just wanted to [tell you] I really liked your midterm, I liked what you had to say, and I just wanted to talk to you.” And so, to me that was, that was huge. She was bringing me in to try and coax me into being an English major and to kind of get a sense of where I was on choosing a major and all that kind of stuff.

Tara’s passion for studying English was matched by her admiration for the teachers in her life. “Some of the best people I ever knew were teachers... People I admired were teachers.” This admiration, along with her initial roles as a teaching assistant in college and an adjunct instructor at the nearby state college is what helped Tara decide to pursue a career as a high school English teacher. Reflecting on these experiences, Tara cited the relationships with her former teachers as
the driving force behind her career decisions. Specifically, Tara acknowledged that her teachers paid attention to her as an individual, learning about and nurturing her strengths. Tara strives to do the same for her students today.

**Overview of Emergent Themes**

The data collected for this IPA came from semistructured interviews. Each participant was interviewed twice. The first interview was designed to capture background information about each participant in an effort to establish a context for each individual. In addition to collecting data regarding each participant’s age, years of experience, and so forth, open-ended questions were asked regarding each participant’s view of themselves when they were students. Participants were asked to recall and reflect on their most meaningful positive learning experiences during any time during their role as a student. Participants were next asked to recall and reflect on their most memorable negative learning experience. Lastly, participants were asked to consider how they thought these experiences have influenced their present-day teaching.

The second set of interview questions focused on participants’ reflections on how they came to choose a career in teaching, as well as their experiences early on in their careers, including notable successes and challenges and how each participant dealt with those challenges. Questions then focused on the participants’ present role as they were asked to consider the ways in which they have changed over time and what they believe led to these changes. Participants were also asked to consider what advice they might give themselves as beginning teachers. The final questions asked participants to consider their future selves: What did they believe would remain the same about themselves as teachers and what things did they expect to change? Each participant was provided with his or her profile as well as initial analysis and findings.
Participants were given the opportunity to comment and/or ask questions. Furthermore, the researcher asked clarifying or follow-up questions to some participants when necessary.

These open-ended questions provided rich and detailed discussions from each participant, which were audio-recorded, transcribed, and coded. Similarly coded excerpts of text were grouped together, and emergent themes were determined by identifying those codes that were used significantly more than the others. From this analysis emerged three primary themes with three subthemes that were applicable to all participants within the group (see Table 2).

Table 2

Themes and Subthemes

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Theme 1: Initial Shock

Transcript analyses quickly identified the struggles that all participants experienced during their first year or two of teaching. Such challenges ranged from managing student behavior to dealing with an unexpectedly excessive workload to trying to remain optimistic. It is interesting to note that four of the six participants had enrolled in traditional teacher-preparation programs before beginning their roles as formal classroom teachers, yet all participants were
quick to describe the somewhat unexpected difficulties the first year or two, regardless of whether they received formal teacher training. High and often unmet expectations of immediately engaging students in meaningfully designed learning experiences, coupled with numerous unexpected pitfalls, led all participants to describe just how difficult the first year of teaching was for them. Such findings are not atypical and are characterized within the shattered-image effect (Cole & Knowles, 1993).

**Subtheme 1a. Being thrown into the fire.** This subtheme describes the jolting beginning to the participants’ teaching careers as they dealt with a variety of challenges during the first year in the classroom. Naturally, many of these challenges were never anticipated, and many participants’ responses to various situations were virtually impromptu.

Bob described his interactions with a very large and irritable student who became angry when Bob asked him to settle down. Bob, who had yet to complete a formal teacher-training program, had to think of an immediate response to diffuse the situation in order to keep himself and the other students safe.

So then he kinda got up out of his seat and started heading for me like he was gonna do something. And so I said, “Well, we need to take this outside” and I threw open the door and he ran through the door, and I quickly stepped back and closed the door and locked it.

Kimberly recalled a time when she planned an activity to get to know each of her new students. She provided each student with a different colored Tic-Tac and had a plan in which each student was expected to share some personal but benign information with the other students. Instead, when Kimberly returned to the front of the classroom and faced the blackboard, the students began launching their Tic-Tacs at her. Needless to say, finding an
appropriate response to an entire classroom of students with this behavior was a significant challenge for Kimberly as she had yet to develop the necessary classroom management tools for this type of situation.

Lucy recalled a negative interaction with one of her students during her first year of teaching in which the confrontation elicited a sudden and unexpected emotional response. Eventually, Lucy had to leave her classroom in tears in the middle of a lesson.

I didn’t know what to do. I couldn’t go back to class because I was just mortified.

Someone came down and watched the rest of my class. But I was so embarrassed. And then, I was dreading the fact that I had to see them the next day.

Tara recalled arriving to work on one of her first days on the job only to meet with two of her school’s administrators who suddenly asked her to teach a special education course that she was not at all prepared to do. Tara, educated as an English teacher, had to immediately improvise a way to connect with the group of emotionally disturbed boys if she was going to be successful with this unexpected work assignment. Similarly, Mark recalled the difficulty of managing classrooms of 35 or more students numerous times during the day during one of his early teaching assignments. Most of the participants went on to describe the challenges they faced when interacting with students and managing behavior in light of their relatively young age: “It was a rough year as a 22-year-old with high school kids.”

**Subtheme 1b. A sobering reality.** This subtheme reflects the participants coming to terms with the numerous challenges they would face if they were to remain in the teaching profession. Lucy, whose first exposure to the classroom as an employee was in the form of a paraprofessional, held preconceived notions as to what a career as a professional teacher was
going to look like for her. She soon began to realize that her new role as a classroom teacher differed significantly from her previous role as a paraprofessional.

A para comes in for the day, for the most part leaves at 2:45, and comes back [the next day] at 8:00. And everything is done and clean, and papers are graded, and it’s like magic, and you keep going on.

As a paraprofessional, Lucy was able to provide support to individual students and assist the classroom teacher. When the reality of her being the full-time classroom teacher set in, Lucy began to realize the difficulties associated with planning a year’s worth of what to teach, how long to teach each unit, and the best ways to teach. These were concepts that Lucy never really thought about until she formally entered the teaching profession. “Everyone says, ‘Oh that first year is the hardest,’ but I didn’t really believe them until I was in the midst of it. And I’m like, ‘Wow, this is really hard.’”

Lucy’s recollection of coming to terms with the unanticipated workload and other challenges was common to all of the participants. Lucy and Mark, for example, described times when they would assign a fair amount of homework to their students, only to realize that they had just given themselves a significant amount of work in the form of grading when their students turned in the homework. John, who completed a teacher-preparation program as a nontraditional college student in his 30s, remembered several of his fellow college classmates who decided to abandon their teaching aspirations shortly after they started their student-teaching internship. When John completed his teacher preparation program and was hired to teach social studies, he began to tell himself to “just get through the week…. It’ll get better next week” as a way to survive his first year. According to John, “the first couple of years were tough.”
Subtheme 1c. Learning on the job. Participants eventually realized that if they were to become successful teachers, they needed to develop their skills and broaden their knowledge of teaching and learning. This subtheme reflects how participants accessed this learning for themselves because they had to become resourceful students during the beginning of their teaching careers. Some of this learning occurred in formal settings such as graduate programs, which were attended concurrently during the first or second year of employment. Other forms of learning occurred either out of necessity due to specific teaching assignments or as the result of making mistakes.

Bob, who was hired on the spot after attending an interview for a teaching position, even though he never had any real direct ambitions to become a teacher, enrolled in a master’s of education program sponsored by his school district. Bob was part of a cohort of new teachers who attended graduate courses in the evening after teaching a full course load each day. These new teachers were required to enroll in such a program, enduring the grueling schedule for 2 to 3 years, in order to earn their public school teaching certification as mandated by the school district.

Tara, who arrived on her first day of teaching only to discover that she would have to work with a group of special needs students, which she was completely unprepared to do, quickly realized that she would have to learn some new skills if she was going to be successful: “Probably the most significant learning experience when it came to teaching was to figure out how to reach those boys that had... every conceivable emotional and behavioral problem.”

John recalled a period of school and community disagreement over his school’s longstanding mascot, the Indian. John, the nontraditional college graduate who often questions the system, engaged in a conversation with students about this topic. John believed the school’s
mascot was culturally insensitive and debated the issue with some students who believed that the mascot should remain as it was. John decided to press his students by having them defend their positions with a solid argument. John eventually was accused of intimidating the students and had to meet with their parents to discuss the matter.

**Summary of Theme 1.** Of the six participants, four completed a formal teacher preparation program before entering the profession. With or without formal teacher preparation, all six participants described their first year of teaching as challenging in one way or another. Their recalled experiences relate what was necessary for them to do in order to survive the first year of teaching and continue with their chosen profession.

The overall perception of the participants was that each was overwhelmed to varying degrees during their first years on the job, with the full responsibility of the classroom now resting on their shoulders.

All participants essentially survived their first year of teaching by showing signs of adaptability, perseverance, and a sense of overall optimism. Knowing when your individual skills may be inadequate for a specific situation seems to be as important as having a sense that the situation will improve over time. When the reality of the situation was acknowledged and understood (i.e., that teaching was going to be much more difficult than originally anticipated), participants used both their sense of self-awareness (e.g., Mark, who realized that “good teaching wasn’t just going to happen” and that he would need to improve his skills) and sense of optimism (e.g., John, who kept telling himself that the following week would be better) to persevere and continue with their challenges. Without this self-awareness, it seems likely that the first year of teaching for the participants would also have been their last.

**Theme 2: From Start to Present**
This theme describes some of the transformative processes that each participant experienced since that first year as a classroom teacher. Although the experiences of each participant are unique, three subthemes emerged as common types of experiences: (a) the value in professional development, (b) the support of colleagues and mentors, and (c) the subsequent development of tools, ideas, and perspectives. Professional development provided participants with research-based knowledge and information, whereas the support of colleagues and mentors provided participants with emotional support and specific pragmatic approaches toward teaching and learning. Together, these two subthemes, along with more exposure to teaching over time, allowed participants to develop their own tools, ideas, and perspectives and, ultimately, a sense of independence and growth.

Subtheme 2a. The value in professional development. The participants each described how they drew on professional development as a source of applicable skills and knowledge and how it has shaped them into who they are today. Whether this professional development was in the form of formal graduate coursework or the occasional in-service workshop, participants actively sought to apply what they had learned to their own teaching in an effort to become more effective in the classroom.

Professional development in the form of formal graduate coursework was identified as a significant source of useful knowledge for the participants. This is true regardless of when the professional development was undertaken. Bob, for example, who enrolled in a graduate education program as soon as he began his first year of teaching, described how many of the ideas presented and studied at the time were somewhat nascent.

You know, some things weren’t as practical and didn’t help me as much, at least at that particular moment, but they did give you a good sort of a research basis for education in
general, which I think is valuable. I think a lot of our ideas about how people learn have changed since then. But I think there were some things, particularly in science, that I think we were ahead of the game a little bit because we knew that learning by doing was a lot better than, you know, learning by just reading about it.

Bob’s description of his learning experience as a graduate student underscores how various frameworks of thought have the ability to influence teachers later in their careers, after they have moved out of “survival mode.” Although professional development that provides new teachers with immediate tools for managing the stress of the first year might be desirable, the value of Bob’s professional development became evident to him when he was able to establish himself as a teacher several years after he entered the profession.

Mark, who entered the teaching profession with no formal training, entered a graduate program after a couple of years of teaching in different venues. For Mark, the knowledge and insight provided by this program were critical to his future success as a teacher. When Mark was asked how valuable his graduate program was to him as a teacher, he simply replied, “I don’t think I would probably have continued in the field without it.” According to Mark, his graduate program provided him with the tools and insights that were immediately useful to him as a new teacher.

Lucy, also relatively new to the teaching profession, similarly described the value of her learning experiences as a graduate student as being immediately useful to her in the classroom.

The most beneficial thing that I learned was planning and, you know, backwards design, and things like that, just because I was never in the education world. So I never knew all of these great things that you can use or could use to help kids learn. I just did it on my own.
In addition to gaining skills in planning and organization, Lucy also recalled acquiring practical insight associated with human growth and development as well as educational psychology.

It was very useful, especially the different stages of the brain, especially during that adolescent period that I was working with. Those middle-schoolers are very compulsive and just do things without thinking about it. So I would remind them, you know, you should stop and think about the problem that you’re doing. If it was a math problem, what numbers are you given? What are the units that you’re given? Don’t just rush through [the problem]… Step back and take your time.

Kimberly, who earned her master’s in education well after she established herself as a teacher, recalled in a similar fashion to Bob how her coursework has informed her teaching in terms of how her students learn. Specifically, Kimberly attributes her graduate coursework to her knowledge of the different ways that students learn, thus enabling her to provide students with multiple opportunities to demonstrate their learning.

John also recalled how his coursework as a graduate student has influenced his thinking and practice over time. John, like Kimberly, enrolled in his master’s program after he was established as a classroom teacher. He described how his formal coursework has shaped his view of leadership within schools (as opposed to the focus of teaching and learning as described by Bob and Kimberly). “My advisor used an interesting term and that was, you know, trying to develop instructional leaders, and I think that resonated with me because that’s different than being a— a manager.” This professional development, it seems, has provided John with the skills, knowledge, and confidence to wield his influence beyond his classroom and further “question the system” for the benefit of students.
Tara pursued her master’s degree in education near the middle of her career when she was “getting a little restless,” and described this professional development experience as refocusing and reenergizing. One major takeaway for Tara was the relevance of her graduate program. Not only was what she was learning in her master’s program relevant across virtually any discipline (as opposed to any relevance specific to her discipline) but it also helped her to realize the importance of relevance for her students. Furthermore, Tara placed great significance on the collaborative aspects of this program and her cohort of 17 other teachers from various disciplines and backgrounds.

We learned from, problem-solved with, and celebrated each other for about four years. We had a range of perspectives—kindergarten, middle school, high school, PE, Special Ed, core academics, the arts, etc.—and it helped to see how we are truly interdependent when it comes to education.

Participants’ professional development was not limited to their formal completion of graduate programs. Several participants noted the value of various workshops, conferences, and school-sponsored professional development initiatives. Tara, for example, articulated that “conferences at the right time, on the right topic, with the right people [are] always productive.”

Bob recalled attending a multiweek workshop during his third year of teaching after his principal asked him to develop an AP Chemistry class. Bob not only found the intensive studying of his discipline useful but also thoroughly enjoyed networking with fellow high school science teachers from various parts of the country. Likewise, Kimberly cited that school-driven professional development initiatives have influenced her thinking about how she teaches and how her students learn. Mark recalled a summer workshop he recently attended that helped him to develop a deeper understanding of critical skills and student-centered learning. For Mark, all
these learning experiences—graduate coursework and workshops—have been useful and packed with information and ideas. Mark recognizes the value of his learning experiences and, in making sense of his professional development, states, “I feel like I’m putting the pieces together with all of the [professional development] and all this stuff that I’ve been working on.”

**Subtheme 2b. The support of colleagues and mentors.** There is no doubt that the support provided by colleagues and mentors has been of the upmost importance to each participant. Teaching and learning do not occur in a vacuum and are fundamentally social interactions, especially in a formal school setting. Participants’ experiences with groups of their coworkers were shown to be influential factors that helped shape the participants’ views of themselves as teachers. Participants also described the importance of focused professional relationships between themselves and one or two other teachers who served as mentors of some sort, even if the title of mentor was never formally used.

Participants’ perceptions of the value of their collegial relationships with coworkers were deemed important throughout the timespan of each participant’s career. Some participants were quick to share their interactions with other teachers during the first few years on the job. Bob elaborated on the value of his professional development associated with introducing a new AP Chemistry course at his principal’s request just a few years into his career. In addition to the useful content knowledge that he gained, Bob valued the discussions he frequently engaged in with other science teachers, many of whom taught at other schools. When Bob was asked what he found to be most beneficial at this particular professional development event, he was quick to highlight the interactions with other teachers.

The parts of the courses that were very useful [were] when we could exchange ideas and talk about our own common experiences and things like that… You know, just the
networking there with other teachers… [they] ranged from very inexperienced like me to very experienced, and it was a mixture of everybody.

Similarly, Kimberly recalled her first year of teaching and how having a colleague who was also a young first-year teacher was a source of encouragement.

What helped me the most was that I was actually teaching... Another young female teacher and I were both hired to teach together. Neither of us had any experience, we were both teaching at the same time and we worked together a lot. So I would say that it’s more like peer, like colleague support, but it was peer.

Kimberly identified this collegial support in terms of a peer relationship due to the similarities between herself and the other new, young female teacher. By connecting with each other, Kimberly was able to see that her struggles as a new teacher were not unique; knowing she was not alone helped Kimberly believe that she could persevere through the formidable challenges associated with her first year of teaching.

John’s first year of teaching took place at his alma mater, providing him with some established familiarity with many of his new colleagues, several of which happened to be his teachers when John was a high school student. Naturally, as a new teacher, John’s relationship with these teachers was quite different than it was when he was a teenager. John’s school was small by any standard, with a total of 10 teachers working at the high school level. Nonetheless, John frequently relied on a couple of those teachers to guide him through the challenges of his first year of teaching. “There were very few people I would ask for help but they got me through a lot of rough patches.” John emphasized the importance of those collegial relationships he formed during his first year of teaching, citing these experiences as “crucial.”
Some of the collegial relationships described by participants focused on one highly influential individual who unofficially served as a mentor during their beginning years. Bob described a seasoned fellow science teacher who took him under his wing during his first year of teaching.

I’ve had other teachers in my past that have kind of helped me out with advice, and certainly my own father. But I had another…my first teaching job in California, I had another teacher who…you know, he’d probably been teaching about 20 years when I came on board and he was a wealth of information. You know, just really practical stuff. I mean, just do this, do this, and try this, you know, this is what I do. He wasn’t real pushy, but he…[had] a lot of good ideas.

It seems that this experience, which occurred over 30 years ago, has helped to shape Bob into the teacher and colleague he is today. Bob seems to have unofficially taken on the role of mentor for Lucy and often uses his experience to provide her with wisdom and insight when it comes to teaching chemistry.

And we give the same quizzes and everything. So he and I are very, I don’t know, simpatico with what we’re teaching. So it’s easier for me because I have him to lean on and I have, we have, more idea-time together, I guess. Or I can ask him, “Oh, how did you relay that information to your kids?” Maybe if it’s something that I’m just not sure about, like “This still isn’t clicking for me” or “The way that I’m thinking about it isn’t working,” I can ask him, and he replies, “Oh, this is what I’m doing.”

For Lucy, her connection with Bob (and other colleagues) helped her through the struggles of her first year and set her up for a more successful second year in the classroom. Furthermore, this relationship has allowed Lucy to impart some of her expertise to Bob,
especially with regard to implementing new technology in the classroom, bolstering her sense of efficacy and self-confidence.

Both Mark and Tara teach at their alma mater and, therefore, were already familiar with several of their colleagues by the time they joined their current school. Two of Mark’s former teachers (one being Kimberly) have served in the unofficial role of mentor for Mark, who described these relationships as “great because we already had a connection…. I mean, they were very good role models; I still go to them today.”

Tara shares a similar relationship with another of Mark’s former teachers, Chris, although Chris began teaching at Tara’s alma mater the year after Tara graduated from high school. Tara described a profoundly memorable interaction with Chris when she was having an extremely difficult time working with a group of emotionally disturbed boys during the beginning of her career.

I was having a total meltdown and he said, “Well quit,” and I said, “I’m not going to quit. That’s not an option.” He said, “Well, then you need to figure out how to teach them.” And that— that encounter with… him has been in my mind forever.

**Subtheme 2c. Developing tools, ideas, and perspectives.** Participants valued both their professional development and their connections with colleagues and/or mentors. This combination of professional learning and personal relationships seems to have served as a fundamental ingredient in developing (a) their own tools in the classroom, (b) ideas about how to be a more effective teacher, and (c) perspectives about their roles and growth over time.

Various changes in teaching were described by the participants. Many of these changes were the result of trial and error; some occurred over the period of several years, whereas others occurred in a much shorter time. Lucy, now in her second year of teaching, described her first
year of teaching as one in which she assigned to her students what she now considers excessive amounts of work. For Lucy, every assignment that she believed she should distribute to her students quickly turned into an avalanche of assessment and grading for herself. Furthermore, Lucy recalled the stress involved with what she now considers to be overly meticulous planning of every detail, regardless of size or significance. However, when the school’s J-Term arrived (a three-week project-based learning initiative, with suspension of classes as normal between the fall and spring semesters), Lucy had the opportunity to try something new in terms of her planning and teaching.

I guess it was after that second semester that I realized that I needed to stop giving homework as, well, homework and instead provide more in-class work. And what you don’t finish, then you finish at home… Like emotionally, dealing with things and stuff like that, in the beginning of the first year, I was very stressed out. And I was so focused on planning out every single second. And then, it was like a major swing, like to J-Term—I didn’t really plan much. It’s like I have weekly plans and people had all this [unstructured] time in between. And [they] got to do what they wanted. And I started to see how that worked.

John described how his engagement of students has changed over the years as his teaching has evolved to more of a Socratic method. John has become more comfortable letting go of the plan at hand and allowing students to guide the discussion.

I think my last couple of years in the classroom was much, as I think back on it, was much more advisory…I mean, I had a plan and we had content, but inevitably, one of my kids would say something that would be related to the historical topic or whatever.
Likewise, Tara described her need to change her teaching style to better suit the needs of a challenging group of students during the beginning of her career.

I think what helped is— is figuring out how I could make things relevant. So, in the beginning, it was painful because I was trying to teach the way that I thought I should teach and, you know, this is how you teach social studies and this is how you teach English and— I don’t know what I was doing with math but I was following some book and this is how we went through it and— and that was just…miserable for them. And I had to figure out how to change things so that it was relevant to them and something that they could latch on to. So, instead of going through the math book page by page, we started looking at, like, okay, you’re building a house and how much flooring do you need and you know, all that kind of stuff that could just make it a little bit more relevant for them. So I think I had to change my ideas about what to teach and how to teach. And that’s sort of what made the difference.

When Tara was asked how she developed this awareness for the need to challenge her own preexisting beliefs about what teaching should look like, she credits her colleague, Chris, who subtly challenged her notions.

I mean I think he was sort of kind of trying to get me to come to the conclusion that I can’t teach [them] what I normally do…but he didn’t— he never came out and said don’t do this.

Bob, whose first year on the job included locking a student out of his classroom in order to avoid a physical altercation with this student, described how he has learned to manage classroom discipline over time. “You know, just in terms of discipline, in terms of keeping law and order, I don’t fight every battle anymore.”
In addition to adding to each participant’s repertoire of tools for improving teaching, participants also displayed a willingness to explore new ideas regarding teaching and learning. For the participants, being open to new ideas meant accepting that teaching is a dynamic profession and change is the one constant. Bob, for example, not only accepts the concept of constant change within his classroom but he willingly embraces it as a source of inspiration and satisfaction.

It’s endless variety, and that’s, you know, if you find a job that has endless variety, that’s a great job. So, I never do the same thing every day. The one thing about education is it’s always something new. Every year, every month, every— You know, you’re going through a curriculum that’s dynamic. I mean, it’s not— you’re not doing the same thing. It’s not a menial kinda job where everything’s, you know, the same repetition of the previous day or whatever. It’s— it’s, you know, days are different, weeks are different, months are different, and certainly years are different. You know, what can you do to adapt?

This notion of adaptability is also reflected in Mark. Having had numerous teaching assignments in various parts of the world, Mark acknowledges being open to the idea that no one in the field of education is an absolute expert who is better than all others.

’Cause you never know, like, if somebody probably can do it better than you can… I think just having taught in so many different situations and so many places, I feel like I can just adapt very easily or very quickly to a particular situation.

In less than a year, Lucy decided to abandon her strict regimen of constant homework assignments and collection of grades for her grade book after she realized that her practices were not necessarily beneficial to her students and certainly not beneficial to herself.
I guess now, I just know there’s not one cookie cutter that’s going to solve the whole world’s problems. You know what I mean? There’s— there’s so many different ways to approach these types of [problems]... Especially with chemistry— it’s so abstract, like, you— you’re never going to hold an atom in your hand. You’re never going to see a single proton, and yet, you have to create some sort of visual concrete thing for students to think about, because otherwise [students will ask], “Why am I learning this?” Lucy’s willingness to explore new approaches to her teaching is driven by her desire to better meet her students’ needs. Tara described a similar self-reflection of her own teaching as she embraces a student-centered approach in her classroom.

So, I think I had to change my ideas about what to teach and how to teach. I’m willing to stop things midstream to kind of regroup… I think that’s critical, and then as time went on, through the years, you realized that [it] wasn’t— it wasn’t just a trick for a particular group of kids, it’s something you have to do for all students.

Kimberly reflected on her own changing attitude toward her students and clearly identified the need to connect new ideas of education (and even herself) to her students’ learning.

I feel like we’re more lenient about some things than we used to be. We’re more accommodating about things than we used to be, but is that a bad thing? I mean, I think I am a much more flexible person now than I was even five years ago… And then, there’s also this whole other piece of, you know, am I changing or are the kids changing? So there was that shift, and it definitely was [a] new approach to teaching, but it was also a new way of viewing students, like how— the way I thought about kids. Um, even though I feel like I’ve always had that understanding that not all kids are the same, I don’t know if that understanding always translated into best practice for how we assess their learning.
The development of new teaching tools and the openness to new ideas have served as factors that have shaped participants’ perspectives and philosophies about the teaching profession in general, as well as their personal view of their teaching and learning. John could sense this change in perspective regarding his role as a teacher as he described his relationship with a former colleague who also happened to be one of his own high school teachers. “And by that time I think my just general philosophy of education had changed. We always got along, we still do to this day, but there was definitely a professional divide in terms of how we approached teaching.”

With a teaching career spanning over three decades, Bob has developed a perspective on teaching that involves both good and bad days. His philosophy is reflected in his enthusiasm to embrace an ever-changing experience in the classroom.

I’ve developed a philosophy over the years, and I know there’s gonna be good days and there’s gonna be bad days, and I know there are vastly more good days than bad days, so…if something doesn’t go well one day, I know the next day it’ll be better. You know things cycle, and I don’t want to fall too much into a hole… But I know there are plenty of good times ahead and, if something does fall [apart], that it’s not gonna be, you know, a life-ending kinda thing.

Maintaining this sense of optimism was also important to Lucy, especially considering that last year was only her first year of teaching.

I would give myself the advice to not… I guess to— to not take things so personally. Um, and to also, I guess, think about more successes than failures and focus on those, because when you asked me that question before, I couldn’t think of many successes.
In fact, most of the participants noted that they learned, over time, not to take many of the challenges they faced in the classroom too personally. By doing so, these challenges became less corrosive to their self-esteem and more of a learning opportunity for improvement. Mark shared his perspective of life and school: “As I keep saying, there’s much more in life than just hitting the books.”

Although all participants demonstrated perspectives that were heavily influenced by their experiences in the classroom, Kimberly and Tara cited their role as a mother of younger and/or high school–age children as another factor that has shaped how they view themselves as teachers. Kimberly questioned herself as she compared her students to her own children.

I don’t know if I unfairly expected too much of them before, and now, they’re just, you know, they’re almost the same age as my kid. And so having a better sense of what I expect from my own child, maybe I should expect that from them. It’s a different feeling, about maybe my patience for them or maybe my tolerance for their behavior, but what would I expect from my own child? Are they needing that— you know, where are they in relationship to that?

Tara, whose older son is enrolled in the same school where she teaches, shares a similar perspective of her students compared to her own children.

I think as my children have gotten older, they seem— the students seem younger to me, and so when I first started and I thought of teenagers, I thought of them as a certain maturity level and, you know, nearly adults and all of this, but as my kids have gotten older and I recognize just how young they really are, I think I’m a little— I don’t know, a little— I don’t know if kinder is the word because it’s not like I wasn’t kind to the other
ones, but I’m a little easier on their— their immaturities that crop up because they are still just kids.

**Summary of Theme 2.** This theme describes the most influential factors that have transformed the participants over time. All participants cited their own professional learning as fundamental in their transformation as teachers. Professional learning, however, provided only one aspect of perceived growth. Personal and professional relationships with other teachers were also shown to be significant to each participant. These relationships with other colleagues or mentors provided the participants with a human connection in which their preexisting beliefs were challenged while their efforts were supported. Over time, participants were able to develop their own perspectives and philosophies of their role as teachers. Although this amount of time varied between participants (e.g., Lucy and Bob), there is little doubt that time in the classroom, coupled with professional learning and personal support from colleagues, was necessary for participants’ perspectives to evolve and mature.

**Theme 3: Present Status**

This theme describes participants as they are now, having built on their beginnings as new teachers and taken their own journeys that led them to their present status. Three subthemes denote the present status of the participants as teachers: (a) participants’ views of students as individuals, (b) what participants believe is good for students, and (c) how participants ensure that students are provided with learning opportunities that are real and relevant.

**Subtheme 3a. Students as individuals.** In just 1 year of teaching, Lucy began to realize that the way she taught needed to reflect the individual needs of her students, as opposed to a uniform approach to teaching.
I think that last year, I was really trying to put everything in this tight, clean, neat box.

But that’s not how it is. Kids are all over [the place]. And they’re all learning at different levels. And I knew that, but I didn’t know how to achieve that in my classroom yet.

John described how he began to understand that students’ aspirations do not necessarily have to follow a prescribed path such as going to college, even if that meant possibly bucking a perceived trend or expectation within his school.

I also began to realize that not every kid is going to college. I think there is a real push because, I mean, schools now— it’s kind of a competitive business whether you are independent or public. It’s really a competitive business.

Kimberly offered an insightful view of how some teachers might, subconsciously, see themselves in some of their students. Accordingly to Kimberly, this mutes the reality that the teacher is truly separate from those students and that students are separate from each other, and she acknowledged the importance in her own teaching of understanding that students are truly individual.

That experience helped me to see, I think for the first time, students that were different from myself. And I think sometimes as a teacher, we identify with who we were as students, and that was an experience of— there’s this whole world of students that you have that aren’t like you. So they either don’t learn like you, they don’t have the same environment that you do, they don’t have the same aspirations that you do. They don’t have the same support that you do. And that was, I think, a really important lesson to take forward as a teacher, that, you know, there’s not twenty Kimberlys in the class.

Bob also echoed this idea on reflection of his own teaching and understands that students will have their own views about the importance of what he teaches them.
I guess I’ve tried to be less, you know, certain that everything I teach them is of the utmost importance, and that they should feel that, too. You know, not everything that’s important to me is necessarily important to them.

Mark similarly acknowledged the value in truly recognizing students’ needs as opposed to relying too much on what he as a teacher feels students need. “It’s not [simply] putting my experience on them as [much as] it’s trying to understand what their experience is and just looking at what skills they’re going to need.”

Tara described the importance of having an understanding of not only individual students’ needs in the classroom but also her students as individual people. By taking the time to understand her students’ lives outside of school, Tara can tailor her teaching to better meet her students’ individual needs.

You think about all of the stuff that these poor kids have to do and all the pressures that they have and all of the responsibilities that are on them, whether it’s, you know, school or sports or family or jobs or, you know, financial burdens on their own, in their own families— that they bring all of that. And me being hard on them is not helping anything— and just recognizing that they have these full, complicated lives and I’m just a portion of their day [and knowing] just what their real backgrounds are, and then giving them work that promotes dignity.

Bob also sees the importance of viewing students as individuals by working to build a sense of trust and considers this connection with his individual students as having the highest level of importance.
But, you know, I keep that as kind of a sacred thing that I don’t want to lose that with—
with a kid and—and have him think that, you know, that I’m just another adult that he
can’t trust or that’s not fair.

This subtheme underscores participants’ current practices of seeing their students as more
than a list of names on a roster. In their own ways, the participants seem to embrace a practice
that reaches beyond the teaching of skills and content knowledge in their classrooms. In essence,
each participant finds importance in supporting not just their students’ growth and learning but
their humanity as well.

**Subtheme 3b. What is good for students.** Across the board, participants described their
roles in supporting students in a variety of ways that reached beyond academics. This seems to
occur when teachers suspend their own preexisting judgments and prejudices about their students
and identify the students’ specific needs as opposed to focusing only on the teachers’ desired
outcomes or agendas.

Sometimes, putting students’ needs ahead of a teacher’s needs is as simple as being
available. This availability, typically outside the classroom, can be for the purpose of academic
support or personal support. Either way, the message conveyed to students is that their teachers
care about them. Lucy related, “I know that just being available to the students is something that
they like and that I’m willing to help them, and then, I do help them.” Bob expressed a similar
sentiment and wants to ensure that his students know that he cares about their success. “I hope
they realize that I care about their learning and, you know, that I’m willing to help them if they
want the help.”

Other participants recognized that sometimes, the standard conventions of school as they
know them (specifically, the emphasis on grades earned and work completed) can be detrimental
to students. Tara described taking a step back to understand a struggling student’s situation and then reconsidering the expectations she placed on the student. “You know, here I am thinking that this kid needs to do her homework and then being, like, okay, this is the least of this kid’s problems.”

John does not mind bending the rules for a student if he knows that doing so will truly be in the student’s best interest.

The kid comes in— a senior, a high school male— just balling his eyes out because you just gave him an 89 and his mother is going to ground him for two weeks ’cause he didn’t get a 90. It’s no big deal— scratch out an 89 and write a 90.

For John, the participant who openly questions the system, this approach is typical. Furthermore, John is always looking for ways to help students navigate the school system, especially those students who do not conventionally fit within the existing construct.

When I first read it, this idea of personal learning plans and flexible pathways, to me, it just clicked. This is what’s good for kids— I mean they— they need advisors, they probably don’t necessarily need teachers in the traditional sense. They need— they need people to guide them in ways that they are able to find their passion.

Kimberly tries to be mindful of what she asks of her students and whether or not her expectations might inadvertently place students in uncomfortable or even compromising situation.

Like I said, I try to think a lot about what I ask kids to do. Am I putting them on the spot? Am I making them try to do something in front of others that they really can’t do? I always [try] to encourage kids— if I’m asking you do something that you’re not
comfortable with—especially with the beginning of the year when you’re getting to know kids, and you don’t, really… You’re still assessing their strengths and weaknesses.

The notion of doing what is best for students is clearly shared by each participant, but with some differing interpretations. Nonetheless, the participants all display a student-centered approach to teaching and learning that often transcends any specific skill or knowledge acquisition. In other words, the participants’ interpretation of what is best for students might begin with providing academic support but then transcends beyond the framework of academics into the realm of personal growth and a focus on students’ overall well-being.

**Subtheme 3c. Real and relevant.** All participants, in one way or another, described the need for learning experiences to be real and relevant if they were going to be meaningful. John highlighted the importance of helping students identify their interests and then shaping students’ learning opportunities around these personal interests. “I think also trying to look at kids’ interests first, because if it’s something that they are interested in and passionate about, they’ll put the time in, right?”

Sometimes this need for relevance was reflected in participants’ own professional learning. While Lucy was pursuing her master’s in education, she was also working as a paraprofessional in a nearby school. This venue allowed Lucy to apply some of the principles that she learned in her graduate coursework. Lucy also described a memorable learning experience from her days as an elementary school student. The assignment she had to complete contained an element of student choice, meaning that Lucy had a say about what her work would entail. Upon reflection, Lucy recalled, “That made me feel really good about the assignment—that it was mine and that I found it personally interesting.” Lucy has used this realization when
planning learning experiences for her students by also allowing them a sense of choice in their learning.

Mark also connects his own real and relevant learning experiences to his classroom practices. A self-confessed history buff and avid world traveler, Mark described how reading about history is not enough; making history real and relevant implied that he also needed to travel.

This has kind of always been my little tick in my personal life and, again, I don’t know how it comes across but, for me, it was very important also to not just read the books but to go out and see, you know? And that’s why I feel like, for me, the traveling was a—an important piece.

Mark then actively connected this idea to his own teaching: “I’m hoping to continue to develop ways for students to realize the history in their own lives.”

The other participants described the need for real and relevant learning experiences for their students and emphasized the importance of this idea. Tara emphatically underscored the importance of designing learning opportunities so that students can readily find the relevancy in the lesson.

I think a question should always be What are you doing to make your content relevant? I think that’s—I think that’s crucial. I think relevancy has to be first and if you can’t—if a kid asks why do I have to learn this or why are we doing this and you don’t have an answer, there’s a problem.

Furthermore, Tara claimed that designing these relevant learning experiences for students becomes a way for them not just to gain an education but also a potential way to become more engaged citizens.
And just recognize…how all of these things may seem really far away, but they are influences, or they are silent influences sometimes, but they definitely shape our perceptions and, if we don’t— it’s hard to— like one quote that I heard recently is that “It’s hard to change the world if you don’t know much about it.”

Bob hopes that the principles involved with the scientific method help students become critical thinkers and, further, allow them to discover truth for themselves.

You know, maybe in their life they do experiment a little and say, “What if I do this? And what might be the effects of this?” And they come up with an idea and then they try to figure out if their idea is right.

Kimberly wants to ensure that her students can connect seemingly disparate ideas from history to be able to better understand the larger picture. Like Lucy and Mark, she draws on her own experiences as a child and reflects this into her teaching. Kimberly, like Bob, described her desire for students to apply the skills learned in one venue to different situations so that her students can eventually take control of their own learning over time.

It’s not about memorizing things, but it’s about having an understanding of the big picture. It’s about, you know, these skills that you can take forward and use in other areas of your life. You know, being a critical thinker, being able to put things into context, you know those kinds of things you can use in school, in different academic areas, but it’s also part of skills of life.

**Summary of Theme 3.** This theme highlights the shared views of the participants as related to a student-centered approach to teaching and learning that developed over time. Participants were able to speak of their students as individual people as opposed to simply students within a class or names on a roster. This student-centered view is fostered by and
supports the participants’ abilities to examine their own teaching to ensure that the experiences they offer their students are indeed beneficial to the students’ well-being as opposed to the teachers’ agendas. In addition, the need to create real and relevant learning opportunities for students in order to engage them in meaningful ways was also deemed significant.

**Summary**

Each participant described the first year of teaching as very challenging. This description was applicable for all participants, regardless of whether they had received prior formal teacher-preparation training. Despite a sense of being overwhelmed during this time, participants came to terms with the new reality of being a first-year teacher, needing to quickly learn from their mistakes if they were going to continue in the profession. Professional development and support provided by colleagues and mentors helped participants move beyond their first year of teaching and helped shape them into the teachers they are today. These formal professional learning opportunities and personal connections with colleagues, coupled with time, allowed participants to develop perspectives about their own sense of self-efficacy and discover how to independently help themselves become better teachers. Lastly, all participants, regardless of age or time in the classroom, recognize that their practices should support student growth, not just academically but as individual people, by means of connecting individual students to learning opportunities that are authentic as well as relevant to each student’s life.
Chapter V: Discussion of Research Findings

This chapter reviews the problem of practice, provides an analysis of the data, and compares the findings against the theoretical framework and related literature. Limitations of the study and suggestions for future research are also discussed.

Summary of the Problem of Practice and Research Methodology

The purpose of this study was to explore the experiences of teachers in an independent, East Coast high school that have contributed to their skill development over time, as well as to understand how these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom. Essentially, this study sought to describe teachers’ experiences over time that led them to become the educators they are now as compared to who they were at the beginning of their teaching careers.

Summary of Major Findings

Theme 1: Initial Shock. Regardless of prior preparation, all participants described an extremely difficult, if not overwhelming, first year of teaching. Like many new teachers, five of the six participants were, at the time, only a handful of years older than their oldest students. This relatively small difference in age between teachers and students, coupled with inexperience, elicited feelings of anxiety, embarrassment, fear, and stress associated with managing student behavior. Adding to this challenge were overfilled classrooms for at least one participant and sudden changes in teaching assignments for another participant.

Within the first year or two of teaching, all participants began to realize just how much work was going to be required if they were going to survive beyond this time in their careers, let alone be successful. This new reality was common to all participants and was, in some cases, inadvertently self-induced. At least two participants initially believed that their worth as teachers
could and should be gauged by how much time they spent preparing for their classes and by the amount of work they assigned to their students. These teachers spent countless hours planning and grading, resulting in an unintended focus more on teacher productivity and less on student outcomes.

One of the ways that some participants coped with their new reality was to employ an ongoing sense of optimism and belief that the situation would eventually improve. Other participants developed a sense of camaraderie with other new teachers in similar situations, allowing for the realization that many of the challenges faced were not unique to them. In addition, participants started to realize that they needed to either gain new knowledge or apply existing knowledge to their situations in order to develop their skills, become more effective, and simply survive their first years in the classroom.

In fact, the notion of survival seems to serve as the dominant descriptor of the participants’ first years of teaching. The way participants tended to cope was to look for ways in which they could change in order to adapt to their new environments. This internal view was about self-preservation and never included expressing a desire to change the external factors that were viewed as the sources of stress. In other words, participants identified the need to change themselves if they were going to change their situation, as opposed to alleviating stress by seeking smaller classes, easier disciplines to teach, and so forth. At this stage, no participant spoke to the long-term view of where they believed their new careers were taking them, their energies were seemingly focused solely on returning to and getting through a difficult situation from week to week and even from day to day. Furthermore, participants could not speak to their roles in terms of how they influenced their students’ outcomes. This internal and somewhat
teacher-centered view of necessary change in order to survive eventually began to shift to a
student-centered view as participants’ gained experience and developed their skills.

**Theme 2: From Start to Present.** Over time, participants emerged from being
overwhelmed and merely trying to survive their first years of teaching. By moving beyond this
initial state of shock, the participants began their own journeys that would lead them to become
the teachers they are now.

**The value in professional development.** Professional development, in one form or
another, was shown to be a critical component in developing participants’ skills and knowledge
of teaching and learning. Although all participants held masters’ degrees in education, it should
be noted that participants earned their degrees at varying times throughout their careers.
Although half of the participants earned a master’s degree before (or started a graduate program
concurrently with) the beginning of their teaching careers (Lucy, Mark, and Bob) and certainly
found their programs useful during the first year of teaching, their survival beyond the first year
of teaching cannot be directly attributed to their advanced formal education. The remaining
participants earned their graduate degrees after they were well established as teachers.

The usefulness of these advanced degrees in terms of what participants were able to learn
and apply to their own teaching is undisputed. What is not ubiquitous is the level of usefulness in
comparison to time spent in one’s career and how the participants’ made sense of their learning
experiences. Lucy and Mark, for example, found immediate use of the skills and knowledge
provided by their graduate programs and relied on what they learned as survival tools for their
first year of teaching. Bob, on the other hand, who enrolled in a graduate program concurrent
with the beginning of his teaching career, seemed to find greater value in some of what he
learned many years later. John, Kimberly, and Tara embarked on their graduate degrees several
years after becoming comfortable within their careers. Tara sought the challenge associated with earning a master’s degree because at the time, she was “getting a little restless.” John and Kimberly pursued their graduate degrees in order to increase their efficacy as educators. The purpose of earning these advanced degrees was not consistent across the group: for some participants, the graduate programs in education served as initial teacher preparation for newcomers to their field, whereas for other participants, the programs served as teacher enhancement.

Other professional development opportunities were also deemed valuable. Although these learning opportunities (conferences, workshops, etc.) helped to further participants’ skills and knowledge, they were also valued for the chance to network with other professionals in the field. Participants found value in learning opportunities that allowed them to connect with other professionals by exchanging ideas and perspectives as well as sharing experiences.

*The support of colleagues and mentors.* The support of colleagues and mentors was equally important to all participants. How and when colleagues and/or mentors influenced the participants varied greatly, however. Tara, for example, recalled her time as a student and reflected often on her interactions with her teachers in high school and college. These interactions led her not just to major in English but to become an English teacher. Tara noted the numerous positive interactions with her teachers that constantly nurtured her growing interests and talents. Tara’s active recalling of these influences implies that she is aware of the potential influence that she might also have on her students, especially when sharing with them her own experiences as a student and the positive influences of her former teachers. Mark was a student of Kimberly’s and is now a colleague. Kimberly, along with Chris, another former high school teacher of Mark’s and now a colleague, were both identified as role models who Mark actively
seeks out for advice. Similarly, one of John’s former high school teachers eventually became his colleague. John, who entered college as a nontraditional student, was able to shape his own views of education that were somewhat divergent from those of his former teacher. For John, this collegial relationship became an opportunity to challenge long-standing notions of education with someone he trusted and respected.

Although some participants were quick to speak to how their past teachers influenced their decisions to become teachers or their teaching practices, attention was also paid to current relationships in the work place. The influences of past teachers were described as more inspirational and further removed from the present than the influences of current coworkers. Whereas professional development provided participants with useful skills and knowledge, the development of collegial relationships provided participants with significant emotional support. Lucy, for example, was quick to speak about her struggles during her first year of teaching but credits Bob and a direct supervisor for providing her with support in terms of wisdom and perspective. Bob, in turn, had a similar experience with a coworker during the beginning of his career more than 30 years ago. Tara’s outlook and perspective on her own teaching has been heavily influenced by her coworker, Chris, who bluntly encouraged her to challenge herself and persevere during a difficult moment in the beginning of her career. Although the times and types of relationships differ (former teacher influences current teacher; experienced teacher influences new teacher, etc.), the relationships described by the participants were a combination of support, encouragement, and respectful challenge. Above all else, it was evident that relationships, in varying forms, mattered significantly as a positive influence on their experiences over time.

Developing tools, ideas, and perspectives. The analysis of the data indicates that the combination of professional development and the support of colleagues and mentors, along with
time and gained experience, allowed participants to develop their own perspectives of and attitudes toward their roles as teachers. The overall shift that occurred for all participants was from a seemingly teacher-centered view as participants struggled to persevere through their first years in the classroom to a more student-centered view. When participants were able to establish themselves as teachers within the first few years of their career, their growth as teachers was less about surviving and more about how to become more effective. Nearly universal to all participants was learning, over time, how not to take failure too personally, a common experience during the first year of teaching. By doing so, participants were able to persevere through challenging situations and become more introspective as they began to look at what they could do better in order to help their students rather than focus on what they had done poorly. Although professional development and the support of colleagues may have nurtured this shift, it is unlikely that it would have occurred at all if the stresses associated with the first year of teaching remained beyond that time. Although collegial support was present for all participants during the beginning of their careers and likely helped participants exit the survival mode of the first year, the same cannot be said for professional development, because meaningful and relevant professional development was not present for all participants during their first year in the classroom.

In addition to professional development and the support of colleagues and mentors, participants’ developing perspectives were influenced by various other factors based on personal circumstances. Tara and Kimberly, for example, are mothers of younger and high school–age children, which has allowed them to see their students as children of other parents. This more holistic view replaced the label of student with that of child. While Tara and Kimberly are influenced by such a personal factor, Bob is influenced by time, among other factors. Bob, the
most experienced teacher of the group, with nearly twice as many years in the classroom as the
group’s average tenure, has been able to form a long-range perspective about his role as a
teacher: his work contains “endless variety” and is, therefore, very rewarding to him; he believes
there are vastly more good days in the classroom than there are bad ones.

Circumstances related to the teaching venue were also influencing factors for the
development of at least two participants. Lucy, who was consumed by the amount of work that
she created for herself during her first year, started to see her role differently when her school’s
3-week project-based-learning J-Term commenced. The relatively unstructured nature of this
term allowed Lucy to try new approaches in planning, engaging, and assessing her students.
Lucy realized that she could incorporate some of these new practices into her teaching after J-
Term concluded, thereby somewhat alleviating herself from a crushing, self-induced workload
and creating what she believed to be a more rewarding experience for her students. Mark
credited his ability to adapt to new and changing situations to his varied teaching venues across
the globe.

There is no doubt that professional development, the support of colleagues and mentors,
and developing perspectives and attitudes all played a role in shaping the participants into the
teachers they are today. Aside from the influences of colleagues and mentors, a closer
examination of the nature of some of these changes within the group reveals that those
participants who were established teachers at the time of the study (Bob, John, Kimberly, and
Tara) seemed to be influenced more by internal forces of self-change (i.e., personal
circumstances, time in career, and a desire to be more effective in the classroom). Participants
who were relatively new to the field of education (Mark and Lucy) seemed to be influenced more
by external forces (i.e., teaching venue, changes in curriculum, schedule, etc.).
Theme 3: Present Status. Perhaps the biggest change experienced by the participants was a shift in the focus on their own situations during their first years as teachers to a focus more on students. This was true for all participants, regardless of time in the career. As participants were asked to reflect on their present status, they presented a view of their students more as individual people and less as a group, class, roster, teaching assignment, and so on. Furthermore, participants acknowledged that students have differing experiences from their peers as well as from their teachers. Specifically, some participants explicitly described the separation of identity between teachers and students (Kimberly and Bob). Participants recognized that school makes up only a part of their students’ lives and that they are just one portion of their students’ school experience.

When students are viewed as individual people, teachers are better able to identify ways to help them with (and beyond) academics. For this to occur, teachers must put aside prejudices and preexisting beliefs about their students. Understanding students as individual people and identifying their needs was sometimes as simple as teachers being available for extra help and students knowing that this opportunity was available. However, simply informing students of the availability of extra help may not suffice. For the participants, it was important for them to convey to their students that they truly cared for their entire well-being by building trust, identifying personal interests, and, most of all, being willing to question their own practices in terms of how they affect their students.

Understanding students as individuals and identifying individual student needs implies designing learning experiences that, as much as possible, are meaningfully connected to students’ lives. This realization, however, stems from the participants’ own learning experiences when they were students. Therefore, the notion that teachers will completely see themselves as
truly separate from their students (and to a certain degree, see students as truly separate from each other), is somewhat challenged. Teachers, it seems, are likely to reflect at least some of their own learning experiences (good, bad, or otherwise) into their teaching. This study identified teachers who consciously designed aspects of their teaching based on their own past experiences but who also acknowledged that their students are truly separate from them and from each other.

**Summary.** Three emergent themes—Initial Shock, From Start to Present, and Present Status—describe the participants’ journeys of transformation of who they were at the beginning of their teaching careers to who they are now as teachers. Although all participants described common experiences of stress and anxiety during the first year of teaching, all expressed the value of their own professional learning and the support provided by colleagues and mentors. Armed with both applicable working knowledge and emotional support, participants have been able to form their own perspectives on their roles as teachers. As a result, each participant’s focus shifted has from what was best for the teacher to what is best for students.

Analysis of the emergent themes identified some noteworthy findings. The participants who are newer to the career (Lucy and Mark) described changes in their teaching that were influenced more by forces external of themselves. These participants described their roles and attitudes as having been shaped by their working environment. Specifically, they spoke to how changes in scheduling, curriculum, and varying school venues influenced their practices as well as their beliefs about their own efficacy. Participants who had more teaching experience described the influences on their careers as being more personal in nature.

Also noteworthy is how the participants identified students as individuals (and subsequently, what is best for them) juxtaposed to the participants actively recalling their own experiences as students and incorporating these experiences into their own teaching. Two
competing ideas emerged: teachers considering students as individuals separate from each other and from the teacher, and teachers accessing their own personal experiences when engaging their students. In other words, the participants acknowledged the need to address students’ needs but, by doing so, participants had to understand that what might be meaningful to them personally may not have the same level of meaning to their students and that they should, therefore, not design learning experiences based on this. However, all participants, in one way or another, consciously or subconsciously, drew on their own personal experiences at some point when designing learning opportunities that they believed were in their students’ best interests.

Lastly, the analysis of the participants’ experiences over time identified the influence of personal and/or professional relationships as a significant influential factor that has helped to shape these teachers into the educators they are today. This support through relationships was present for all participants at the beginning of their careers. The influence of professional development, on the other hand, occurred at different times for participants and held different meanings and levels of usefulness. Nonetheless, professional development was still viewed as a significant influential factor that contributed to the teachers’ development of skills. This combination of personal support and professional learning allowed teachers to develop their current perspectives on teaching and learning, with a clearer focus on what is best for students and a lesser focus on immediate solutions to varying challenges.

**Findings in Relation to Theoretical Frameworks**

This study attempted to look at how teachers make sense of their experiences over time as they relate to their skill development; however, it did not make any determination of the quality of each teacher. The study addressed how the participants dealt with the numerous
challenges they faced during their first year and how they, as educators, have changed since that time.

**Attribution theory.** The difficulties and subsequent challenges that teachers faced during their induction into the teaching career align with the shattered-image effect as described by Cole and Knowles (1993). New teachers who experience this effect typically come to the profession with a variety of preconceived notions and expectations and with a sense of naivety about their new experiences and performances in the classroom, only to find themselves overwhelmed with unanticipated challenges. This was clearly evident in the participants’ recollections of their first years in the classroom. However, instead of possibly leaving their new careers, all participants showed signs of seeking to understand the reasons behind their initial difficulties in accordance with attribution theory (Weiner, 2008, 2010) and looked for ways to improve. None of the participants indicated that they believed that good teachers were simply born with great skills. Instead, the participants acknowledged that they could improve with effort and, subsequently, sought this improvement in one way or another. The participants believed that they could add to or draw from their existing knowledge in order to increase their skill set and efficacy, and although inferences about the participants’ sense of self-efficacy as teachers can be made, they are not conclusive. All participants described their growth over time, regardless of the amount of time in the career, with a sense of confidence. Perhaps this confidence can be attributed to a sense of higher self-efficacy, especially as teachers’ perceptions became increasingly student centered and less teacher centered. This sense of self-efficacy is significant, in that teachers who experience higher levels of this phenomenon tend to have students who experience greater gains in achievement (Holzberger et al., 2013; Mojavezi & Tamiz, 2012). In addition, teachers who have an awareness of their assumptions that govern their teaching practices and relationships
with students are more likely to modify the way they think about their abilities and, in turn, modify the way they think about their role as educators in a manner that helps students become more successful (Brooks & Goldstein, 2008). This would explain the shift in participants’ perspectives from teacher centered to student centered. Student outcomes, however, were not explored or discussed in this study.

**Implicit theories of intelligence.** Dweck’s (2006, 2015) implicit theories of intelligence, specifically incremental theory (growth mindset), support participants having taken steps to improve their skill sets as teachers. None of the participants cited factors that prevented them from learning new skills; instead, participants held a sense of optimism about their roles and/or were supported and encouraged by colleagues and mentors. Although it was not formally determined whether participants’ beliefs about their abilities and talents as teachers were malleable or fixed, all participants showed evidence of being willing to develop new skills by a variety of means, implying the presence of a growth mindset.

**Skill development.** For participants to develop their skills over time, they must believe that their skills can develop in the first place. Thus, Dweck’s (2006, 2015) implicit theories of intelligence seem to serve as a prerequisite for any subsequent skill development to occur. If skill is a property of both the person and a specific context (Ayoub et al., 2006; Fischer & Farrar, 1987), then Dweck’s theories certainly help to describe how the participants increased their skills over time with a sense of ability to improve. Furthermore, the context of teaching, as experienced by the participants, contained the social interactions of support and encouragement between the individual participants and a variety of colleagues, mentors, teachers, and others. This support seems to have contributed to the participants’ sense of security during difficult times, perhaps bolstering participants’ self-confidence in their abilities. According to Fischer (1980), the
surrounding environment induces skill development; skills that are induced most consistently eventually form the highest skill levels an individual is capable of. This study, however, did not seek to discern which specific skills the participants were able to develop.

Findings in Relation to the Literature

Although this study sought to describe the experiences that have influenced teachers’ skill development over time, it did not seek to quantify or qualify teachers’ efficacy or skill level. However, several overlaps were found to exist between the study’s findings and the characteristics of effective teachers identified in the literature.

The value in professional development. Prior research on the relationship between a teacher’s level of formal education or participation in professional development and student outcomes provides findings that are contradictory. According to Clotfelter et al. (2007), greater levels of student outcomes can indeed be attributed to teachers’ advanced levels of education. However, Hanushek (2011), Yeh (2009), and Harris and Sass (2011) all claimed that teacher certification programs, professional development, and traditional teacher-training programs have no real influence on student outcomes. These latter conclusions are echoed in this study’s findings, at least regarding the challenges faced within the first year of teaching: regardless of their participation in a formal teacher-training program, all participants described numerous difficulties during their first years in the classroom. The analysis of participants’ descriptions of these experiences revealed that during the first year of teaching, participants were focused more on their own survival than on their students’ growth and achievement. These findings are further supported by research specific to the efficacy of teacher-preparation programs, in which student teaching has been shown to often inadequately prepare new teachers to meet the needs and demands of various school settings (McKinney et al., 2008).
Although the effect of teachers’ level of education and participation in professional development on student outcomes is debatable, this study clearly shows that participants found significant value in their graduate degrees. Participants were quick to describe how their graduate education provided them with useful techniques as well as a broader perspective of their roles and their students. In other words, participants found relevance in their own learning experiences as educators in one form or another and believed that these experiences contributed to their teaching. Indeed, research has shown that investments in meaningful and relevant professional development strategies will improve the outcomes of a diverse array of learners (Darling-Hammond, 2000). Furthermore, teachers who engage in meaningful and relevant professional development and are open to embracing new beliefs and practices are more likely to experiment with new methods (Meirink et al., 2009).

**The value of relationships with colleagues and mentors.** As discussed previously, participants’ sense of the value of their own professional development varied based on their circumstances. Those participants new to the teaching profession described drawing on their formal education as a resource for tools and information to help them cope with the stresses associated with the first year of teaching. Other participants pursued a graduate degree in education after they were established in their careers and described the value of their professional development in terms of changing their perspectives on teaching and learning. However, all participants described the significant value of the relationships established between themselves and various colleagues and/or mentors, especially early on in their careers, even though they may not have participated in a formal mentoring program.

Analysis of participants’ descriptions of the relationships established with other colleagues or mentors showed that such relationships were significant and highly influential
sources of support and growth. These relationships seemed to display, in part, senses of empathy and advocacy from mentors toward new teachers, with the ultimate goal of helping the new teacher feel more effective as an educator. Participants’ descriptions of these organic relationships varied but included seasoned and experienced teachers sharing proven techniques, ideas, and perspectives with new teachers, eventually helping them to feel more secure in their new roles. “A feeling of efficacy does not derive from what to do and from having problems solved for you; instead, it grows from ownership of decisions and from the support of peers who reveal other options and offer cautions” (McCann, 2011, p. 104). Waterman and He (2011) underscored the importance of these relationships and showed that teacher mentoring has the ability to improve the quality of teaching and help prevent teacher attrition.

**Changes in perspectives and practices.** Changes in practice can lead to further changes in teachers’ beliefs and perspectives (Mitchell, 2013) regarding their students and themselves. Meaningful professional development has the potential to increase the level of a teacher’s sense of self-efficacy—the sense of one’s ability to change student outcomes and influence student growth (Kennedy & Hui, 2006). When teachers make an effort to increase their skills and actively engage in their own learning, teachers’ beliefs (especially those of new teachers) can be challenged, reshaped, and developed, increasing their sense of self-efficacy (Guo et al., 2012). Although participants’ sense of their own efficacy as educators was never directly examined in the present study, the results imply that, for the most part, the participants felt “more effective” as teachers and cited professional development and the support provided by colleagues and mentors as two reasons for this sense of self-efficacy. If this is true, these findings are significant. Although the concept of teacher self-efficacy was not directly explored in this study, self-efficacy has been shown to be a predictor of teachers’ classroom practices that lead to better
What is good for students. After surviving the initial shock associated with the first year of teaching, participants were able to establish a sense of stability and comfort within their careers by relying on their learning experiences via professional development and the support provided by colleagues and mentors. As a result, participants were able to develop and shape their own ideas and perspectives of their roles as educators, moving away from the initial teacher-centric view of their reality to a more student-centric view. In doing so, participants were able to speak to their current status as classroom teachers with a distinct focus on what is best for their students. This view is supported by the participants’ acknowledgment that the learning opportunities they offer their students need to be relevant to their students’ lives. Furthermore, participants showed evidence of having empathy for their students, making sure to recognize that their students’ lives were likely full of formidable challenges that transcended the teacher’s demands in the classroom.

These findings are congruent with several practices and behaviors associated with effective teachers. For example, teachers whose style of instruction diverges from their students’ learning styles are at risk of their students developing less positive attitudes and achieving at lower levels (Charkins et al., 1985). This study’s participants, however, provided evidence that they strived to make the experiences they provide for their students real and relevant and questioned themselves when they believed that their teaching did not align with their students’ learning styles. This practice of participants looking beyond their own teaching and trying to understand the perspectives of their students is an important step in trying to improve student outcomes (Yeager, Walton, et al., 2013).
Summary. The major findings revealed in this study are supported by previous research. Although the effects of formal professional development, advanced degrees, and teacher-preparation programs are debatable, the participants all described how their formal education was of direct use to them in the classroom. Participants also described the value in the relationships they established with colleagues and/or mentors, which provided a source of support and growth as professionals. Together, these two factors—professional development and relationships with colleagues and mentors—seem to have provided participants with the ability to develop new perspectives about their teaching as well as their students’ learning. The overall implication is that this growth in teachers’ perspectives and ability is an indicator of each participant’s skill development over time and, ultimately, their growing sense of self-efficacy as educators.

Implications for Practice

Even if the effects of professional development on student outcomes are debatable, the participants of this study demonstrated that they valued their formal education as a useful means to improve their teaching. As a result, these teachers viewed themselves as more effective because of their prior learning. Even if the participants’ level of education cannot be directly linked to their students’ learning and growth, it likely implies a greater sense of skill development and sense of self-efficacy as teachers. It is this sense of teacher self-efficacy that has been previously shown to be a critical influential factor on student outcomes. Therefore, schools and their administrations should make concerted efforts to provide teachers with meaningful and relevant learning opportunities that allow for the direct application of theory and knowledge to teachers’ everyday practices. Notably, the participants in this study all described the need for such learning opportunities for their own students because this is often considered
best practice. Schools, therefore, should follow similar best practices in order to engage their teachers in their own professional learning as a means to build teacher skills, increase teachers’ sense of self-efficacy, and, ultimately, improve student outcomes.

Just as schools should invest in meaningful and relevant professional development for teachers, equal attention should be paid to providing new teachers with the benefits associated with seasoned and skilled mentors. Mentoring not only helps mitigate the deleterious effects of teacher attrition but it also provides an opportunity for teachers to reflect on their own learning through the personal support of other teachers. Although a formal mentoring program can certainly provide this, it should be noted that all the participants’ spoke to the importance of these collegial relationships, even though no such formal mentoring system existed for them. Even without the formal structure of a teacher-mentoring program, the participants, in one way or another, forged connections with other colleagues that were viewed as influential factors on participants’ attitudes, philosophies, and practices. The culture of a school should, at a minimum, support such relationships between colleagues, even without a formal mentoring program.

These two factors—professional development and relationships with colleagues and mentors—were found to have the largest influence on the participants’ skill development and, likely, their sense of self-efficacy as teachers. Significant investments and research are geared toward examining the factors that influence and improve student outcomes; perhaps the same investments should be made to better understand teacher outcomes. School leaders and policymakers should regard schools as communities and consider supporting the learning and growth of all the stakeholders (i.e., teachers and students alike) a top priority if we are to fully leverage the learning opportunities for our students.

Study Limitations
This study set out to examine the experiences of teachers at an independent high school on the East Coast that have contributed to their skill development over time, as well as to understand how these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom. This study did not seek to identify what specific skills the teachers developed or to comment on the quality of their teaching. Instead, the goal of this study was to understand how these teachers believed their experiences helped shape them into the teachers they are today.

All participants described their professional development as being an influential factor on their skill development. It should be noted, however, that all participants were voluntary members of a professional development cohort at the time of the study. Because of the convenience sampling technique associated with recruiting participants, it is possible that a truly random sample of other teachers might yield different results in terms of how they view the value of their professional development opportunities.

Another potential limitation of this study is that half the participants were graduates of the school at which they were teaching. All participants described the value of supportive relationships established with other colleagues and/or mentors. However, for some of the participants, relationships had already been established between the former students and teachers. Perhaps the collective value of relationships between participants and their colleagues and mentors might have been described differently if all participants had no previously established relationships before beginning their roles as teachers at this school.

Although the researcher was a member of the school’s senior administration at one time, the researcher did not work at the school where this research was being conducted at the time of the study. However, all the participants were previous subordinates of the researcher and, in
some cases, the researcher was previously responsible for hiring and evaluating some of the participants. It is possible that this previous relationship between the researcher and participants might have skewed participants’ responses to the interview questions.

**Suggestions for Future Research**

Research has shown that the quality of a teacher is potentially the most influential factor on student outcomes. As a result, future research must continue to examine the relationship between teacher quality and student outcomes, namely, which (and how) specific teacher characteristics contribute to students’ learning. By doing so, we may better be able to increase opportunities for students.

Although this study examined teachers’ experiences that contributed to their skill development over time, it did not identify which specific skills teachers believed they developed. This general view of skill development appears to coincide with the construct of teachers’ sense of self-efficacy as educators: as teachers wield their skills, they become more effective teachers. However, future research is needed on the potential dynamic interplay between the two: Is a growing sense of teacher self-efficacy fostered by a growing skill set and/or does an increased sense of teacher self-efficacy contribute to teacher skill development? By better understanding the relationship between these two similar but different variables, we may be better able to understand how highly skilled and effective educators are developed.

Lastly, this study focused on teachers at an independent high school on the East Coast. The influence of venue on teachers’ experiences as it relates to their skill development was not examined. Furthermore, because the school is independent, teachers do not need to have completed a formal teacher-credentialing program before beginning their careers, unlike in a public school setting. Exploring the difference between independent school and public school
teachers’ perceptions of the experiences that have contributed to their skill development might provide more information on how the governance structures of schools influence teachers’ learning and growth over time.

**Summary**

The purpose of this study was to explore the experiences of teachers at an independent high school on the East Coast that have contributed to their skill development over time, as well as to understand how these teachers make sense of these experiences as they pertain to teaching, learning, and assessment in the classroom. Participants in the study included six high school teachers who were all members of a professional development cohort within their school. These participants taught various disciplines and were in different stages of their careers, with some teachers in their first 2 years of formal teaching and the most experienced teacher having 32 years of classroom experience. All participants possessed graduate degrees in education.

Data were gathered in the form of two semistructured face-to-face interviews per participant. All participants were provided a record of their individual interviews and, in some cases, follow-up questions from both the researcher and the participants were asked beyond these two interviews. Analysis of these interviews defined three emergent themes: Initial Shock, From Start to Present, and Present Status.

The first theme, Initial Shock, describes the challenges experienced by all participants during their first year of teaching and how they met these challenges and survived the year. The second theme, From Start to Present, describes the participants’ journeys from their first year to their present status. The third theme, Present Status, describes the participants’ present view of themselves as teachers after more time and gained experience.
The analysis of these themes and their subthemes revealed some commonalities between all participants in terms of how they made sense of their experiences. The first year of teaching was essentially described as a time of survival. All participants, regardless of whether they participated in a formal teacher-preparation program, described the hardships associated with this induction into the teaching profession such that no qualitative differences were discernable between those teachers who did and did not have formal teacher preparation. Participants initially described views of themselves that were primarily directed inwardly; each experienced a sense of shock associated with what seemed to be the relatively unanticipated demands of being a classroom teacher. Nonetheless, all persevered and moved beyond this survival mode, eventually becoming more comfortable with their roles over time.

The second theme, From Start to Present, tells the story of how the participants transformed over time to become the teachers they currently are. Participants described their varying experiences, which coalesced into three subthemes: the value in professional development, the support of colleagues and mentors, and developing tools, ideas, and perspectives. All participants could speak to their formal education and how they were able to draw on what they learned from their graduate programs. Some of these teachers earned their graduate degrees as a part of a teacher-preparation program and therefore came to the profession with a master’s degree in education. Others pursued their master’s degrees several years into their careers. Regardless of when these degrees were earned, all participants cited their formal education and/or participation on other forms of meaningful and relevant professional development as sources for improved practice. In addition, all participants were able to identify the relationships they forged with other colleagues and/or mentors as highly influential on their teaching and outlook toward students. Together, these two subthemes of the value in professional
development and the support of colleagues and mentors seemed to provide participants with both the intellectual and emotional support needed to develop their own tools, ideas, and perspectives and to evolve as teachers.

The final theme, Present Status, describes the contrast between who the participants were during their first years as teachers compared to who they are presently. All participants described a present view of themselves in terms of what they believed would best serve their students. No longer were their narratives about survival; instead, all participants freely articulated how their views of their students have changed over time. For example, students were viewed more as individual people with specific needs and less as a list of names on a roster or as a class. This shift in focus from what seemed to be a teacher-centered view during the first years of teaching to what is presently a student-centered view was clear for all participants, regardless of how many years of experience each participant had in the classroom.

In short, participants described the ways in which they changed over time in terms of techniques used in the classroom as well as their change in attitude toward teaching, learning, and their students. In addition, participants identified several influential factors that helped to bring about these changes, chief among them being the value of relevant and meaningful professional development and the support provided by colleagues and mentors. Because teachers have been identified as potentially having the largest influence on student outcomes, a better understanding of how teachers develop over time can help us better understand how to help our students learn and grow.
Personal Reflection

As an educator of nearly 20 years, with about half of that time as a classroom teacher, I have often wondered about the various ways we can improve the outcomes for our students. Early in my career, I became aware of the myriad of programs, textbooks, protocols, and so forth that all seemed to promise to move the needle in the positive direction on the scale of student achievement. It was not until I heard from Mary DeKuyper, author of *Trustee Handbook: A Guide to Effective Governance for Independent School Boards* (2003), that I started to really think differently about this. In a meeting with my school’s administration (which happened to be one of my very first meetings as an administrator), Ms. DeKuyper stated, “The teachers are the stars of any school—not the students, and certainly not the administration or members of the board of trustees.”

Research clearly backs DeKuyper’s claim. However, this truth seems to fly in the face of how our nation values teachers. This is not to say that teachers are not loved, respected, and revered, because many certainly are. However, their status as true professionals seems to lag behind much of the developed world’s view of teachers. Becoming a teacher in the United States does not hold the same status level as it might in countries such as Japan, China, Greece, or Turkey. However, teachers in the United States are also not the lowest on the recipient list for respect in comparison to other countries. Regardless, if teachers tend to have the greatest level of influence on our students’ outcomes, then why are they not at the top of that list?

What has become apparent to me in this study is that although skill development of teachers was the focus, the results likely apply to everyone at any age. The processes of learning and skill development are obviously not relegated to schools only. When we think of teaching and learning, we tend to think of teachers meeting the needs of their students, and rightly so.
However, we do not discuss meeting the needs of the teachers in a similar way so that they can, indeed, meet the needs of their students. If we are serious about helping to increase and improve the opportunities and outcomes for our students, then we must acknowledge that we cannot meet that objective without first doing the same for our teachers in terms of their own learning and skill development.

I was particularly struck by the role that environment plays in skill development. For teachers, this environment is their school. If the surrounding environment induces skills, then school administrators and policy makers should be intentional on designing the best environments with skill development in mind. Although I have yet to fully flesh out this notion to be able to describe what this environment might look like, I am reminded of High Tech High, a highly successful charter school in San Diego, California. Although student learning is at the forefront of their work, they are also aware that such learning is contingent on their teachers’ learning and skill development. Perhaps this is why High Tech High is a school not only for kids but for adults, too. I am not aware of any other high school that awards its high school graduates with a high school diploma while also awarding graduates of their very own teacher-training program with a master’s degree. High Tech High seems to have tapped into a very fundamental model of learning-by-doing for all members of its community, not just its adolescent student body.

We need to continue to explore how we might create skill-inducing environments within schools for everyone, not just for traditional school-aged students. Learning, after all, is supposed to be lifelong and transferrable. Because schools are in the very business of providing education to the masses, then perhaps this new way of looking at creating dynamic and global
learning environments needs to become a greater part of the conversation about how to help our kids succeed in a rapidly and ever-changing world.
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Appendix A: Recruitment Email

Dear ________________.

My name is Adam Norwood and I am currently an EdD candidate at Northeastern University in Boston, Massachusetts. As part of my doctoral research, I am conducting a qualitative study that will allow me to explore and understand teachers’ experiences over time that have contributed to their skill development as educators. I am seeking to conduct two to three interviews of 8–10 participants from a variety of backgrounds in terms of years of experience, disciplines taught, and gender within your school.

If you are willing to participate, I will arrange an interview time and location that is convenient for you. The first interview will last for approximately 30–40 minutes and will be used primarily to further familiarize you with the purpose and format of the study as well as to gather some of your background information. The second interview will last for approximately 90 minutes while you respond to a series of overarching questions related to your teaching experiences and how these experiences have helped you to develop into the teacher that you are today. A third interview will be conducted so that you have the opportunity to check the initial analysis of your previous interviews and for any follow-up questions that either you or I might have.

There are no known risks to your involvement in this study. I assure you that the information I collect and the identity of your school will be treated confidentially. Your participation is completely voluntary. If at any time you wish to discontinue your participation, you may do so with no penalty.

If you are interested in assisting me by participating in these series of interviews, please contact me by email at norwood.a@husky.neu.edu. At that point, I will send you a consent form and we can schedule a convenient time and location for the interview.

Thank you in advance for your time and consideration.

Sincerely,

Adam Norwood, EdD Candidate
Northeastern University
Appendix B: Informed Consent Form

You are invited to take part in a research study. This form will tell you about the study, but I will explain it to you first. You may ask me any questions that you have. When you are ready to make a decision, you may tell me if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, I will ask you to sign this statement and will give you a copy to keep.

**Why am I being asked to take part in this research study?**
We are asking you to be in this study because you are a part of a professional development cohort within your school.

**Why is this research study being done?**
The purpose of this research is to understand how teachers develop their skills over time.

**What will I be asked to do?**
You will be asked to participate in a series of two to three interviews.

**Where will this take place and how much of my time will it take?**
Interviews will be conducted at a place and time convenient for you. The first interview will take approximately 30–40 minutes. Several weeks later, you will be contacted via email to participate in a second that will take up to 90 minutes. A third interview might be held to address any follow-up questions that you or I might have. The total time required for all interviews is expected to take roughly 2.5 hours.

**Will there be any risk or discomfort to me?**
There is no foreseeable risk or discomfort associated with this research.

**Will I benefit by being in this research?**
There will be no direct benefit to you for taking part in the study. However, the information learned from this study may help provide a deeper understanding of how teachers develop their skills over time, which in turn contributes to better understanding how to increase students’ learning, growth, and achievement.
Who will see the information about me?

Your part in this study will be confidential. Only the researchers on this study will see the information about you. No reports or publications will use information that can identify you in any way or any individual as a participant of this project.

Data will be collected using a series of audio interviews and open-ended questions. All interviews will be stored as MP3 files on my password-protected computer. A transcription service will be used to transcribe the audio files into written text. These transcriptions will also be stored on my computer.

Before using this service, a signed statement of confidentiality will be obtained from the transcriber. Both the audio files and transcriptions will be destroyed 1 year after the final data collection process.

If in the unlikely event that any of your personal identification is disclosed during the data collection and analysis process, your information will not be included in the final publication of this study.

In rare instances, authorized people may request to see research information about you and other people in this study. This is done only to be sure that the research is done properly. We would permit only people who are authorized by organizations such as the Northeastern University Institutional Review Board to see this information.

If I do not want to take part in the study, what choices do I have?

You may simply decline to participate in this study with no questions asked.

What will happen if I suffer any harm from this research?

There are no foreseeable harmful risks associated with this research.

Can I stop my participation in this study?

Your participation in this research is completely voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time. If you do not participate or if you decide to quit, you will not lose any rights, benefits, or services that you would otherwise have had as an employee of your school.

Who can I contact if I have questions or problems?

If you have any questions about this study, please feel free to contact me (Adam Norwood) at 802.626.3683 (home) or at 802.473.8324 (cell), the person mainly responsible for the research. You can also contact Dr. Kelly Conn at k.conn@northeastern.edu, the Principal Investigator.

Who can I contact about my rights as a participant?

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 490 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call
anonymously if you wish.

<table>
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<tr>
<th>Will I be paid for my participation?</th>
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<td>There is no payment or compensation associated with your participation in this research.</td>
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<th>Will it cost me anything to participate?</th>
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<td>There are no costs associated with your participation in this research.</td>
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<th>Is there anything else I need to know?</th>
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<tr>
<td>There is nothing else you need to know about this research.</td>
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</table>

____________________________________________  _________________________
Signature of person agreeing to take part       Date

____________________________________________
Printed name of person above

____________________________________________  _________________________
Signature of person who explained the study to the participant above and obtained consent       Date

____________________________________________
Printed name of person above
Appendix C: First-Interview Questions

What are the experiences of teachers at an independent East Coast high school that have contributed to their skill development over time and how do these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom?

• Can you tell me your age? You can give me a 5-year span if that’s more comfortable for you.

• How many years have you been working in education?

• What is the highest level of education that you have completed?

• Can you describe your current role?

• What other roles have you served in while working in education?

• In what other settings (e.g., other schools), if any, have you worked as an educator?

• What career(s), if any, did you have prior to becoming an educator?

• What kind of a student were you while growing up?

• Can you tell me about your most memorable positive learning experience as a student? What made this experience so memorable? What about the most memorable negative learning experience?

• How do you think these experiences have influenced you as an educator?
Appendix D: Second-Interview Questions

What are the experiences of teachers at an independent East Coast high school that have contributed to their skill development over time and how do these teachers make sense of these experiences as they relate to teaching, learning, and assessment in the classroom?

• Why did you decide to pursue a career in teaching?

• Can you tell me a story of your experiences when you were first learning how to become a teacher?

• Thinking back to early in your career, can you tell me about a success you experienced as a beginning teacher? Can you tell me about some notable challenges? How did you deal with these challenges?

• Thinking back to the beginning of your career and then thinking about yourself as a teacher now, in what ways have you changed as a teacher?

• What are the differences in how you deal with setbacks now compared to experiencing setbacks near the beginning of your career?

• How has your view of your students changed over the years?

• Can you tell me about how you believe you impact your students in terms of their success academically, socially, and emotionally?

• If you could go back in time and meet with yourself as a beginning teacher, what type of advice would you give yourself?

• Looking into the future, in what ways do you think you will be different as a teacher than you are now? What about you do you believe will remain the same?

• Is there anything else you would like to share?
Appendix E: Certification of Completion of *Protecting Human Research Participants*

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Adam Norwood** successfully completed the NIH Web-based training course "Protecting Human Research Participants."

Date of completion: 10/18/2016.

Certification Number: 1869419.