EXPLORING THE COMPLEXITY OF TEACHING: A DESCRIPTIVE

“SNAPSHOT” OF THE ACT AND PROCESS OF

TEACHING IN PUBLIC EDUCATION

by

ANDREW X. MAXEY

VIVIAN WRIGHT COMMITTEE CHAIR
ANDRE DENHAM
KELLY W. GUYOTTE
MARGARET RICE
PHILLIP WESTBROOK

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Although the field of research on effective practice in education is vast and although expectations for professional action and practice are communicated formally to teachers, a clear framework to describe what teaching is – the whole of what it is - remains absent. Grounded in Ingersoll’s professionalism, and guided by existential phenomenology, this research study provides a snapshot of the complexity of teaching as a missing but essential component of any productive conversation about improving the profession through a systematic review of literature and first-hand accounts of participating teachers’ lived experiences.

Both the professional literature between 2010 and 2019 and the teachers participating in this study suggest that teaching is significantly complex. The research outlines 13 distinct yet intertwined competencies and practices that are integral to the essence of teaching.

- Know Students
- Know Your Subject Matter
- Demonstrate Pedagogical Expertise
- Plan for Practice
- Create a Learning Environment
- Engage Students in Learning
- Implement Effective Strategies
- Provide Authentic Learning Experiences
- Support Learning
- Monitor Learning
- Provide Feedback
- Know and Follow Laws and Policies
- Reflect on Practice

Teachers affirm that, in their experience, these factors are all, in fact, part of teaching.
DEDICATION

This dissertation is for the millions of teachers who are pouring out their lives in service of the students entrusted to their care; to the countless men and women who have been crushed by this profession; and to the current and yet unborn students who each deserve to be taught by accomplished teachers.
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It is with a profound sense of gratitude that I acknowledge the people who own a share of this work by virtue of their investments into me. There can be no doubt that I would simply not be in possession of my sanity, my job, relatively healthy relationships and a new title if not for the extensive support I have received.

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CHAPTER I
INTRODUCTION

Introduction to Problem

Public education provides a vast field of study. Entire bodies of literature are dedicated to relatively small and focused areas such as specific practices in specific subject areas (i.e., phonics instruction vs whole language instruction) and entire journals are dedicated to specific subsets of practice (i.e., Research in Middle Level Education and Journal of Physical Education, Recreation and Dance). Conferences, newsletters, blogs, and practitioner publications abound. In spite of this great wealth of research and knowledge, the literature simply does not include a description that encompasses all of the process and act of teaching.

The attempt to define teaching has been made often by many. Defining teaching is a dauntingly large task because teaching is so complex. John Dewey provided the groundwork for that debate in American education with his claim that teaching is to learning as selling is to buying (Noddings, 2003; Phillips, 2014). A great deal of attention (Phillips, 2014) was thereafter devoted to defining teaching as either a task or an achievement. Those offering counterpoints to Dewey’s assertion have included Smith and Ennis (1961) with their standard thesis and C.J.B. Macmillan and James Garrison’s (1988) erotetic teaching which they defined teaching as an answering of students’ questions—asked and unasked. Teaching has similarly been described as “the ability to detect knowledge deficits or false belief in another person and the intention to supply the missing information” (Olson & Bruner, 2018, p. 21). Phillips (2014) defined teaching as “actions intended to bring about learning” (p. 791). As with most complex concepts, these
definitions do little more than provide insight into one narrow facet of “the act and practice of a teacher” (Teaching, 2003, p. 565). The academic literature debates what teaching ought to be at great length or what practices work “best” in narrow bands of practice. Missing is a unified description of teaching. In fairness, a singular definition is likely to be so laboriously detailed as to be impractical specifically because teaching is far too complex to be fully captured in a brief definition.

In spite of the fact that many instructional design models and frameworks have been developed, when compared with the litany of expectations faced by classroom teachers, these models either do not claim to describe the entirety of the process of teaching or they fail in the attempt. For example, Robert Gagne’s Nine Events of Instruction (1980) is silent on the issue of classroom management and the planning that precedes instruction. ADDIE—Analyze, Design, Develop, Implement and Evaluate—may have provided the general framework on which many subsequent instructional models have been built (Dooley, 2005), but it focuses heavily on planning and reflection cycles, providing little structure to guide instructional practice. Dr. Madeline Hunter’s seven steps for planning lessons make the process easy to replicate and evaluate (Burris, 2014), but it fails to account explicitly for the individuality of students and their unique learning needs.

The limitations of these and other instructional models or frameworks may be due to the fact that they are prescriptive models (Culatta & Kearsley, 2018); by their nature, they seek to dictate what teaching should be, not to describe what it is. Although seemingly boundless information, advice, and insight about teaching is available, missing from the literature is a clear and complete view of what teaching actually is as practiced and experienced by teachers. For
these reasons, a research-based “snapshot” that depicts the complexity of teaching—as it exists for public school teachers in practice—could serve to address this gap in the literature.

**Need for Study**

Ingersoll and Perda (2008) argued that teaching is complex work, which requires specific, specialized skills and knowledge. In a multilevel analysis published in 1997, Richard Ingersoll and his colleagues introduced a framework for understanding the nature of a profession. Ingersoll’s framework of professionalization (refined in 2003, 2008, and 2011) makes the case that teaching meets the criteria for being a profession therein enumerated: “credential and licensing levels, induction and mentoring programs for entrants, professional development support, opportunities and participation, specialization, authority over decision making, compensation levels, and prestige and occupational social standing” (Ingersoll & Merrill, 2011, p. 186). He and his co-authors warned that a range of factors in public education are threatening to de-professionalize teaching. Others, such as Linda Darling-Hammond (2005), also made the case for the systematic de-professionalization of teaching, citing factors such as the state of flux in teacher preparation. Thus, the absence from the literature and in the collective consciousness of the profession of a snapshot of the very complexity that qualifies teaching as a profession is problematic because the absence of such a snapshot may serve to contribute to the ongoing de-professionalization of teaching.

The absence of a generally accepted conceptualization of the essence of teaching may allow educational decision makers and administrators to incrementally add to the existing expectations of teachers, increasing the already high complexity of the job. Richards (2012) administered a survey that included more than 1,200 teachers, which examined teacher stress, among other issues. The results indicated that teachers reported many sources of stress, including
too many duties and responsibilities and pressure from their supervisors. The fact of relentless pressure to improve is a well-known fact of public education (Ballet, Kelchtermans, & Loughran, 2006); the continuous addition of responsibilities and initiatives has become a truism for teachers across the country (Carver-Thomas & Darling-Hammond, 2017).

A second reason that the absence of a snapshot of the totality of teaching is problematic is the fact that misunderstanding of the nature of teaching likely fuels the persistently low status teachers hold in society, including the very question of whether teaching is, in fact, even a profession (Etzioni, 1969; Martinez, Desiderio, & Papakonstantinou, 2010; Myers, 2008).

According to the 2018 Phi Delta Kappan (PDK) Poll of the Public’s Attitudes Towards the Public Schools, although two-thirds of respondents believe that teachers are underpaid, 54% do not want their child to become a public school teacher (“50th Annual”, 2018). In marking the first time a majority of respondents have responded in this way, the poll suggests declining support for the profession even as individual (current) teachers are affirmed. Andreas Schleicher, during the time he was overseeing the Programme for International Student Assessment (PISA), argued that although teachers are often characterized as having an easy job “with short hours and summers off, the fact is that successful, dedicated teachers in the U.S. work long hours for little pay and, in many cases, insufficient support from their leadership” (Paine & Schleicher, 2011, p. 4). Schleicher joined others who argue that the action most likely to improve public education is a radical change to the role of the teacher. In cities and countries such as Shanghai, Finland, Singapore, and others near the top of international measures of student learning, the role of the teacher is far different than it is in the United States. Teachers in those educational systems enjoy greater autonomy in making decisions within their classrooms, are held in greater esteem by society at large, and are compensated at levels comparable to professions with similar
educational and certification requirements (Tucker, 2011). In contrast with such places, rates of teacher attrition in United States public education are rising and participation in colleges of education is falling (Allen, 2018). If the example set by those countries in elevating the status of teachers is to be followed, the United States needs first to see and acknowledge the complexity of the job that demands such a change.

The problem of declining “occupational social standing” (Ingersoll & Merrill, 2011, p. 186) is indisputably relevant today in the United States. Teachers in five states went on strike in 2018 in protest of issues such as low pay, working conditions, and reduced funding (Will, 2018). TIME magazine ran a series of cover stories in September, 2018 about the reality of the difficulty of teaching and focused on privileging the voices of teachers in describing the reality of their work. A read-through of the comments posted in the discussion threads on digital platforms could lead one to conclude that many in other professions view teachers with little sympathy or respect. Those comments ironically support the claim of one of the teachers who pointed out that the public “talk[s] about teachers in a way they don’t talk about firefighters and police officers, and they’re all public servants” (Reilly, 2018, para. 17). While providing scholarly evidence relevant to this issue may not directly precipitate a change in public opinion or cause those in positions of leadership to modify their approach, such evidence may provide a basis on which to build more of an accurate understanding of the nature of teaching as experienced by teachers.

Statement of Problem

This study has the potential to be part of a larger conversation around the transformation and elevation of the role of teachers in public education by making a case for their status as professionals. The average salary of a teacher is far below that of most professions that require a similar education and professional preparation (Strauss, 2017). Teacher shortages, driven by
rising attrition, declining enrollment in colleges of education (Allen, 2018; Percy, 2016), and an aging work force (Weiss, 2018) are increasingly common. If these trends are symptoms of the de-professionalization of teaching, the antidote must surely be the re-professionalization of it. Scholarly work that contributes to a substantial change to the role of the teacher is needed. Before any such change can occur, however, a more accurate picture of the complexity of teaching is required as foundational to making the case for the need for change.

Significance of Problem

This study is important because it was designed to fill a stubborn gap in the literature. In spite of extensive research into component parts of teaching, no synthesis of that work has been offered. A clear snapshot of the nature of teaching synthesizing those component parts could provide a starting point for developing shared understanding and consensus around the totality of teaching in all its complexity.

Public education would benefit from a consensus understanding and acknowledgement of the complexity of teaching. A map of that complexity provides a basis for dialogue about the very role of the teacher. In the current crisis of teacher shortages, remaking the role of teacher may be a way to reverse declining participation in teacher preparation programs and accelerating separation from the profession.

The complexity of teaching is known but that knowledge lacks the weight a basis in research would lend. The fable of the blind men and the elephant may be useful to explain the purpose of this study. Five blind men had the opportunity to learn about elephants in person. They were led close and each touched the elephant, carefully comparing that experience with their existing knowledge. When the men later discussed the experience, each one summarized his conclusion about the nature of elephants based on his experience by means of a metaphor—like a
rope (tail), like a wall (side), like a hose (trunk), like a tree (leg), like a spear (tusk). Although each man provided information and a metaphor based on accurate information, none of them were correct because each description was incomplete. To interact meaningfully with the elephant called teaching, we must understand it in all its complexity, not merely one component at a time.

**Statement of Purpose**

The overall purpose of this three-article dissertation was to document and demonstrate the complexity of the process and act of teaching itself, as expected of and experienced by K12 public school teachers. The researcher’s aim was to produce a study of practical use in informing the discussions around teacher retention, the “reality” of teaching, and teacher voice and leadership. A descriptive study that explores that complexity will be useful for those purposes.

The research questions guiding this study are as follows:

1. What is “teaching” as articulated in peer-reviewed and practitioner literature between 2010 and 2019?
2. What are the lived experiences of teachers regarding the act and process of teaching?

**Assumptions**

The researcher brings certain assumptions to this study that are noted here for their interplay with the research process, conclusions, implications, and recommendations in each chapter.

1. The professional literature provided an appropriate source for exploring the nature of teaching as it both reflects and influences practice in the field.
2. The research methodologies and methods selected were appropriate for answering the research questions.
3. Interview participants answered questions in a candid and honest manner.

4. The inclusion criteria for both studies were appropriate.

5. Interview participants accepted the invitation to participate out of sincere interest in the purpose of the study and not due to any other motives.

6. The researcher’s experience and extensive reading prior to dissertation research was beneficial to the study.

7. “Teacher” and the entire discussion of teaching herein assumed K12 public education in the United States. All or part of the research, findings, conclusions and recommendations may apply beyond those parameters, but such reach was not assumed nor implied in this dissertation.

**Limitations**

All research studies face limitations. The limitations unique to each study will be addressed in those chapters. A general overview of limitations follows.

1. The systematic review of literature included 11 publications. Although the number of articles included in the study (295) is very high, a study intended to answer such a large question must be understood to be drawn on a representative sample of the literature. The review was systematic but not comprehensive.

2. Interview participants were drawn from a single district. While it would be preferable to include participants from a much wider pool of teaching contexts, it was beyond the scope of the researcher’s capacity to conduct a larger study.

3. The researcher’s status within his district and state may have exerted undue influence on participants’ responses to interview questions. To mitigate this issue, the researcher sought and obtained approval to conduct the research outside his district and, in fact, did not interview any teachers he had met prior to the time of the interview.
Definitions

The following terms are key to this study. The researcher’s working definition of each is provided here.

1. The literature or professional literature. For the purpose of this dissertation, the literature and the professional literature are references to publications related to education. This refers primarily to journal articles, and then primarily peer-reviewed articles, but also includes books, book chapters, and in some cases news articles, blog posts, or similar publications based in peer-reviewed research (see Appendix A).

2. Teachers. Individuals engaged directly in the instruction of students in K12 public education in the United States. Unless otherwise noted, this is meant to include all such individuals regardless of subject matter, grade span, geographic location, or percentage of contract hours assigned contact with students. Although research, discussion, conclusions, and recommendations may apply to individuals teaching in settings outside these boundaries, it was not the intention of this dissertation to speak to the broader context.

Conceptual Framework

This three-article dissertation sought to explore the complexity of teaching. To that end, all three articles were guided by the conceptual framework of the professionalization of teaching as constructed by Ingersoll and his colleagues (1997) and by Darling-Hammond (2005). The question at hand is what teaching is really like (Van Manen, 2016) when taken as a whole. The conventional wisdom of both the public and educators distracts from a clear view of the whole complexity of teaching. This study seeks to look past the assumptions and rhetoric about teaching to describe what it truly is as lived and experienced by teachers and described in the literature. By bracketing or “set[ting] aside, or suspend[ing] . . . assumptions” (Schwandt, 2015,
p. 178) and the conventional wisdom about teaching—both those that are held by non-educators and by educators who do not or no longer teach—the study will seek to illuminate the phenomenon of teaching itself.

The researcher carries the viewpoint that, while the nature of teaching is not immutable, it is knowable and known collectively in spite of remaining uncaptured in a frame that includes the whole. Far from claiming to have knowledge or a theory heretofore untested, the researcher sought to follow a process through which “data and theory [are] constantly compared and contrasted during data collection . . . [while] the materializing theory drives ongoing data collection” (Locke, 1996, p. 240). Instead of seeking to discover or articulate a new theory, this study sought to map the boundaries of “teaching” through a systematic review of the literature to trace the projected view of teaching as recommended and through teacher interviews to trace the lived experience of teaching as it exists for the participants.

**Research Study Organization**

This dissertation included three articles that sought to examine the complexity of teaching from unique, interrelated perspectives. The first article undertook a systematic review of literature from 2010 to 2019. Because shared understanding shifts over time, it was important to draw on a range of time extending backward, though the study was not designed to examine the history of teaching. The nearly universal adoption of the Common Core 1 decade before the time of the study provided a point of significance in education at which to begin the review. The researcher identified all articles published in purposefully selected journals that provided a description of or prescription for the act or process of teaching. Data extracted from included articles were coded and analyzed to map the themes of how teaching has been described in the prior decade in the literature, including descriptions of recommended practice. This examination
of the literature also informed the protocol for the research conducted as part of the second article. The second article drew on existential phenomenology to explore teachers’ lived experiences in regard to teaching through semi-structured, face-to-face interviews. The third article was intended for a practitioner audience and provided a synthesis of the data collected in the systematic review and teacher interviews. From these data, themes, implications, and recommendations are presented in layperson’s terms for a general audience.

**Subjectivities Statement**

I am employed as a district-level administrator in Tuscaloosa, Alabama. After teaching for a total of 9 years in rural Indiana, the southern extreme of California, and in Tuscaloosa, I became a building-level administrator. After 7 years as assistant principal and principal, I transitioned to my current position as Director of Special Programs for the district. I have been a vocal advocate for policies and practices in support of teachers for many years, particularly after I became a principal, but stretching further back than that at some level. This study is intended to be instructive to individuals who occupy decision-making positions similar to my own and to building-level leaders and policy makers at all levels. This allows me to position myself within the study in such a way as to stand proxy for those educational leaders and see on their behalf through this research.

This topic is a burning passion for me due to my deeply held belief that the long-term viability of public education is threatened by the subjugated role to which teachers are now relegated. Although this passion can be read as altruistic, in moments of introspection, I believe this passion to be self-interest instead: I quite like being a public educator and do not wish my profession to collapse or fundamentally change. Regardless of the true motives of my heart, I honestly do seek to make a small contribution to the work of elevating the role of the teacher.
My deep convictions about this issue may indeed create a threat to my objectivity as a researcher. I may face the temptation to disregard evidence that fails to confirm my beliefs and suspicions about the complexity of teaching. It is ever the responsibility of the scholar-advocate to carry conviction and honesty in equal supply. Even the design of my project could conceivably predispose the actions that follow on a self-confirming course and set of investigations. However, there are also benefits to this disposition. This personal conviction has already motivated me to extensive study and reading for multiple years. I rarely pass on the opportunity to read an article related to issues regarding teacher retention, the challenges of teaching or examples of successful efforts to address this issue. My conviction of the significance of this issue drove me to seek to develop a dissertation-level study around this topic.

Born in the Midwest, I am a Caucasian male in the upper middle class. My upbringing in Nigeria, West Africa has shaped my worldview dramatically. I have thought of myself as different for as long as I can remember; the color of my skin was isolating in my childhood even as it drew mostly positive attention. My notions of poverty, suffering, and justice were shaped in that culture. As the son of missionaries and the husband of a Protestant minister, a strong belief in the supernatural informs my thinking, particularly as it relates to the transience and fallibility of human life and access to transformative power beyond reasonable explanation. Eight female humans cohabitate with me: the aforementioned wife, three daughters, a widow, and a displaced mother and her two daughters. Through conscious effort, I am becoming more actively aware of gender inequities, striving to understand and seeking to redress them.

My passion for this topic is a natural result of my identities and experiences. The son of my parents, I believe that I was born to a purpose and (having found it) am bound to fight for those who are powerless to do so for themselves: students denied standing to object to the way
they are treated within a school, classroom teachers doubly constrained to silent compliancy by Southern notions of power and those that exist within public education, and parents yearning to advocate for their children but without sufficient insight into how to navigate the maze of bureaucracy. In carefully studying the history of public education in America, the long subjugation of women within the profession is clear. While this inequity has not been confined to this profession, as a lingering feature of my profession it is made doubly untenable to me as the father of young girls and a wife who has seen more than her share of sexism in her career.

There can be no denying that my research will be impacted by power inequities. This study positioned me to interact with individuals who almost certainly and consistently perceived me to hold more power: because I am a man, because I am White, because I am well known in certain educational circles around the state, because I am highly placed in my district, because I am perceived to be intelligent, and because I speak confidently (and sometimes rashly). It was incumbent upon me to anticipate the influence of this interplay on the research and work to prevent it from impacting the results.

As a “northerner,” my tendency toward what I mean as candor can create awkwardness which can interplay with notions of power, causing embarrassment to others made anxious by my breaching of social norms but who are bound to accept the actions of anyone in authority. Without care, this too could have impacted my study.

The subjectivities listed here are a free and honest evaluation of my positionality as a researcher. It is my conclusion that they did not create significant threats to the viability of this research project and may in fact have contributed to a more robust study than would otherwise have been produced.
Summary

Declining participation in teacher preparation programs and increasingly vocal protests from teachers are leading indicators of the need for a deeper public understanding of the true nature of teaching. This study investigated the complexity of teaching as it is described in the literature and as experienced by teachers.

This three-article dissertation consists of five chapters. Chapter I outlines the purpose of the study, explains why the study is necessary and significant, describes the conceptual framework, and describes the three articles. Chapter II is the first article and provides a systematic review of the literature related to the act and process of teaching. Chapter III is the second article and offers a description of the complexity of teaching through an exploration of the lived experiences of teachers. Chapter IV is the third article and is a practitioner-oriented overview of the issue of the complexity of teaching. It presents a synthesis of the research in lay terms. Chapter V summarizes and discusses the research, considering implications arising from the findings, and providing recommendations for future study.
References


CHAPTER II
WHAT IS TEACHING? DESCRIPTION AND PRESCRIPTION
IN THE LITERATURE FROM 2010 TO 2019

*What is teaching?* On its face, this is a simple, straight-forward question. At first, answering such a question seems easy. After all, everyone in the United States—almost literally without exception—has witnessed teaching. It may be the one professional act most likely to have been encountered by every individual in any group. Perhaps it is the familiarity of prior encounters that allows so many to feel themselves qualified to provide commentary on the teaching profession (Tampio, 2018), offer “reform” solutions (Lutz, 1986), and write legislation (Beck, 2019) without any training or qualifications in the field.

Even in a country that values free speech, ubiquitous criticism and commentary on education has not always been among our social norms. In 1983, a landmark report titled *A Nation at Risk* was released, outlining the “failing of the American school system” (Smith, 2014, p. 8). One immediate and persistent impact of the report was that the public scrutiny of public education multiplied dramatically. It “spurred more commotion, controversy, and change to America’s schools than any other public statement issued” (Guthrie & Springer, 2004, p. 14). The report suggested that the state of public education was so poor as to pose a threat to the future success of the nation as a whole and provided the impetus for what has become a perpetual state of “reform” around public education since that time (Au, 2016).

Between 1993 and 2000, the number of states with an accountability system—or structure for measuring school success in producing student learning outcomes, particularly as
measured by standardized tests—increased from 4 to 40 (Smith, 2014). With the reauthorization of the Elementary and Secondary Education Act (ESEA), a new age of federal accountability began with an emphasis on standardized evaluations of all students in all contexts for the purpose of measuring the efficacy of schools (Au, 2016). With the acceptance of the notion that a need for improvement exists in education, the question left open for discussion was what exactly should be improved and how that improvement should be done (Tushnet, Flaherty, & Smith, 2004). As Gottlieb (2016) has pointed out, the majority of reform efforts tend to target teachers directly or impact them more significantly than others within education.

The field of educational research has done its part in advancing school improvement priorities by seeking to examine and define effective teaching practices. This research has provided meaningful insight into such wide-ranging parts of teaching as effective strategies for integrating arts into instruction in other content areas (Brown, Garnett, Valazquez-Martin, & Mellor, 2018), making effective use of “wait time” as a questioning strategy (Ingram & Elliott, 2016), and the relative merits (Soler, 2016) of phonics-based (Bower, 1992) and whole-language instruction (Phadung, Suksakulchai, Kaewprapan, & Howland, 2013).

The cumulative effect of this research and educational policy, however, has been a layering of expectations on teachers for professional practice (Dworkin & Tobe, 2014). Perhaps because this change has been made incrementally, it appears to be invisible to most, including decision-makers (Bates, 2014). In the estimation of some, teaching is “as complex as medicine and therefore, just as worthy of being a profession” (Thorpe, 2014, p. 6). Larson suggested that teaching “may be particularly difficult in the United States” (2014, p. 15) because of the great complexity of issues teachers are expected to understand and manage. Teaching is becoming increasingly complex, indeed a “considerable body of research in education concludes that
teaching is remarkably complex” (Enow & Goodwyn, 2018, p. 120), a fact which should strengthen the case for its professionalization but instead is a contributing factor in its de-professionalization, as will be outlined in the following section.

In 2008, Ingersoll and Perda presented an argument that teaching is complex work and that the act of teaching requires a specific set of skills and knowledge. In a multilevel analysis published in 1997, Ingersoll and his colleagues introduced a framework for understanding the nature of a profession. Ingersoll’s framework of professionalization (refined in 2003, 2008, and 2011) made the case that teaching meets the criteria for being a profession by virtue of fulfilling the following criteria: “credential and licensing levels, induction and mentoring programs for entrants, professional development support, opportunities and participation, specialization, authority over decision making, compensation levels, and prestige and occupational social standing” (Ingersoll & Merrill, 2011, p. 108). Ingersoll and his co-authors warned that a range of factors in public education are threatening to de-professionalize teaching. Others, such as Darling-Hammond (2005), also made the case that a systematic de-professionalization of teaching is underway, citing factors such as the state of flux in teacher preparation. Thus, the absence from the literature and in the collective consciousness of the profession of a snapshot of the very complexity that qualifies teaching as a profession is problematic because the absence of such a snapshot may serve to contribute to the ongoing de-professionalization of teaching.

A clear mapping of descriptions and recommendations of teaching in the professional literature may provide a holistic view of the cumulative effect such research and professional literature is having. The question to ask, therefore, is what is teaching as articulated in peer-reviewed and practitioner literature since 2010?
**Researcher Positionality**

As an educator with 20 years of experience in three different states, I have a rich background of practical experience with the issues that are the subject of this study. Further, specifically as an administrator, I have been a vocal critic of the status-quo I observe in public education—particularly the role that teachers typically play. As such, it is impossible to deny that I bring these perspectives and biases to this work. However, by establishing clear criteria and procedures for this systematic review of the literature the possibility of drawing conclusions not supported by that literature has been controlled and minimized.

**Purpose of the Study**

The purpose of this study was to explore how teaching is defined in the current professional literature. A systematic review of the literature, a process that works methodically through all available literature within specific parameters rather than pursuing a more limited or narrowly focused review, served to trace the themes that have emerged and that exert influence on the shaping of the profession and on collective understanding of the profession. The research question guiding this study is

**What is teaching as articulated in peer-reviewed and practitioner literature between 2010 and 2019?**

**Assumptions**

The researcher brought certain assumptions to this study that are noted here for their interplay with the research process, conclusions, implications, and recommendations to follow.

1. The professional literature provided an appropriate source for exploring the nature of teaching as it both reflects and influences practice in the field.
2. The research methodologies and methods selected were appropriate for answering the research question.

3. The inclusion criteria for this study was appropriate.

4. The researcher’s experience and extensive reading prior to dissertation research were beneficial to the study and not a source of bias.

5. “Teacher” and the discussion of teaching herein assumed K12 public education in the United States. All or part of the research, findings, recommendations, and conclusions may apply more broadly but such reach was not assumed nor implied in this dissertation.

Limitations

All research studies face limitations. In the case of this study, one limitation warrants special mention. This systematic review of literature included 11 publications. Although the number of articles included in the study (295) is very high, a study intended to answer such a large question must be understood to be drawn as representative. The review was systematic but not comprehensive.

Definitions

These terms are key to the study and include the researcher’s working definitions.

1. The literature or professional literature. For the purpose of this dissertation, the literature and the professional literature are references to publications related to education. This refers to primarily journal articles—and then primarily peer-reviewed articles—but also includes books, book chapters, and in some cases news articles, blog posts, or similar publications based in peer-reviewed research. A more thorough discussion of the literature included in this study will follow.
2. Teachers. Individuals engaged directly in the instruction of students in, for this study, K12 public education in the United States. Unless otherwise noted, this is meant to include all such individuals regardless of subject matter, grade span, geographic location, or percentage of contract hours assigned contact with students. Although research, discussion, conclusions, and recommendations may apply to individuals teaching in settings outside these boundaries, it is not the intention of this dissertation to speak to the broader context.

Conceptual Framework

This study was guided by the conceptual framework of the professionalization of teaching constructed by Ingersoll and Merrill (2011). They argued that teaching meets the descriptors of a profession in many regards: “credential and licensing levels, induction and mentoring programs for entrants, professional development support, opportunities and participation, specialization, authority over decision making, compensation levels, and prestige and occupational social standing” (Ingersoll & Merrill, 2011, p. 186). They went on to argue, however, that teaching is under severe threat of de-professionalization from a variety of challenges such as low levels of autonomy and status.

The researcher carries the viewpoint that while the nature of teaching is not immutable, it is knowable and known collectively in spite of remaining uncaptured in a frame that includes the whole. Instead of seeking to discover or articulate a new theory, this study seeks to map the boundaries of teaching through a systematic review of the literature to trace the projected view of teaching as described and recommended in the professional literature over the last decade.

Methodology

This study pursued a systematic review of the literature. Beyond a standard review of literature that undergirds and grounds a research study, this systematic review should be
considered research in itself. This approach to reviewing a specific problem or issue is characterized by a development of inclusion and exclusion criteria, a clearly articulated search strategy, and a criterion for the evaluation of studies (Badger, Nursten, Williams, & Woodward, 2000). Bennet, Lubben, Hogarth, and Campbell (2005) argued that systematic reviews are a “key strand” (p. 389) in educational research because they can provide evidence on which to base policy decisions, fueling the evidence-based decision-making seen as essential in education. The following systematic review of the literature, therefore, serves as a key component of this dissertation study. Inclusion criteria for journals and articles are outlined in detail next.

This systematic review of literature sought to capture a large-scale overview of the themes in the literature that serve to influence policy and practice in public education. Any attempt to capture the “present” state of the literature must include sufficient past contributions as no state of shared understanding exists in a vacuum but is shaped over time. For this reason, creating inclusion criteria for this systematic review required the articulation of specific boundaries.

Identification of Sources

This study follows PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), a structured set of guidelines for systematic reviews (Moher, Liberati, Tetzlaff, Altman, & PRISMA Group, 2009). This method articulates the steps researchers follow and in order to identify documents as part of a systematic review of literature, as depicted in Figure 1 (Hallinger & Kovačević, 2019). Unlike a systematic review that relies on a keyword search, this study relies on inclusion criteria to identify specific journals to include in the systematic review and criteria for selecting articles published within them. The journal inclusion criteria is discussed in more detail below.
Figure 1. PRISMA flow diagram detailing steps to identify and screen sources (Moher et al. 2009, p. 3).

Search Criteria

The chronological boundaries for this systematic review were January, 2010 through March, 2019. The year 2010 was selected as the starting point for this review as it marked a significant moment of change within public education. During that year, Common Core State Standards were adopted by states across the nation. By November 2010, 45 states had adopted the standards (LaVenia, Cohen-Vogel, & Lang, 2015). While the implementation of Common Core has been fraught and deeply politicized, it is undeniable that its adoption had significant
implications for practice (Goldstein 2019; Papola-Ellis, 2014), for the manner in which programs prepared candidates to teach (Greenburg, Walsh, McKee, & National Council on Teaching Quality, 2014), and for teaching itself.

Publications

The following criteria were used for selecting publications to include in this systematic review. In both categories of rating and focus, journals were required to meet one criteria or the other to be included.

1. Rating. Top rated journals. The selection of peer-reviewed journals was based on a review of the journals’ impact as recorded in the 2018 Journal Citation Reports (JCR). As the longest established tool for assessing journals (Delgado-Lopez-Cozar & Cabezas-Clavijo, 2013), Thomson Reuters’ JCR was used for identifying journals to include in the current study. For this study, a top-rated practitioner journal was defined as one that is widely read in the field but that does not employ peer-review procedures for article selection. As practitioner journals do not rely on peer review, the process of evaluating journal impact and prestige by means of citations was not available. Therefore, for the purpose of this study, practitioner journals were selected on the basis of total readership.

2. Focus. Publication focuses on a specific content area. Journals in this category are written for educators within a particular subject or content-area discipline. Publication features articles addressing multiple subjects or any subject area. Journals that met this criteria feature articles that are not content-area specific or that address a mix of content areas.

The review was delimited to articles identified via the preceding criteria. The search excluded books, book chapters, editorial articles, and conference papers in order to provide consistency across publications (Hallinger & Kovačević, 2019). When articles of that nature
were encountered during the course of the systematic review, they were removed from consideration for inclusion.

**Selection Process**

The researcher used the chart presented in Figure 2 to track the process of reviewing and considering journals for inclusion in the study. The criteria above were carefully selected as a means of identifying a group of journals that would provide a sampling of publications that could reasonably be considered representative of the (much) larger body of work published during this time period. Applying the journal inclusion criteria yielded the journals listed in Figure 2 after a careful process of review and consideration.

The process of developing the list of journals began with a review of the 2018 Journal Citation Report and a review of which subject area(s) individual journals focus on. By using the matrix included in Figure 2, subject areas not included were identified and journals were sought to add to the matrix for consideration. Sixteen journals were originally included. Upon review, five were eliminated for a variety of reasons: a heavy focus on practical tips for lessons (*Arts and Activities*), a very narrow range of publication topics (*Metacognition and Learning*), articles focused more outside K12 education than in (*Journal of Communication*), and the prioritization of brief articles in the style of news items or a redundancy with an included journal (*Education Week* and *THE Journal*).

A single practitioner journal (as defined above) was ultimately included in this study. That decision was driven by the abundance of peer-review journals otherwise meeting the inclusion criteria and a dearth of practitioner journals meeting those same criteria. Among the practitioner articles originally reviewed for inclusion, this journal (*Techniques*) filled a gap by virtue of the fact that it focuses on a subject area (Career and Technical Education) not explicitly
<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
<th>Peer-Reviewed</th>
<th>Practitioner</th>
<th>General</th>
<th>ELA</th>
<th>Math</th>
<th>Science</th>
<th>Social Studies</th>
<th>Arts</th>
<th>Physical Education</th>
<th>Career/Technical</th>
<th>Articles reviewed</th>
<th>Articles selected</th>
<th>Articles included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Researcher</td>
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<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>32</td>
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<tr>
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<td>X</td>
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<td></td>
<td></td>
<td>1,426</td>
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<tr>
<td>Educational Studies in Mathematics</td>
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<td>X</td>
<td>X</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td>675</td>
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<tr>
<td>English in Education</td>
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<td>X</td>
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<td></td>
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<td></td>
<td></td>
<td>1,167</td>
<td>17</td>
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<td></td>
<td></td>
<td>593</td>
<td>63</td>
<td>32</td>
</tr>
<tr>
<td>Journal of Teaching in Physical Education</td>
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<td>X</td>
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<td></td>
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<td></td>
<td></td>
<td>7,152</td>
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<td>26</td>
</tr>
<tr>
<td>Learning and Instruction</td>
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<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>6,147</td>
<td>47</td>
<td>29</td>
</tr>
<tr>
<td>Review of Educational Research</td>
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<td>X</td>
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<td></td>
<td></td>
<td>2,406</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Social Education</td>
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<td></td>
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<td></td>
<td></td>
<td>23,220</td>
<td>61</td>
<td>33</td>
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<tr>
<td>Studies in Science Education</td>
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<td>X</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>113</td>
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<td>22</td>
</tr>
<tr>
<td>Techniques</td>
<td>113,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,661</td>
<td>66</td>
<td>41</td>
</tr>
</tbody>
</table>

*Figure 2. Journal and article inclusion matrix.*
addressed in other journals. Additional discussion of the article selection process and results is included in the following section. While many additional highly regarded peer-reviewed journals were not included in this study, the inclusion criteria outlined here guided the researcher to select these journals listed below because they meet the inclusion criteria, they address all identified subject areas directly, and they create a scope within the ability of the researcher to complete. The omission of other journals and the narrowing of the scope to 11 journals is a clear limitation of this study. However, the nature of the study makes a systematic search of a representative selection of journals preferable to a keyword search and the inclusion of a larger list of journals impractical for review by a single researcher. As such, the journals below are presented as reasonable representations of the professional literature between 2010 and 2019.

**Articles**

In order to provide clear boundaries of this systematic review, criteria for selecting articles from the listed journals for inclusion was necessary. Those criteria are as follows. Only articles meeting all three criteria were included.

1. Published between January 2010 and March 2019. This study sought to establish current peer-reviewed research on the nature of teaching. The beginning year of inclusion selected was 2010 because by November of that year, 45 states had adopted the newly drafted Common Core State Standards (LaVenia et al., 2015). While the Common Core has been and continues to be plagued by rigorous political and philosophical opposition (Tampio, 2018), the fact of its significance and influence on public education in the subsequent decade is undeniable.

2. Published in one of the identified peer-reviewed journals or published in one of the identified practitioner journals AND consistent with peer-reviewed research. While the need for peer-reviewed literature is self-evident, the need for practitioner articles is based on what
teachers read about their own profession. While research is intended to inform and impact practice, evidence suggests that teachers do not often read the research themselves (Borg, 2009; Schaik, Volman, Admiraal, & Schenke, 2018) and are, therefore, very often not aware that research around an issue relevant to them has even been published (Sparks, 2018). Articles that make claims without a grounding in or reference to peer-reviewed research, however, were excluded.

3. Provide descriptions of or recommendations for teacher practice. Publications that report what a group of teachers actually do in practice [i.e., math teachers’ use of game-based instructional tasks (Denham, 2019)] were included. When descriptions of teacher practice were provided as ancillary to the article’s thesis, they were still included. The repetition and amplification of existing descriptions of/recommendations for teaching underscores the appropriateness of including such details, instead of undermining them as irrelevant. Publications that make recommendations for practice were also included [i.e., effective teachers use performance feedback (Collins, Cook, Sweigart, & Evanovich, 2018) or take a specific action or toolkit/recommended actions for arts integration (Nilson, Fetherston, McMurray, & Fetherson, 2013)]. These recommendations were found in the review of literature or in the conclusions and implications section of peer-reviewed research or in the “tips/suggestions” section of practitioner articles.

Data Collection

A copy of all included articles identified via the process (column labeled “Articles selected” in Figure 2) were collected for further review. The researcher accessed databases containing issues of each journal included in the systematic review. A digital record of each article published in the issues was reviewed using the following methodologies. First, all articles
labeled as books reviews, book chapters, editorials, and conference papers were disregarded. For all articles not failing the inclusion criteria, as previously outlined, the researcher read the article title, abstract, and introduction. When such review was inconclusive, he also examined the results or findings section and the recommendations section, as needed. For all articles reviewed that broached the topic of the nature of teaching at all, a digital copy was captured for further review. This process yielded 471 full-text articles.

Following this collection process, all articles were read to identify specific descriptions of or recommendations for teaching. The researcher extracted all such quotes verbatim from each article. In the course of this more in-depth review process, an additional 176 articles were excluded for only partially or imperfectly meeting the inclusion criteria. For example, upon more careful review, many originally included articles focused on teaching practices at the post-secondary level. A significant number also spoke to issues or practices within education but focused on collective practice—at the school or district level, for example—or did not make recommendations or assertions about teaching. Ultimately, verbatim quotes were extracted from 295 articles.

**Data Analysis**

Upon completion of the collection of articles meeting the criteria as described and the collection of data in the form of descriptions and/or recommendations for teaching, all collected data were coded. Charmaz suggested that this process “distills data, sorts them, and gives us an analytic handle for making comparisons with other segments of data” (2014, p. 4). To that end, first cycle coding was conducted using descriptive coding, which summarizes a passage or set of data in a word or short phrase (Saldaña, 2016). As a result of that process, all articles yielded data that produced at least one code. Articles that provided extensive description or
recommendations for teaching produced as many as 12 unique codes. Altogether, 786 unique codes were produced in this manner.

The second cycle relied on pattern coding as a way of grouping first cycle descriptive codes into a smaller number of sets, themes, or constructs (Zupic & Čater, 2015). During this process, codes not identical but carrying the same meaning were combined to better reveal the patterns in the data. For example, “Be aware of individuality,” “Understand and respect the individuality of all children,” and “Understand the beliefs and motivations of individual students” were combined into a single code “Understand/respect individuality of all.” The majority of all codes remained uncombined and combinations were typically just two codes. At the extreme end, two codes, “Build constructive, positive, caring, supportive relationships with students” and “Use questioning to prompt thinking and assess learning,” represented the merging of nine very similar codes. In this way, the second cycle consisted of eliminating redundancies in the codes during the process of grouping. Pattern coding produced 20 groupings:

<table>
<thead>
<tr>
<th>First Grouping</th>
<th>Second Grouping</th>
</tr>
</thead>
<tbody>
<tr>
<td>create learning environment</td>
<td>know your subject matter</td>
</tr>
<tr>
<td>know students</td>
<td>provide feedback</td>
</tr>
<tr>
<td>plan</td>
<td>authentic learning experiences</td>
</tr>
<tr>
<td>technology</td>
<td>know pedagogy</td>
</tr>
<tr>
<td>develop relationships</td>
<td>whole child</td>
</tr>
<tr>
<td>engage students in learning</td>
<td>professional growth/practice</td>
</tr>
<tr>
<td>instructional strategies</td>
<td>reflect on practice</td>
</tr>
<tr>
<td>know/follow the law</td>
<td>student thinking</td>
</tr>
<tr>
<td>monitor student learning</td>
<td>communication</td>
</tr>
<tr>
<td>autonomy/agency</td>
<td>set standards/expectations</td>
</tr>
</tbody>
</table>

Finally, the researcher engaged in code weaving—an exploratory process of identifying how identified patterns fit together (Saldaña, 2016)—to identify patterns of descriptions of and recommendations for teaching within the included articles. As part of this process, codes within each grouping were moved on the page to place those with similar meaning in proximity to each other. In the course of this process, it became
apparent that seven of the original groupings were not substantively different than one or more of the other groupings. For example, the codes originally grouped under “develop relationships” overlapped significantly with codes originally grouped under “know students.” The codes within those seven groupings were placed where they better fit and the extraneous groupings were collapsed. The three-step coding process described above (descriptive, pattern, weaving) is depicted in the flowchart presented in Figure 3.

The guiding framework of this dissertation was professionalization (Ingersoll & Merrill, 2011). This systematic review was designed to methodically survey the professional literature to examine how teaching is defined there. As both the record of and a contributor to the growing complexity, the professional literature is key in developing a snapshot of that complexity. The weaving of the codes yielded by this systematic review of literature produced a picture of teaching as complex and demanding as it is clear. Over the course of the last decade, the professional literature has described—and demanded—professional practice that encompasses 13 competencies and practices. They are arranged here very roughly in the following order: actions and competencies that exist or are taken before an individual lesson, actions that happen during lessons, actions that occur after an individual lesson. It is beyond the scope of this study to evaluate the sequencing of these actions or the relationship of each to the others; this sequence is also not intended to suggest prioritization or linear progression.

- Know Students
- Know Your Subject Matter
- Demonstrate Pedagogical Expertise
- Plan for Practice
- Create a Learning Environment
Figure 3. Data coding flowchart.

Data
Direct quotes from 295 journal

Descriptive coding
786 codes

Pattern coding
20 code groupings

Code weaving
13 competencies/
Engage Students in Learning
Implement Effective Strategies
Provide Authentic Learning Experiences
Support Learning
Monitor Learning
Provide Feedback
Know and Follow Laws and Policies
Reflect on Practice

The descriptions and recommendations found in the literature depicted these practices as interwoven yet distinct. Each competency and practice was supported by extensive bodies of research. Taken as a whole, “the work of being an educator is extremely complex and fraught with difficulties” (Selkrig, 2017, p. 335). A brief overview of each area follows.

**Know Students**

Teaching includes knowing individual students deeply in a range of dimensions and using that knowledge to drive professional decisions. If the frequency with which an issue is addressed is an adequate metric, the professional literature from 2010-2019 lays a heavy emphasis on the importance of teachers knowing students individually (Gasser, Grütter, Buholzer, Wettstein, 2018; McMullen, Kulina, & Cothran, 2014; Pavlou, 2013; Putwain, Remedios, & Symes, 2015) and using that knowledge of students to inform decision-making (Bonner, 2014; Valoyez-Chavez, 2019). Teachers must reject deficit perspectives of students (Aronson & Laughter, 2016) and “avoid making hasty assumptions” (Hodgson & Wilkin, 2014, p. 203) about students, but instead hold all students to high expectations (Hickey, 2014; Peterson, Rubie-Davies, Osborn, & Sibley, 2016; Shifer, 2016; Smith, 2017; Straehler-Pohl, Fernández, Gellert, & Figueiras, 2014; Valoyez-Chavez, 2019). Especially important is understanding and valuing students’
cultural heritage (Paris, 2012). This can be done by supporting students in sustaining cultural competence (Bonner, 2014; Borrero & Yeh, 2010; Paris, 2012; Rusanen, Rifa-Valls, Alexandre, Bozzi, & Haikio, 2011), understanding the relationship between students’ culture and worldview and the subject matter (Akkerman & Bakker, 2011; Stocklmayer, Rennie, & Gilbert, 2010), and supporting multilingualism and multiculturalism (Paris, 2012).

Knowing about students is not enough as teachers must build constructive, positive, caring, and supportive relationships with students (Battey, 2013; Burke, 2011; Fauth, Decristan, Rieser, Klieme, & Büttner, 2014; Kopershoek, Harms, de Boer, van Kuijk, & Doolaard, 2016; Kwok, 2017; Pan, 2014; Pike, 2011; Slayton & Meadows, 2012). Recognizing that emotions and learning are inseparable (Strauch-Nelson, 2012), teachers work to establish trusting relationships with students (Bonner, 2014). At a basic level, this includes behaving unaggressively (Mainhard, Breklemans, & Wubbels, 2010) and avoiding negative interactions with students (Adams & Leininger, 2019; Gasser et al., 2018). Far from being a neutral strategy for enhancing learning for students, “experiencing a positive relationship with a teacher can protect against numerous other negative influences including maladaptive behaviour, negative life events, poor quality child–parent relationships, and referral to special education settings” (McGrath & van Bergen, 2015, p. 13). Teachers must understand the complexity of relationship building (McGrath & van Bergen), and engage students emotionally (Fredriksen, 2010; Hamilton, 2015; Pöllänen, 2011; Ruzek et al., 2016; Zee & Koomen, 2016) by addressing their needs, desires, and hopes (Smith, 2014).
Know Your Subject Matter

Teaching includes holding, actively working to expand, and demonstrating strong content knowledge. While having deep knowledge of the subject matter one teaches should be an obvious requirement of the job, many employed to teach do not have such knowledge (Ben-Chaim, Keret, & Ilany, 2007; Shulman, 1986). Perhaps that is why the professional literature in the past decade has emphasized an expectation that teachers know the subjects they teach (Dewitt, 2010; Hamilton, 2015; Oberg & Flanegan, 2017; Stern & Kampourakis, 2017; Valoyes-Chávez, 2019) in deep and flexible ways (Luft, Dubois, Nixon, & Campbell, 2015).

Beyond mere fact-based knowledge, teachers are expected to know how the discipline they teach aligns with their curriculum (Cruz & Bailey, 2017) in order to more fully know and understand the curriculum itself (A Vision, 2016; Kim et al., 2018; Valoyes-Chávez, 2019). A key application of this knowledge is in the knowledge and analysis of content standards (Michael, Webster, Patterson, Laguna, & Sherman, 2016). For many teachers, effective practice requires the managing of multiple sets of standards (Gaitlin, 2015), skillfully navigating the convergences of them as critical for guiding instructional decision-making (Lee, 2017). In short, teachers are expected to move well beyond general familiarity to be subject matter experts (Dewitt, 2010; Gehrki, 2014).

Indeed, the knowledge needed by teachers is not simply a clear-cut and well-connected set of basics, but a sophisticated and largely enactive mix of familiarity with various realizations of [content area] concepts and awareness of the complex processes through which [learning] is produced. (Davis & Renert, 2013, p. 247)
Far from being a universal set of basics, content knowledge is one area of teaching expertise that is required of all teachers but is itself completely different from one subject to another.

**Demonstrate Pedagogical Expertise**

Teaching includes understanding and enacting effective professional practices related to instruction. A companion competency to content knowledge is pedagogical knowledge (Brodie, 2014; McClune & Jarman, 2012). This expertise is complex, requiring that teachers understand how to make their subjects comprehensible to others (Brock, 2015), the ways in which knowledge is produced (Sztajn, Confrey, Wilson, & Edgington, 2012) and students learn (Bausmith & Berry, 2011), and understand student understanding (Manizade & Mason, 2011) well enough to build models of that thinking (Sztajn et al., 2012). Effective practice relies on student-centered conceptualizations of teaching (Stylianou, Kulina, Cothran, & Kwon, 2013) that view education as transformative (Illeris, 2012). Effective teaching also requires a knowledge of the way students think (Valoyes-Chávez, 2019), including common student errors or misconceptions (Stern & Kampourakis, 2017), an anticipation of multiple zones of proximal development (Sztajn et al., 2012), and a consideration of how instruction is likely to impact a variety of students (Healey & Fernandes, 2011).

The literature acknowledged that it is essential for teachers to understand the complexity of teaching (Davis & Renert, 2013). While there is no universal methodology for teaching, a wide range of pedagogies or approaches vie for teachers’ attention: art-based, practice-lead pedagogy (Kay, 2013); brain research (Oliver, 2011; Patterson, 2015; Sikora, 2013; Strauch-Nelson, 2012); passion-led instruction (Fried, 2015); drama-based
pedagogy (Lee, Patall, Cawthon, & Steingut, 2015); and blended learning (Cheung & Slavin, 2012), just to name a few. It is important to note that the list of practices specifically included here does not present equivalent professional practices. One of the key tasks for teachers is to sort out how the great mass of research and pedagogical approaches intersect, overlap, and even contradict each other in the developing of practice.

The incorporation of digital and technological tools to support learning is strongly emphasized in the professional literature (Aubusson, Burke, Schuck, Kearney, & Frischknecht, 2014; Blanchard, LePrevost, Tolin, & Gutierrez, 2016; Cheung & Slavin, 2013; Garfield, Le, Zieffler, & Ben-Zvi, 2014; Jones, 2012; Karich, Burns, & Maki, 2014; Kori, Pedaste, Leijen, & Mäeots, 2014). Skillful practice in this area requires an understanding of how technology supports content-area learning (Lu, 2010). Far from simply using mobile devices (Bartholomew, 2015) and social media (Heatley & Lattimer, 2013) in the classroom, teachers are expected to consider how to skillfully incorporate various technological applications in support of learning (Biggerstaff, 2018; Wyant, Jones, & Bulger, 2015).

A firm commitment to continuous professional learning is expected of teachers through such activities as reading professional journals (Van den Berghe et al., 2013), utilizing a network of professional peers (Moscon & Thompson, 2013), and giving presentations (Van den Berghe et al., 2013). Above all, teachers should “ventur[e] into the lost, uncertain and unknown space. Teaching demands a constant negotiation between the lost and found, and dwelling in this space can lead to new exciting curricular and pedagogical possibilities” (Lajevic, 2013, p. 42).
Plan for Practice

Teaching includes routine, strategic, thoughtful planning for both short- and long-term action. Integral to the work of teaching is the process of planning for teaching (Goodchild, Fuglestad, & Jaworski, 2013; O’Connor, Michaels, Chapin, & Harbaugh, 2017; Strimel et al., 2014; Villanueva, Taylor, Therrien, & Hand, 2012). This work ranges in scope from long-range planning for a course to planning units of study (Parker, 2018) and the standard expectation that teachers create plans for meaningful lessons every day (Gaitlin, 2015).

Far from being a simple expectation of the job, the recommendations and expectations surrounding planning are a complex, and sometimes self-contradictory, tangle of minutia. Teachers are expected to identify content to be learned deeply (Parker, 2018; Stevenson, Hartmeyer, & Bentsen, 2017) and organize it (Garfield et al., 2014; Hämäläinen & Vähäsantanen, 2011) using a research-based approach, such as the backward-design model (Moye, 2011). Teachers are expected to ensure that the resulting curriculum follows a logical sequence (A Vision, 2016). Teachers are not only required to comply with existing, district-level curriculum (Simpson, 2010) and plan lessons based on that curriculum (Fallik, Rosenfeld, & Eylon, 2013), but also to design the lessons they plan based on students’ actual misconceptions (Swalwell, 2015), while considering those students’ cognitive capacity and the cognitive load planned tasks will impose (Kirschner, Paas, Kirschner, & Jansen, 2011).

At the lesson level, it is essential for teachers to plan rich (Chen, Mason, Hypnar, Zalmout, & Hammond-Benett, 2014) and engaging (Lee, Chou, & Fend, 2017) learning tasks that vary in complexity (Kirschner et al., 2011) and that prioritize active learning
(Hamilton, 2015). Also integral to successful planning is the selection of appropriate materials (Jack & Lin, 2017; Robinson, Fischer, Wiley, & Hilton, 2014), considering the resources available (Hämäläinen & Vähäsantanen, 2011). Planning must also anticipate addressing multiple student learning outcomes (Sztajn et al., 2012), and supporting a wide range of student responses to learning activities (Van Driel & Berry, 2012). This means that teachers must grapple with logistical implementation issues (Bevan, 2017) and be prepared but also willing to take risks (Pavlou, 2013), thereby demonstrating flexibility (Stern & Kampourakis, 2017; Villanueva et al., 2012) and a tolerance for ambiguity (Hadjiyanni, 2014) in service of deep student learning.

### Create a Learning Environment

Teaching includes strategic and continuous action to create and maintain an environment optimally conducive to learning. The next core competency for teaching is creating an environment conducive to student learning (Korpershoek et al., 2016; Sikora, 2013; Tuchaai, O’Neill, & Sharplin, 2012). Doing so requires attending to a complex range of priorities: creating a space that is emotionally safe (Ruzek et al., 2016; Sikora, 2013); non-threatening (Villanueva et al., 2012); non-competitive (Sikora, 2013); actively engaging (van Loon, de Bruin, van Gog, & van Merriënboer, 2013); flexible, social, and cooperative (Anderman, Sinatra, & Gray, 2012); motivational (Fauth et al., 2014); socially and culturally healthy (Barker, Wallhead, Goodyear, Brock, & Arnade-Escot, 2017); and inviting to and reflective of the myriad of human relations (Cruz & Bailey, 2017).

A key strategy in nurturing such an environment is striving to meet students’ needs for autonomy, competence, and relatedness (Sikora, 2013). Thus, effective teachers
support and enhance students’ autonomy (Ruzek et al., 2016), teaching them to appreciate and guide their own learning (Dubinsky, Roehrig, & Varma, 2013; Gehrki, 2014; Kwok, 2017). Equally important, teachers implement strategies that value and promote self-discipline (Osher, Bear, Sprague & Doyle, 2010), creating conditions for students to co-create the culture of their learning environment (Osher et al., 2010). Student professionalism is fostered (Moscon & Thompson, 2013) as students are assisted in monitoring and regulating themselves (Mainhard et al., 2010).

Effective teachers employ effective management skills (Fauth et al., 2014; Pan, 2014) by finding a balance between unlimited freedom and excessive structure (Mendelowitz, 2014). That balance is enhanced by providing a clear understanding of behavioral expectations and norms (Garn, McCaughtry, Shen, Martin, & Fahlman, 2011); modeling respectful behavior (Escarti, Llopis-Goig, & Wright, 2018); and invoking and applying routines in creative, improvisational ways (Hämäläinen & Vähäsantanen, 2011). Teachers avoid coercive practices (Mainhard et al., 2010; Putwain et al., 2015), acting instead as a warm demander (Mainhard, Oudman, Hornstra, Bosker, & Goetz, 2018) through a relational approach to management of the learning environment (Kwok, 2017; Gasser et al., 2017). Teachers respond to students who exhibit behaviors disruptive to the learning environment first with small corrections (Mainhard et al., 2010) and interventions for improvement (Korpershoek et al., 2016; Osher et al., 2010) instead of attempting control via threats (Putwain et al., 2015).

The preservation of a healthy learning environment is often the result of a healthy ecosystem of interactions, particularly one that values democratic interactions (Shen, McCaughtry, Martin, Fahlman, & Garn, 2012). Students are allowed voice and choice
(Hickey, 2014), having been passed control from the teacher (de Boer, Donker, Kostons, & van der Werf, 2018; Hospel & Garland, 2015; Pavlou, 2013). When certain tasks are mandatory, the teacher provides rationales (How, Whip, Dimmock, & Jackson, 2013) and the opportunity for co-development of procedures (de Boer et al., 2018). Learning is positioned as a co-investigation of the world by teacher and students (de Eca, Pardinas, & Trigo, 2012), a process that values risk-taking (Sikora, 2013), encourages individual reasoning (Nilsson & Ryve, 2010), and prioritizes equity and access (Hodgin & Kahne, 2018; Merga, 2015).

In the nurturing of a healthy learning environment, teachers eliminate gender stratification and segregation (Valley & Graber, 2017), attend carefully to and avoid racist constructs (Flanagan & Hindley, 2017), strongly root out any form of harassment (Belfi, Goos, de Fraine, & van Damme, 2012), and ensure student safety (Cobb & Mosley, 2019). Individual practices that promote a positive environment, such as playing music (Digelidis, Karageorghis, Papapavlou, & Papaioannou, 2014), allowing students access to water (Sikora, 2013), incorporating movement and activity breaks (Sikora, 2013), and strategically organizing the room (Chen et al., 2014; Mainhard et al., 2018), are blended and incorporated in ways that best serve specific cohorts of students.

**Engage Students in Learning**

Teaching includes the implementation of activities designed to actively engage students in learning. The next three sections encompass what those lacking a deep familiarity with the complexity of the profession likely think of as teaching. They could all reasonably be placed under the umbrella heading of instruction. However, the range of competencies and practices is so broad that these three categorizations serve to illuminate
that complexity by providing substructures through which to understand. First is student engagement in learning.

The antecedent professional practices to engaging students in learning is the development of high expectations for all students (Straehler-Pohl et al., 2014; Hickey, 2014; Straehler-Pohl et al., 2016), including the belief that all students are able and willing to engage in challenging instruction (Conklin, 2011). Teachers must examine their expectations of students (Adams & Leininger, 2019) in order to clearly communicate an expectation of growth from every student. In setting challenging learning goals (Villanueva et al., 2012), teachers explicitly communicate high expectations for all students (Shifrer, 2016) — particularly those historically marginalized in the context of school (Valoyes-Chávez, 2019).

Such expectations are manifested in the engagement of students in interesting, challenging intellectual work (A Vision, 2016; Conklin, 2011; da Ponte & Quaresma, 2016; Villanueva et al., 2012). Far from simple, such practice requires teachers to “work against the grain” (Neumann, 2013, p. 310) of existing student assumptions and learning habits, keeping them engaged in the learning process (Fried, 2015) and striving to transform knowledge sources into meaningful learning (Gerki, 2014; Hasni et al., 2016; Sjöström, Frerichs, Zuin, & Eilks, 2017).

Meaningful engagement (Bevan, 2017) in learning is itself motivating to students (Hunt, 2019; Stuckey, Hofstein, Mamlok-Naaman, & Eilks, 2013). Examples include deconstructing complex ideas (Hayes & Wilson, 2016), problem solving (A Vision, 2016; Hayes & Wilson, 2016; Kolikant & Broza, 2011), exploration of students’ interests (Jack
and Lin, 2017), and relevant, real-world learning (A Vision, 2016; Jones, 2012; Manfra, Gray, & Lee, 2010).

To make engagement possible, teachers must develop a number of skills in students including careful and logical thinking (Brock, 2015); creative thinking (Hämäläinen & Vähäsantanen, 2011); metacognition (Chatzipanteli, Digelidis, & Papaioannou 2015; Garfield et al., 2014; Korpershoek et al., 2016); and the ability to plan, monitor, and evaluate their own learning (de Boer et al., 2018; Dubinski et al., 2013). Students also must be taught to develop synthesis of findings (A Vision, 2016), engage in active participation in structuring and displaying data (A Vision, 2016), and publicly defending and debating ideas (Villanueva et al., 2012).

The importance of student engagement is simultaneously so obvious as to be unremarkable and so complex as to be difficult to adequately explain. It requires physical activity (Sikora, 2013; Snook & Brown, 2017) but is not satisfied by it. It insists on deep and careful thinking (Hetherington, Hardman, Noakes, & Wegerif, 2018) but expects more than thinking alone. The deep and active engagement of students in their own learning is one of the pillars of teaching.

**Implement Effective Strategies**

Teaching includes knowing which specific instructional strategies work well to support learning and enacting them. While the active engagement of students is essential to learning, effective teaching also requires that the teacher plan and implement activities in which to engage. Key to this process is using content area standards as the starting point and driver of instruction (J. Moore, 2012; Lee, 2017) aimed at immersing student in that content (Jones, 2012). To that end, teachers must use a variety of instructional
strategies (Lee et al., 2017; Manizade & Mason, 2011; O’Connor, Mupinga, & Parker, 2013; Pan, 2014), particularly those which focus or probe student thinking (Temple & Doerr, 2012). These student-centered tasks (Korpershoek et al., 2016; Valoyes-Chávez, 2019) should span multiple levels of cognitive proficiency (Sztajn et al., 2012) while providing both enjoyable and effective learning experiences (Gunn & Delafield-Butt, 2016).

The effectiveness (and therefore advisability) of a wide range of strategies is supported by research. Among these are those best used at the beginning of class such as bell ringers (Boettner, 2011) and posting and discussing standards (J. Moore, 2012). Others center around strategies for instruction: explicit instruction (Kim & Quinn, 2013), lecture (Friesen, 2011), project-based learning (Anderman et al., 2012; Gehrki, 2014; Hastie, Chen, & Guarino, 2017; Hickey, 2014; Loyens, Jones, Mikkers, & van Gog, 2015; D. Moore, 2012; Turk & Berman, 2018), guided instruction (Iserbyt, Elen, & Behets, 2010), and teaching with literature (Risinger, 2011). Other strategies revolve around engaging students: concept mapping (Stevenson et al., 2017), reciprocal teaching (Chatzipanteli et al., 2015), inquiry-based learning (Andiliou & Murphy, 2010; Goodchild et al., 2013; Hayes & Wilson, 2016; Valbuena & Roy, 2016), games (Barab, Gresalfi, & Ingram-Goble, 2010; Gaydos, 2015), memorization (Neumann, 2011), writing activities (Hübner, Nückles, & Renkl, 2010; Prain & Hand, 2016; Risinger, 2011), and many more.

It is well beyond the scope of this article to examine the relative learning impact of these strategies as others have done. In the context of the study, however, this short list of instructional strategies serves to illustrate that teaching is not singular but immensely
complex even within specific subdivisions of the complex whole. The understanding and skillful implementation of this wide range of strategies requires a high degree of professional competence as teachers “operate within a high-pressured context, in which the superior memory, complex yet accurate manoeuvres and fast decision-making that characterize expert performance are a real advantage” (McIntyre, Mainhard & Klassen, 2017, p. 42).

Over the last decade, the professional literature has placed a special emphasis on collaborative, small-group learning (Coultas, 2012; Strimel et al., 2014). Teachers are expected to strategically assign students to cooperative groups (Burke, 2011; Duschl, Maeng, & Sezen, 2011) and prepare them for group work (Coultas, 2012) by clarifying the relationship between individual student reasoning and collective practice (Nilsson & Ryve, 2010). In order to maintain high-functioning student groups (Gaitlin, 2015; Tuchaai et al., 2012), teachers must notice groups’ individual characteristics, privately elicit feedback about collaborative work, and strategically change group composition on a regular basis (Barker et al., 2017). Making collaborative groups work requires the investment of time and energy (Tolmie et al., 2010) by actively developing the necessary skills and practices in students (Coultas, 2012; Kuhn, 2015) and by setting learning tasks and challenges that are virtually impossible for a student to solve alone (Kirschner et al., 2011).

**Provide Authentic Learning Experiences**

Teaching includes designing and implementing learning activities that are meaningful and relevant to students. The third subset of professional competencies and practices that describes instructional practice is the importance of providing students with
purposeful, worthwhile, meaningful learning experiences (A Vision, 2016; da Ponte & Quaresma, 2016). Teachers must integrate real-world learning activities (Jones, 2012; Manfra et al., 2010) by providing students with authentic problems (A Vision, 2016) and field-based learning experiences (DeWitt, 2010). This can look like students seeing how experts solve problems and subsequently experiencing expert-like investigations (Garfield et al., 2014) by using what they know to explore, create, and construct solutions (Balistreri, 2013; Eckstein, 2014).

Authentic problem-posing is recommended in teaching and learning (Battey, 2013; Wood, 2016) as a means of teaching students 21st century skills (Gaitlin, 2015). To engage in approaches to learning like this, students need to leave their school (Daneels, 2016; Greene, Erickson, Watson, & Beck, 2018) and use their city or community as a classroom (Smith & Soganci, 2011). Such interactions can provide the catalyst for providing students opportunities for civic engagement (A Vision, 2016; Barbieri, 2011; Rubin, 2010; Sjöström et al., 2017). Authentic learning requires that students consider issues from a variety of vantage points (Bailey & Cruz, 2013) and discuss controversial issues (Kawashima-Ginsberg & Junco, 2018; Kawashima-Ginsberg & Levine, 2015). Whether in the learning laboratory environment of their classroom (Barbieri, 2011) or actively engaged in their community, students learn more deeply when their learning is real and relevant (Hand, Yore, Jagger & Prain, 2010).

Support Learning

Teaching includes identifying and providing a wide range of supports to advance student learning. The picture of teaching painted by the professional literature is far different from the paradigm of teacher as dispenser of knowledge formerly valued. The
current vision calls for teachers to be flexible and responsive to student needs (Anderman et al., 2012; Gasser et al., 2017; Luft et al., 2015; Van Driel & Berry, 2012; Villanueva et al., 2012). Key to this approach is for the teacher to support learning through differentiated instruction (Kalyuga, 2012; Stair & Moore, 2010; Stylianou et al., 2013; Swalwell, 2015); implementation of interventions and supports tailored to individual student need (Osher et al., 2010; Slavin, Lake, Davis, & Madden, 2011; Weiser & Mathes, 2011); and adjustment, repetition, and sustaining of interventions to the extent necessary to ensure success (Chen et al., 2014; de Boer et al., 2018; O’Connor et al., 2013).

A specific approach to skillfully supporting student learning is referred to as scaffolding (Coultas, 2012; Duijnhouwer, Prins, & Stokking, 2012; Hunter-Doniger, 2015; Kim, Wee, Han, Sohn, & Hitchens, 2017; Kolikant & Broza, 2011; Lee, 2017; Moscon & Thompson, 2013; Swalwell, 2015). Scaffolding is a practice in which the teacher “temporarily takes over parts of student tasks with the goal of transferring the responsibility for the task back to the student at a later point in time” (van de Pol, Volman, & Beishuizen, 2011, p. 46).

In the support of learning, teachers enact peer tutoring (Iserbyt, Elen & Behets, 2010), tutor and reteach students themselves (Slavin et al., 2011), and provide enrichment activities for students who demonstrate mastery level learning more quickly than their peers (Hyslop, 2010). Teachers also identify and address students’ emotional needs (Fredriksen, 2010; Gasser et al., 2017; Hamilton, 2015; Ruzek et al., 2016; Zee & Koomen, 2016). In order to be able to support learning more effectively, teachers consider and mitigate non-academic factors that may stand in the way of student learning.
such as the effects of poverty (Kigel, McElvany, & Becker, 2015; Ritok & Bodoczky, 2012), physical or cognitive disability (Dessemontet, Martinet, de Chambrier, Martin-Willemin, & Audrin, 2019; Shifrer, 2016) and students’ emotional health (Fredriksen, 2010).

Monitor Learning

Teaching includes actively and continuously monitoring the degree to which students are learning. Effective teaching includes active monitoring of student learning. The teacher must monitor (Kalyuga, 2011) and manage (Hamilton, 2015), student work (da Ponte & Quaresma, 2016; Drageset, 2014; Firestone, 2014) and learning (McClune & Jarman, 2012; Nitz, Ainsworth, Nerdel, & Prechtl, 2014) frequently (Duschl et al., 2011) and as a natural part of the classroom culture (Eckstein, 2014).

To enact this type of monitoring of student learning, a teacher must hold a strong understanding of the nature of assessment; both assessment of learning (Manfra et al., 2010) and assessment that drives learning (Breakstone, Wineberg, & Smith, 2015; Heitink, Van der Kleij, Veldkamp, Schildkamp, & Kippers, 2016). That foundation allows the use of an objective, measurable accountability system (J. Moore, 2012) based on observable, measurable evidence of learning (J. Moore, 2012). Criteria of assessment are shared with students (Hodgson & Wilkin, 2014) to make clear what evidence will best reflect achievement of learning goals.

Monitoring student learning is a complex and perpetual practice for the effective teacher. By developing (Heitink et al., 2015) and conducting multiple forms of assessment (Manfra et al., 2010), teachers are able to collect (Swalwell, 2015) and analyze data about student learning (Michael et al., 2016). Formative assessments
(Andersson & Palm, 2017; Breakstone et al., 2015; Duschl et al., 2011; Hand et al., 2010; Manfra et al., 2010; Schoenfeld, 2014), rubrics (Humphry & Heldsinger, 2014; Panadero & Jonsson, 2013), achievement-based assessments (Michael et al., 2016), work samples and productions (Brodie, 2014), questioning (Heitink et al., 2015; Hodgson & Wilkin, 2014; Tuchaai et al., 2012;), student self-assessment (de Boer et al., 2018; Kawashima-Ginsberg & Levine, 2015), and performances of real-world skills (Balistreri, 2013; Eckstein, 2014) are all valid approaches to monitoring student learning. Instead of labeling unsuccessful attempts as failures (Bevan, 2017), teachers view errors as opportunities for learning (Brodie, 2013) and interpret the information they gain from student errors as a source of guidance for future instruction (Carey & Carifio, 2012; Goodchild et al., 2013).

**Provide Feedback**

Teaching includes continuously providing specific, descriptive, individual feedback to students about their learning. The companion practice to monitoring student learning is providing feedback (Andersson & Palm, 2017; Chien, Chang, & Chang, 2016; Davis, Jansen, & Van Driel, 2016; Duijnhouwer et al., 2011; Radford, Blatchford & Webster, 2011). Effective teachers use evidence of student learning as a tool for further advancing that learning through substantial, constructive, and focused feedback (Heitink et al., 2015). Engaging in the assessment/feedback cycle frequently (Hickey, 2014; Sikora, 2013), teachers ensure that their responses to students move far beyond the traditional *Initiation, Response, Feedback* protocol (Coulta, 2012) and are instead immediate and useful (Heitink et al., 2015; Kawashima-Ginsberg & Junco, 2018), personal and salient (Carey & Carifio, 2012; Eckstein, 2014), descriptive (Stevenson et
al., 2017), open (Radford et al., 2011), and self-referential (Pekrun, Cusack, Murayama, Eliot, & Thomas, 2014).

In order to ensure that feedback is maximally beneficial to student learning, teachers create a culture of trust by publicly praising student task performance (Belfi et al., 2011) and providing an endless feedback loop (Hunt, 2019). However, they strive to build students’ academic perseverance by providing as few explanations as possible (Richey & Nokes-Malach, 2013) and never providing the correct answer outright (Radford et al., 2011). They do address students’ lack of understanding (Barrett, 2018), however, by offering close and supportive responses (Archambault, Pagani, & Fitzpatrick, 2013).

The professional literature calls for grades and assessment to be instruments of learning (Brookhart et al., 2016). In addition, assessment serves as information for planning (Carey & Carifio, 2012) along with the results of formative assessments (Breakstone et al., 2015).

**Know and Follow Laws and Policies**

Teaching includes an active familiarity and compliance with relevant federal, state, and local laws and policies. Although it produced the fewest isolated mentions and (subsequently) codes in this systematic review of literature, knowledge of and compliance with laws and policies are an integral part of teaching practice. Although it may seem irregular to elevate this issue to the level of other competencies and practices in this study, a simple fact explains this decision. The professional literature may not focus on the importance of knowing and following laws and policies because they are such an ingrained part of teaching that a special focus would be superfluous. A great
many of the details included in other sections of the study are not recommendations but required for teachers, either by law or by policy. For example, one of the ways in which teachers are required to *know students* is in identifying and addressing the needs of homeless children (Miller, 2011). In most cases, *knowing their subject matter* is required of teachers by state law (Porter, McMaken, Hwang, & Yang, 2011). *Supporting student learning* is required by federal law (Zirkel & Thomas, 2010). Many schools or districts have policies that make it mandatory for teachers to *monitor* and *provide feedback* on student learning on a regular basis—minimally, in the form of reported numeric and/or A-F grades (Polloway et al., 1994). Examples such as these exist throughout the literature. Compliance with educational law and policy certainly is part of job expectations. Indeed, it is this pervasiveness of both law and policy that supports the need for this practice to remain its own category instead of remaining embedded within others.

Teachers must understand and enact all special education requirements (Stair & Moore, 2010; Tant & Waterlain, 2016). It is also essential for teachers to comply with required curricula (Simpson, 2010) and otherwise follow district and school level policies and expectations (Firestone, 2014). These are likely to influence all other areas of professional practice including most or all of the competencies and practices discussed here but also extending into job requirements.

**Reflect on Practice**

Teaching includes continuous, deep reflection on professional practice for the purpose of improvement. The final practice identified in the professional literature is reflection; effective teachers reflect on their teaching (Barrett, 2018; Blanchard et al., 2016; Bonner, 2014; Goodchild et al., 2013; Oberg & Flanagan, 2017; Scott, Mortimer,
& Ametller, 2011), engaging in an on-going process of self-reflection and analysis (Hadjiyanni, 2014; Scott et al., 2011; Valoyes-Chávez, 2019). This practice is enabled by an examination of the actions, decisions, and consequences that shape him/her (MacDonald, 2017) and an awareness of her/his own positionality and identity development (Harrison, Carson, & Burden, 2010).

Building on this self-awareness, the effective teacher actively analyzes lesson plans (Stuckey et al., 2013), observes videos of his/her own teaching (Kori et al., 2014), collaborates closely with peers (Moye, 2011; Vangrieken, Dochy, Raes, & Kyndt, 2015), and makes purposeful use of all such reflections to improve practice (MacPhail & Hartley, 2016). This process is driven by setting and monitoring professional goals (Kolovelonis, Goudas, & Dermitzaki, 2011) and striving to improve professional efficacy (Pan, 2014; Zee & Koomen, 2016).

**Discussion**

**Summary of Evidence**

This systematic review of literature suggested that the act and process of teaching is immensely complex but also includes clearly definable competencies of practice that are both distinct and intricately intertwined. A number of these practices require action both outside of and during class time: knowing students, knowing the subject matter, knowing and enacting pedagogical expertise, planning for practice, and reflecting on practice. Some occur almost exclusively within the confines of the classroom: creating a learning environment, engaging students in learning, implementing effective strategies, providing authentic learning experiences, supporting learning, and providing feedback. While a number of these competencies refer to possessing knowledge, the literature
makes clear that knowledge-based action is the expectation as is the ongoing cultivation of those knowledges.

Seen through the lens of Ingersoll’s professionalism framework, these findings lend credibility to the notion that teaching meets the criteria for being a profession—particularly “specialization” (Ingersoll & Merrill, 2011, p. 186). An occupation that requires knowledge and expertise in such a wide range of competencies and practices as standard practice must be a profession. When combined with teacher perceptions of lack of voice and status and the objectively lower compensation compared with professions requiring similar education (Allegretto, Mishel & Economic Policy Institute, 2018), surely Ingersoll was right to warn that teaching is in danger of radical de-professionalization. It may be reasonable to argue that teaching has been robbed of that professionalization already.

**Implications and Recommendations**

This study has provided an extensive answer to the question, What is teaching as described by the professional literature? To be sure, this answer is not singular. This vast and complex description of teaching is not presented in a unified way in the literature. There was no expectation to find such a unified description of teaching—the lack thereof was the very issue that this study sought to address. However, the component parts of this synthesis are supported by their presence in multiple instances in the literature.

The collective depiction of teaching provided by this systematic review suggested several implications. First, this synthesis of the professional literature’s description of teaching provides the grounds for including this evidence of the complexity of teaching in the public discussion and debate about education. If teaching is, in fact, a profession
that is this complex, that complexity is entirely relevant to discussions about funding, evaluation, decision-making, and (arguably) the bulk of other educational topics.

This description of teaching should have significant implications for decision-makers—from school and district administrators to district and state school boards to state and national legislators. For decision-makers without a professional background in education, this description can provide a clearer picture of the context of the work that their funding and legislation impacts and controls. For most educational administrators, the component competencies and practices should be no surprise. Given the opportunity, most would likely be able to brainstorm a list of expectations that align well with those documented here. However, the researcher wonders whether those same professionals hold this complexity in their mind as they make decisions about and interact with teachers. Perhaps the real complexity of the totality of these descriptions can be useful for local educational administrators in conceptualizing accomplished teaching and developing a culture that values and honors such practice, instead of blithely demanding excellence piecemeal and levying censure and sanctions when component competencies are deemed to be sub-standard.

Another implication could apply to pre-service preparation programs. A question for future consideration could be to investigate the degree to which such programs prepare teacher candidates to meet the expectations outlined here; or even make them aware of this complexity. The question of the effectiveness of teacher preparation programs has been widely examined (Coggshall, Bivona, Reschly & National Comprehensive Center for Teacher Quality, 2012); would a more systematic approach to equipping future teachers with basic skills in these competencies yield a positive impact
in their preparedness? While an expectation for beginning teachers to be masterful across this range of competencies and practices is unreasonable, an awareness of that complexity and the individual’s competence in relationship to it could perhaps mitigate the degree to which beginning teachers are overwhelmed as they start their career.

The complexity of teaching mapped through this systematic review of literature underscores the importance of effective mentoring programs, the need for which is already established in the literature (Berry & Shields, 2017; Hobson, Harris, Buckner-Manly, & Smith, 2012; Kent, Green, & Feldman, 2012). Although pre-service programs have a vital role to play, teaching is a profession far too complex to be mastered before one’s practice begins. The need for structures carefully designed to leverage the wisdom and leadership of experienced teachers for the purpose of guiding the professional development of beginning teachers is made plain by this glimpse and reminder of the job’s complexity.

**Limitations and Recommendations for Future Research**

This study does have its limitations. First, it was necessarily limited to a review of 10 years of professional journals. As a logical but arbitrary point of delimitation, that beginning point misses a great deal of the “reality” of teaching as described and lived both immediately and long before that point. This study does not purport to be an historical examination of the nature of teaching and makes no attempt to trace any such progressions.

Next, this study included only 11 journals; a great many for one person to review in detail but a very small number compared to the total in publication during the time period examined. While the inclusion criteria were designed to provide a representative
sample of the literature published during that time, it is possible that a comprehensive review of the data would yield results with somewhat different implications.

Finally, the boundaries of this study are important to remember as obviously limiting to it. Excluded were all books, news reports, teacher evaluation instruments, laws and policies, and a host of other documents and instruments specifically designed to shape and/or describe the nature and practice of teaching. A recommendation for future study is a cross section of teacher evaluation instruments. Surely the explicit expectations of teachers articulated in documents of that nature will provide significant insight into what teaching is expected to be.

It seems clear to the author that this research demands the development of a companion visual instrument. “Teaching is complex” is a true statement that lacks the detail necessary to lend weight to it. This article provides a great deal of detail—too much to reasonably expect decision-makers to thoughtfully consider. A visual chart could serve as a useful middle option; detailed enough to paint a clear picture of the complexity reflected here but succinct enough to hold the attention of the consumer long enough to allow him/her to make meaning of it.

**Conclusion**

Educational research provides an ever-expanding body of evidence on the nature of teaching and those practices that are proven effective in supporting student learning. Mostly missing from both the literature and the national dialog is even a general overview or a snapshot of the totality of the component parts to carefully study. Through this systematic review of the literature, the author sought to contribute such an overview. The synthesis that results from this study suggests that teaching includes 13 distinct,
overlapping, intertwined competencies and practices. The reality of professional practice thus revealed is immensely complex. In the context of ongoing debate about the role of teachers in public education and policy discussions, in light of rising dissatisfaction and tension regarding pay and workloads, and given the nearly universal shortage of well-qualified candidates for teaching positions, perhaps a shared understanding, acknowledgement, and consideration of the complexity of teaching could prove relevant and useful.
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CHAPTER III

TEACHING WALKS WITH ME, RIDES WITH ME IN THE CAR, LIVES WITH ME: AN EXPLORATION OF THE COMPLEXITY OF TEACHING THROUGH THE EYES OF TEACHERS

This study investigated what teaching *is*—for the teachers participating in the act and process of teaching—as opposed to what teaching *should be* from the perspective of educational scholars, policy-makers, or administrators. Teachers express frustration with the development of policy by individuals who have not personally engaged in teaching (Cournoyer, 2011) and by the demands placed on them by those whose time in the classroom is long passed (Jorgenson & Peale, 2008). While there is extensive research on the perception of teachers about specific parts of their job or even their perspective regarding major parts of it, what is generally missing from the literature is a review of a unified view of what teaching *is*.

Public education provides a vast field of study. Entire bodies of literature are dedicated to relatively small and focused areas such as specific practices in specific subject areas (i.e., phonics instruction vs whole language instruction) and entire journals are dedicated to specific subsets of practice (i.e., *Research in Middle Level Education* and *Journal of Physical Education, Recreation and Dance*). Conferences, newsletters, blogs, and practitioner publications abound. In spite of this great wealth of research and knowledge, the literature simply does not include a description that encompasses all of the process and act of teaching.
The attempt to define teaching has been made often by many. Defining teaching is a dauntingly large task because teaching is so complex. John Dewey provided the groundwork for that debate in American education with his claim that teaching is to learning as selling is to buying (Noddings, 2003; Phillips, 2014). A great deal of attention (Phillips, 2014) was thereafter devoted to defining teaching as either a task or an achievement. Those offering counterpoints to Dewey’s assertion have included Smith and Ennis (1961) with their standard thesis and C.J.B. Macmillan and James Garrison’s (1988) erotetic teaching which they define as an answering of students’ questions, asked and unasked. Teaching has similarly been described as “the ability to detect knowledge deficits or false belief in another person and the intention to supply the missing information” (Olson & Bruner, 2018, p. 21). Phillips (2014) defined teaching as “actions intended to bring about learning” (p. 791). As with most complex concepts, these definitions do little more than provide insight into one narrow facet of “the act and practice of a teacher” (Teaching, 2003, p. 565). The academic literature debates what teaching ought to be at great length or what practices work “best” in narrow bands of practice. Missing is a unified description of teaching. In fairness, a singular definition is likely to be so laboriously detailed as to be impractical specifically because teaching is far too complex to be fully captured in a brief definition.

In spite of the fact that many instructional design models and frameworks have been developed, when compared with the litany of expectations faced by classroom teachers, these models either do not claim to describe the entirety of the process of teaching or they fail in the attempt. For example, Robert Gagne’s Nine Events of Instruction (1980) is silent on the issue of classroom management and the planning that
ADDIE—Analyze, Design, Develop, Implement and Evaluate—may have provided the general framework on which many subsequent instructional models have been built (Dooley, 2005), but it focuses heavily on planning and reflection cycles, providing little structure to guide instructional practice. Dr. Madeline Hunter’s seven steps for planning lessons makes the process easy to replicate and evaluate (Burris, 2014), but it fails to account explicitly for the individuality of students and their unique learning needs.

The limitations of these and other instructional models or frameworks may be due to the fact that they are prescriptive models (Culatta & Kearsley, 2018); by their nature, they seek to dictate what teaching should be, not to describe what it is. Although seemingly boundless information, advice, and insight about teaching is available, missing from the literature is a clear and complete view of what teaching actually is as practiced and experienced by teachers. For these reasons, a research-based “snapshot” that depicts the complexity of teaching – as it exists for public school teachers in practice – could serve to address this gap in the literature.

**Literature Review**

As Manuel, Carter, and Dutton (2018) so eloquently noted, much of the school improvement movement has become focused on the quest for the identification or development of effective teachers. Part of that narrative is “the heroic archetype of the selfless, dedicated, resourceful and ever-resilient” teacher, a narrative that blames “the problems of workload stress, disillusionment, burnout and struggle” on the not-heroic-enough teacher and persistently implies that if teachers would simply “work harder, . . . the systemic challenges of teaching and learning would evaporate” (p. 5). This narrative
is tolerated, perhaps, because it gives lip service to the complexity of teaching, in the context of describing the super-teacher. It fails, however, to offer even an honest overview of that complexity. Such approaches sidestep the issue of the impact of the professionalization of teaching, as raised by Ingersoll and Merrill (2011), Darling-Hammond (2005), and others. In advancing the narrative of the hero-teacher, a relentless elevating of assumptions about and expectations for all teachers is perpetuated. The “going above and beyond” of the few is normalized as “good” teaching—a level of professional attainment simply unreasonable as a universal expectation or even as sustained output for the very individuals so venerated. The source and impact of this feedback loop is traced in part below.

**Teacher Burnout, Teacher Attrition, and Causes of Both**

Within the field of education, the issue of teacher shortages, high rates of teacher turn-over (moving from one context of teaching to a different one), and high rates of teacher attrition (leaving the profession altogether) are well-known concerns. Since late 2017, significantly disruptive events within the field of education, such as multiple teacher strikes across the nation (Burnette, 2018), have been well publicized and have drawn public attention to a variety of the challenges teachers face. Many of those challenges have been identified by teachers themselves as factors in the choice they make between leaving (attrition) and staying (retention) in the profession (Reilly & Edwards, 2018).

Teacher attrition rates have been steadily climbing in recent years and enrollment in colleges of education have reportedly been falling (Allen, 2018; Percy, 2016). Combined with other factors, such as an aging workforce (Weiss, 2018), teacher
shortages have become an increasingly serious threat to a profession that is already beleaguered by persistently low rates of academic achievement overall and significant gaps in achievement between subgroups of students (Sparks, 2018). Education researchers have pointed to a wide variety of factors in the issue of high attrition rates and teacher shortages, including insufficient pay, low societal status, lack of professional voice, poor working conditions, and others (Carver-Thomas & Darling-Hammond, 2017; Glazer, 2018). One of the most frequently identified factors contributing to teachers’ decision to leave the profession is “lack of support” (Carver-Thomas & Darling-Hammond, 2017).

Those who accept a shortage of teachers as fact posit many theories regarding the causes. Rumschlag (2017) examined teacher “burnout” as a driving cause of high attrition rates, possibly because teaching in the 21st century is rated as one of the most stressful professions (Kyriacou, 2000; Nash, 2005; PricewaterhouseCoopers, 2001). Others point to lower pay as compared to other professions, perceived “attacks” on public education, and increasing professional responsibility (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). Rumschlag (2017) suggested that the “cornerstone of teachers’ frustrations comes from not having a voice in decisions within the environment” (p. 22) where they are expected to be so highly skilled. In response to a proposal by the President of the United States to consider arming teachers (to prevent another school shooting), Kadner (2018) joined others in basing their objections to the proposal on the argument that teachers already face overwhelming job expectations. In their examination of teacher retention, Brill and McCartney (2008) identify the following causes of high attrition:
teacher workload, student behavior, inadequate administrative support, work environment (e.g., facilities, resources, etc.), poor mentoring programs, and low salaries.

**Teacher Workload and Expectations**

While the finding that the causes of teacher attrition are complex is not surprising, this current study was particularly interested in the nature of teaching through the lens of the professional actions and work in which teachers in fact engage. As has been documented in a variety of locations and situations, the profession has added significantly to the minimum competencies and duties of teachers in recent years. This increasing of demands and expectations is sometimes labeled “intensification” (Ballet et al., 2006; Woods, 1999). These expanding expectations include the providing of services for which teachers have not previously been specifically trained and which “fit” with teaching only insofar as teachers are in daily contact with students (Jhunjhunwala, 2014). A partial list of these relatively new duties might include counseling or advising students (Goldman, 2017); communicating (well and frequently) with parents and other members of the community (Schneider & Arnot, 2018); organizing extra-curricular learning opportunities such as field-trips (DeWitt & Storksdieck, 2008); fund-raising—with all accompanying legally fraught procedures and paperwork (Bulger, Jones, Katz, Shrewsbury & Wood, 2016); providing instruction or guidance regarding character (Swick et al., 2000); developing students’ social-emotional intelligence (Darling-Hammond, 2019); instruction related to digital citizenship (Ribble, 2015) or similar lessons; and acting as mandatory reporters for a range of suspected abuse, neglect or harm (Kesner & Robinson, 2002). Handling this heavy workload requires a great deal of time. A recent Department of Education survey found that the average teacher spent 54.4 hours working per week
In fact, according research conducted by Ost and Schiman (2017), there is an *inverse* relationship between teacher workload and rates of absence. In other words, teachers generally respond to an increase in their workload by spending more time at work. Far from the stereotype that persists about them, teachers are required to work more than 40 hours each week and more than 9 months each year in that the tasks required of them cannot be completed within their official contract hours. They simply are not compensated in any reasonable way for the additional time that must be invested to meet rising expectations (Bartlett, 2007).

**Description and Prescription**

This study drew on the systematic review of literature conducted by the researcher (Maxey, 2020). That study asked the same research question as the current study, *What is teaching?*, but examined the professional literature to observe the descriptions of and recommendations (or prescriptions) for teaching provided there. The scope of the study was from 2010 through 2019 and included 11 professional journals.

The finding of that study was that the professional literature advances 13 competencies and practices as integral to teaching. While it was beyond the scope of that study to examine the relative weight or value of each category, the researcher did establish that the professional literature points to each of them as distinct but intertwined parts of teaching. They are as follows:

<table>
<thead>
<tr>
<th>Know Students</th>
<th>Provide Authentic Learning Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know Your Subject Matter</td>
<td>Provide Learning</td>
</tr>
<tr>
<td>Demonstrate Pedagogical Expertise</td>
<td>Monitor Learning</td>
</tr>
<tr>
<td>Plan for Practice</td>
<td>Provide Feedback</td>
</tr>
<tr>
<td>Create a Learning Environment</td>
<td>Know and Follow Laws and Policies</td>
</tr>
<tr>
<td>Engage Students in Learning</td>
<td>Reflect on Practice</td>
</tr>
<tr>
<td>Implement Effective Strategies</td>
<td></td>
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</table>
The need for the current study was based in the following logical progression: rising rates of teacher attrition are a clear and present threat to public education (Sparks, 2018); overall teacher workload is a significant contributor to rising attrition (Borman & Dowling, 2008); while the individual competencies and practices considered part of teaching are well known and the subject of research individually, a synthesis of those factors that provides at least a snapshot of the whole is missing from the literature. Such a snapshot was therefore captured, in this current study, for its potential to contribute meaningfully to the field.

An adequate understanding of teaching, as it is experienced by the professionals engaged in it cannot be gleaned from a review of the literature; it must be informed by the experiences of those very professionals. In the context of a search to understand, phenomenology offers a methodology well suited to that pursuit.

**Methodology**

Phenomenology seeks reality in the narratives of individuals’ lived experiences of specific phenomena (Husserl, 1970; Moustakas, 1994). Phenomenology is not singular but includes multiple philosophies or theories: existential, hermeneutic, and transcendental (Cilesiz, 2010). The existential philosophy focuses on lived experience; hermeneutic phenomenology goes beyond description to emphasize interpretation; and transcendental philosophy aims to go outside the phenomenon, as if standing outside of one’s self to view the world (Langdridge, 2007). This study used existential phenomenology, foregrounding the lived experiences of teachers. The purpose was seeking to know, which supports the broader framework of professionalization on which this study is based. While the systematic review undertaken provided evidence of the
themes that have emerged in the professional literature in the last decade and that exerted influence on the shaping and on collective understanding of the profession (Maxey, 2020), the lived experiences of teachers served to ground this current study in the reality of teaching. A phenomenological examination of the narratives of experiences in teaching allowed the researcher to explore and develop a representation of this particular part of the world (Denzin & Lincoln, 2000) as part of the attempt to make sense of this human phenomenon.

While phenomenology has been the methodology of choice for many researchers, these studies often focused on narrow phenomena such as teachers’ experience in offering choice to students (Flowerday & Schraw, 2000) and teachers’ experiences of using digital storytelling in early childhood education (Yuksel-Arslan, Yildirim, & Robin, 2016). However, some studies sought to gain understanding of a broader phenomenon such as the effects of narrowing curriculum on teachers’ practice (Newburg-Long, 2010) or the experiences of second-career teachers (Lee, 2010). Such studies explored freely within the boundaries described by the study but carefully remained within those boundaries. The approach proposed for the current study was certainly not unprecedented. Examples of studies that took a similar approach included Swartz’s (2010) phenomenological study of seven nationally recognized secondary teachers in which she sought to define teaching excellence by engaging participants with open-ended questions. Also instructive is the work of Weng and Lin (2013) who examined the lived experiences of teaching Chinese in American Chinese schools. These studies suggested that phenomenology provides an appropriate methodological approach to seeking to understand teaching as it is experienced by teachers.
The researcher brought to this work the belief that, while the nature of teaching is not immutable, it is knowable and known collectively in spite of remaining “uncaptured” in a frame that includes the whole. In order to provide a strong complement to the picture the professional literature paints of teaching, the voices of the individuals doing the teaching must be privileged as they are here.

**Purpose of the Study**

The purpose of this study was to highlight the voice of teachers to define teaching in the context of a study exploring the complexity of teaching. The question “what is teaching” is best asked of the individuals who do that work. The results are intended to contribute to the discussion about teacher attrition, shortages and their causes.

The research question this study sought to investigate is *What are the lived experiences of K-12 teachers regarding the act and process of teaching?*

**Methods**

Upon receiving IRB and district approval (Appendix B), all individuals assigned a teaching role in the district received an email inviting them to volunteer to participate in face-to-face interviews. Volunteers completed an online survey that included questions pertaining to seven demographic classifications, such as experience in the job, grade band taught, content taught. Additionally, the survey asked participants to provide an open-ended response to a question regarding how they would describe the complexity of teaching to a neighbor or stranger if they had 5 minutes to do so.

Fifty-eight individuals responded to the survey. Using their responses, the researcher engaged in purposeful, preliminary screening, with a focus on the open-ended responses. Those responses were used to eliminate respondents who did not complete the
question or who provided overly negative answers. The remaining 51 respondents were systematically screened for demographic representation. The priority for inclusion was representation across the demographic categories as described in detail in the “Participants” section. Those categories were as follows: urban/rural (school), high poverty/low poverty (school), grade span, core/elective, beginning/experienced, gender, and ethnicity. To ensure representation in each of these categories that might reasonably impact a teacher’s lived experience of teaching, participants were added until each category was represented by at least two participants. Sixteen respondents were initially selected to receive an invitation to participate. The goal of qualitative research studies should be the attainment of saturation. Glaser and Strauss (1967) recommended saturation for achieving an appropriate sample size in qualitative studies. They defined saturation as the point at which adding more participants fails to provide more information or perspective. Having conceded the limitation of drawing all respondents from one district, the researcher developed demographic markers that might reasonably impact a participant’s perspective. The researcher sought to include a minimum of two participants from each of the seven categories and included two additional participants to allow flexibility in case anyone invited declined to participate or failed to respond.

Ultimately, 22 respondents were sent an email inviting them to participate in an interview with a request to select a date and time for the interview. Each participant was also invited to select a public location for the interview in order to remove concerns about anonymity associated with interviews conducted at work locations. Six of those invited never responded or scheduled an interview and then declined or missed a scheduled interview. The researcher continued inviting additional participants to balance the group
as described above. Of the 22 individuals contacted, 14 ultimately completed an interview and were included in the study.

Semi-structured, face-to-face interviews were conducted. The interview guide (Appendix C) included questions designed to elicit rich descriptions of each participant’s lived experiences in regard to teaching. As phenomenological interviews, the primary purpose was to seek to understand the phenomenon of teaching through the lived experiences of the participants. However, the interview guide was also informed by the results of a systematic review of literature also conducted by the researcher (Maxey, 2020). This review of the professional literature from 2010-2019 suggested 13 core competencies and practices as essential to teaching.

<table>
<thead>
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<tr>
<td>Implement Effective Strategies</td>
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A brief description of each area was presented to participants during the interview (Appendix D). For example, *Know Students* is defined as “Knowing individual students deeply in a range of dimensions and using that knowledge to drive professional decisions.” Each interview was audio-recorded and transcribed verbatim.

**Site of Research**

All interview participants were selected from the same large school district in Central Alabama. While a study that includes teachers from a wider range of work environments—and even multiple states—could prove beneficial in strengthening any findings of the research, there are also benefits to centering the site of research in one
district. For example, a large school district provides the opportunity to examine teaching in a variety of settings (urban vs. rural) and in service of a variety of socioeconomic settings (low poverty vs high poverty). At the same time, confining a study to a single district provides the benefit of controlling for variations in district-level culture and climate. While culture and climate do tend to vary by school, it was the researcher’s intention that removing variation that occurs between school districts would introduce an element of contextual consistency to the study. The researcher sought to select a site of research outside the school district where he is employed specifically because the nature of the interview process subjects participants to issues of power (among others).

In order to preserve the anonymity of the district, the schools, and the individuals participating, pseudonyms were used throughout the study. The district is referred as Central Alabama School District. While providing too much information about the district would undermine this anonymity, the following details may be useful as context for interview responses. Central Alabama School District is located in an area that requires it to serve students living in both urban and rural settings. Some schools represented by interview participants are many miles away from even a small township. Others are in the middle of mid- to large-sized urban areas. Similarly, Central Alabama School District operates schools where a significant majority of the students are part of families that live below the federal poverty line as well as schools attended mostly by students who do not live in poverty. In regard to its relationship with the teachers it employs, the district does not have a reputation for practices particularly draconian nor unusually supportive. Anecdotally, the district is not among those known for having great resources or above average financial flexibility but on the other hand, one of the schools
in which an interview took place was built in the last 5 years and three others appeared to have construction projects in progress; an indication that the district is able to invest in more than routine maintenance of its schools. In many ways, this district seemed to provide the quintessential ‘tale of two’ experiences from just about every angle: rural and urban, rich and poor, very diverse and mostly homogeneous, experienced faculty and mostly beginning teachers, etc. It is this very diversity of condition and experience that made Central Alabama School District the ideal site for this study.

Participants

The participant selection process was used to select individuals most likely to represent “the most productive sample to answer the research question” (Marshall, 1996, p. 523). As the study was designed to describe the nature of teaching as it is lived by (and required of) those directly and actively engaged in it, participants did not include classified staff, certified staff who did not hold a teaching position, or pre-service or retired teachers. Survey respondents who were not classroom teachers were automatically excluded as potential participants. In order to capture a sample that reflected the widest possible diversity of experiences, participants were selected as described below.

To begin, all participants had to possess two qualifications:

- Certified to teach in the state of Alabama (excludes classified staff or individuals assigned to a pseudo-teaching position without commensurate certification). Individuals holding “emergency” and “alternative” teaching certificates remained eligible and two such individuals participated.

- Formally and officially assigned to instruct students at least one-half of the time in the school environment where employed at the time of the interview. Non-
teaching certified staff, administrators, pre-service, and retired teachers were excluded.

**Demographic markers.** In addition to the criteria stated above, participants were selected from the following categories in terms of the school at which they were employed and their respective identities: 1) Urban and Rural; 2) High-poverty vs. Low-poverty; 3) Grade span [elementary (grades K-5), middle (grades 6-8), high school (grades 9-12)]; 4) Core vs. Elective Teacher; 5) Years of experience (5 years or less; greater than 5 years); 6) Gender; and 7) Ethnicity.

*Urban vs. Rural.* For this study, urban was defined as a school in a municipality of at least 50,000 residents (Urban and Rural, 2012) while rural was defined as a school in an area that “encompasses . . . territory not included within an urban area” (Urban and Rural, 2012).

*High-poverty vs. Low-poverty.* For the purpose of this study, “high-poverty” was applied to any school that met the federal guidelines for and was designated a “Title I” school. Those guidelines stipulate that any school in which at least 40% of all students (U.S. Department of Education, 2015) meet the definition of low-income—being a member of a family whose income did not exceed 150% of the poverty level established by the United States Census Bureau the previous year (U.S. Department of Education, 2019)—may be designated Title I. “Low-poverty” was applied to any school that did not meet these same federal guidelines.

*Grade span.* For the purpose of this study, teachers were assigned one of three classifications:
• elementary school—those working in a school that included “any combination of grades K-8, and must not contain a grade above 8” (School Facilities, 1997).

• middle school—those working in a school that included “a combination of grades 4-9, but not including both grades 4 and 9” (School Facilities, 1997).

• high school—those working in a school that includes 12th grade and no grade below 8th (adapted from state code as cited above).

The researcher acknowledges that many other configurations of schools exist. However, these classifications were designed only to provide broad contexts for the instructional settings in which participants worked. More nuanced study of the relationship between teaching context and complexity is beyond the scope of this study.

Core vs elective. For the purpose of this study, a “core” teaching assignment was defined as being in a subject required for all students in the school in which the participating teacher was employed. This definition relied on the No Child Left Behind Act of 2001 that defined “core” subjects as English/Language Arts, Math, Science, Social Studies, and Foreign Languages (No Child Left Behind Act of 2001, 2002). Although the reauthorization of this law in 2015 (commonly known as Every Student Succeeds Act or ESSA), expanded the definition of “core” to include a wider range of subjects, this study will exclude the Arts and Physical Education from the definition of “core.” In spite of the inclusion of those subjects in the federal education law, evidence such as public opinion polls (Stiesi, 2017) suggested that the work of considering those subjects on an equal footing with others is incomplete. It is noteworthy that one participant who teaches a
World Language self-identified as an elective teacher – conforming with *No Child Left Behind* definitions.

For the purpose of this study, an “elective” teaching assignment was defined as being in a subject that is optional for all students in the school at which the participating teacher is employed. This definition is in alignment with the state statute that stipulates that “local boards shall offer foreign languages, arts education, physical education, wellness, education, career and technical education, and driver education as electives” (emphasis added, Regulations Governing Public Schools, 1998). This definition was offered in the context of an explicit listing of courses required for graduation (at the state level) that included the subjects listed above. Therefore, for the purpose of this study, “elective” included all Arts and Physical Education assignments regardless of local school requirements associated with them. Additionally, the self-classification of the teacher above as an elective teacher may be a function of the disparity of the state and federal classifications of world/foreign languages.

*Experience.* For the purpose of this study, teachers were assigned one of two classifications:

- “Beginning” teachers were defined as having completed fewer than 5 years of service as a classroom teacher because trends suggest that teacher attrition rates are much higher in the first 5 years than in subsequent years (Gray & Taie, 2015).
- “Experienced” teachers were defined as those who have completed 5 or more years of service as a classroom teacher.
Gender. Gender identity and gender conformity and their interplay with experiences as a teacher are beyond the scope of this study. As such, participants were identified via the binary classification with which they most strongly identified.

Ethnicity. Participants were identified by broad ethnic classifications: Black/African American, White/Caucasian, and “other.” According to the most recently available data, 79% of all teachers in Alabama are White and 19% are Black (Crain, 2017). Although additional ethnic classifications would be appropriate for a study with a more diverse population, this study did not include more classifications than those listed here.

A chart of participant representation in each demographic category is included in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Participants’ Demographic Distributions</th>
<th>No. of participants</th>
<th>Percentage of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td>Rural</td>
<td>9</td>
<td>64%</td>
</tr>
<tr>
<td>High Poverty</td>
<td>8</td>
<td>57%</td>
</tr>
<tr>
<td>Low Poverty</td>
<td>6</td>
<td>43%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>3</td>
<td>21%</td>
</tr>
<tr>
<td>Middle School</td>
<td>4</td>
<td>29%</td>
</tr>
<tr>
<td>High School</td>
<td>7</td>
<td>50%</td>
</tr>
<tr>
<td>Core</td>
<td>9</td>
<td>64%</td>
</tr>
<tr>
<td>Elective</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td>Beginning</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td>Experienced</td>
<td>9</td>
<td>64%</td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>71%</td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>29%</td>
</tr>
<tr>
<td>Black</td>
<td>3</td>
<td>21%</td>
</tr>
<tr>
<td>White</td>
<td>10</td>
<td>71%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>8%</td>
</tr>
</tbody>
</table>

While the present study placed a high priority on anonymity for participants, the representation above may leave participants too abstract in the mind of the reader. As
such, a very brief description of each via self-reported demographic markers are included in Table 2 as a means of providing additional perspective regarding the 14 participants in the study. All names used are pseudonyms.

An underlying premise of the study was that individual experiences are as varied as the number of teachers; but teachers’ own accounts of their lived experiences produce themes that span multiple participants. This study was designed to provide a description of the experiences and expectations teachers face. While individual voices matter and were privileged in this study, it is their collective insight that, in fact, yielded the most significant results.

**Data Collection**

In light of the focus of the research question and the methodology, the method for collecting data in this study was interviews. Roulston (2014) described the purpose of this approach as being “to generate detailed and in-depth descriptions of human experiences” (p. 16). For the purpose of this study, this type of rich discussion and descriptions of the experiences of teachers served exceptionally well. The interviews were designed to be semi-structured with a carefully crafted interview guide that left room for follow-up questions and probes. For skilled practitioners, these probes “frequently use the participant's own words to generate questions that elicit further description” (Roulston, 2014, p. 13). By implementing this approach, the researcher sought to elicit as full a picture of each participant’s experience as possible. Qualitative questions are open-ended, and are more interested in what or how rather than why. They are few, typically between five and seven (Creswell & Creswell, 2007, p. 107). The researcher’s intention was to
Table 2

*Participants’ Demographic Markers*

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design a study and interviews that enacted the spirit of phenomenology as a means of seeking to understand teaching as experienced by teachers.

While the interview guide incorporated the results of a systematic review of literature conducted by the researcher (Maxey, 2020)—as a view of what the research says teaching should be—the interview was designed to first elicit teachers’ own perspectives on their practice. The first question that provided an opportunity for participants to review and respond to the view of teaching provided by the professional literature was the fourth of seven substantive questions. By waiting to introduce the suggestiveness of this question until the midway point of the interview, the researcher was able to examine teachers’ unguided perspectives and their response to the framework revealed in the literature.

In order to address the diversity aims, as outlined in the participants section above, 14 participants were included in the interviews. Given seven categories of demographic markers, this number of participants provided the flexibility in sampling to ensure a minimum of three participants from each demographic category, surpassing the researcher’s goal of two participants per category, as discussed above.

Data Analysis

The analysis of the data collected followed the procedure recommended by Hycner (1985). As Hycner himself pointed out, far from representing the single way to conduct analysis of phenomenological data, this method is a way of approaching the process; it is, in fact, “an attempt to sensitize the researcher to a number of issues that need to be addressed in analyzing interview data rather than as a ‘cookbook’ procedure” (Hycner, 1985, p. 280). In seeking to make meaning of the content of interviews
conducted as part of the study without simply imposing a formulaic process to follow, the research selected Hycner’s analytic method as best suited as a guide to that end.

Hycner’s process includes the following actions:

1. Transcription
2. Bracketing and phenomenological reduction
3. Listening to the interview for a sense of the whole
4. Delineating units of general meaning
5. Delineating units of meaning relevant to the research question
6. Training independent judges (the researcher made the decision to forgo Hycner’s sixth step as unnecessary for this study)
7. Eliminating redundancies
8. Clustering units of relevant meaning
9. Determining themes from units of meaning
10. Writing a summary for each interview
11. Return to the participant with the summary and themes (validity check)
12. Modify themes and summaries
13. Identifying general and unique themes for all interviews
14. Contextualization of themes
15. Composite summary

Each part of this process was enacted in the spirit of existential phenomenology—as a means of understanding the lived experience of the participants.

While Hycner provided a framework relevant to this study, he was silent on an element that was key to this study. The writing of analytic memos has been suggested as the heart of phenomenological research, not the process of encoding itself. Each phase that included acting on the data (4, 5, 7-9, and 12-14) was accompanied by the composition of analytic memos. These memos were a mechanism to “catch [my] thoughts, capture the comparisons and connections [I] make, and crystalize questions and directions for [me] to pursue” (Charmaz, 2014, p. 162). In recording these memos, I was forced to slow my pace to reason with the patterns and categories that emerged (Holton, 2007).
Risks and Benefits

Participating in this research project may have created a risk for teachers. The true identity of the participants being revealed as part of the publication of the study or the mere knowledge by peers and supervisors that individual teachers participated in the study could be problematic. That risk was hypothetically elevated for the participants who included unflattering details about their school or district or even public education itself. It is the observation of the researcher (as further explored below) that this culture of intolerance of dissent is prevalent in Alabama public education—particularly in schools that are labeled “failing” or “low performing.”

To mitigate these risks, the best approach was to use pseudonyms for participants and their schools, to use care in not including a combination of general descriptors (such as school demographics) and participant comments that would allow anyone to identify them. Including multiple participants in similar teaching situations provided additional anonymity. The researcher noted that all the beginning teachers who participated opted to schedule their interviews away from their school. Additionally, while beginning teachers were a reasonably well-represented demographic in the interest survey, several such individuals declined the opportunity to participate when contacted personally or agreed initially and then withdrew. In contrast, many of the experienced teachers scheduled an interview on their own campus. In addition, two made a special point of introducing me to others (including building administrators) during my visit. Several of the beginning teachers (and some of the experienced teachers) asked questions about how the results of the interview would be used and requested assurance of their anonymity.
The benefits to participants were not appreciably tangible. Participants received only a $10 grocery card but were not given credit for their contributions by name (due to the approach described above) and will not otherwise directly benefit personally. Participation in the study, then, primarily yielded the benefit of a contribution to an area of research intended to benefit the field. It may be that participants will see personal benefit from their participation in the form of change to their school, district, or more broad-based change to the profession, but identifying that as a benefit of participating in the study would be unreasonable.

As has been stated, the purpose of this study was to document and demonstrate the complexity of the process and act of teaching itself, as experienced by public school teachers. While such a change would benefit individual teachers, the current problem this study sought to address is impactful at a much larger scale in that it harms society at large. Individual teachers may leave the profession and find gainful employment and a successful career elsewhere. That steady attrition could very conceivably bring the entire profession to a point of crisis at which public education collapses entirely. While it is difficult to say what would rise in its place, there can be no doubt that such an occurrence would be unspeakably harmful to millions of youth living in poverty and to society at large. While a single study can certainly not avert such an eventuality, it can contribute to efforts by many other to prevent it.

Findings

Reading through each interview transcript revealed a variety of perspectives and personalities. Each participant brought a distinct tone to the process. For example, Angelo Jeremiah appeared to be jaded, negative, and mistrustful of school and district
administration and of public education in general. Martha Lesley was very thoughtful about every answer she gave, closing her eyes to listen to the question, and pausing to think before each answer. Marquetta Silverman was a 1st year teacher participating in Teach for America and shared her struggle with teaching seventh grade Language Arts to six sections ranging in size from 31 to 35 students. Ben Owens expressed feeling trapped in the middle school where he teaches, longing to return to the high school setting where he taught briefly at the beginning of his career. Maria Gonzalez was in her 36th year and wished she could have a classroom of her own to serve her students with special learning needs. In his 5th year, George Knepper was already in his third teaching assignment. Jada Hill, Joseph Reagan, and Angelo Jeremiah all had a career outside education before becoming teachers. The current teaching experiences of the participants were widely varied: Elementary homeroom, Language Arts, Visual Arts, Career and Technical Education, World Languages, Social Studies, and Special Education. Their experiences as professional educators were greatly varied, a variety that lends weight to the congruity that emerged from their interviews.

The interviews sought to understand teachers’ lived experiences. In order to capture participants’ own perspectives, the interview guide was designed to avoid leading questions in spite of the fact that it was also based on the descriptions of teaching presented in the professional literature over the last 10 years (Maxey, 2020). Following teacher-participants through their descriptions of their lived experiences and then deeply examining each interview and synthesizing what emerged from each one yielded multiple themes including workload, knowing students, reality vs. expectations, the crunch of time, and public misconception.
Workload

I’m not very good at providing feedback. I take that back. I’m perfectly good at it. I just can’t do it for every student. Nobody can read 150 essays a night – even if it’s 150 paragraphs, it’s just, it’s impossible. (Ben Owens)

Participants made frequent mention of the workload that they experienced in teaching. Many noted that they routinely worked well beyond their contract hours in order to manage the routine tasks and processes required for the job. Jada Hill reported that she had to act as if she has “a job on the weekends [too], just get up and get back to it. Grade papers, lesson plan, get ready for the next thing”; Ben Owens expressed a similar perspective: “In order to do your job right, you have to give up everything else in some ways.” Several—particularly at the secondary level—mentioned the effect that having large classes has in practical terms.

I teach seventh grade, really big classes—they range from 31 to 35 students, and I have six 50-minute classes in a day. I have just under 200 students right now so even knowing all my students’ names is something that I’ve struggled with a lot. (Marquetta Silverman)

Some teachers, like Martha Lesley, referred to the effect this has on them: “We beat ourselves up trying to get to the finish line while we’re holding 120 students on our back.” Others aimed this frustration at their supervisors, like Gabrielle Washington, who asserted “It’s easy to say ‘Do one more thing’ when you are not the one doing the work.” Participant responses clearly echoed the assertion of Ballet et al. (2006): teaching, for these individuals has “intensified” to the point that the workload they face is nearly overwhelming.

Knowing Students

“You have to start with a child. That child sitting in that desk right there, how can I best serve him?” (Angelo Jeremiah). Teachers consistently volunteered and underscored
the perspective that knowing students well and deeply is a critical part of teaching: “You have to know your students” (Joseph Reagan).

In fact, that’s probably more important than knowing what in the world I’m talking about, to be honest. Especially when you teach in places like I do. I mean, that’s the case for everyone. Knowing their names is paramount. I need to know what their families are like, if they have any brothers or sisters in school, if they have brothers or sisters in prison. A lot of my kids work; I need to know that. I need to know if a student has any gang affiliations. You can not teach until you have the respect of students and show them that you care enough to know about them and to listen to them. (Jada Hill)

While Marquetta Silverman and others mentioned how difficult this is to do when they make daily contact with large numbers of students, participants linked the need to know students individually to success in the classroom. As Anita Bassinger put it, “teaching is building a relationship with your students.”

**Reality vs Expectations**

The entire school is supposed to take a test at the same time. So you literally have three hundred kids who all need the computer lab in the same week. That’s not logistically even feasible. But it must be done or we go on the list that has to be sent in. Okay, you send the email and you tell them that three hundred children needed to use the lab with thirty computers in it and it didn’t work out. That kind of stuff makes you real angry. Like, where did those people get this stuff from? Or making children take tests that we know they’re going to fail. If I have a fourth grader reading on the first grade level, why is she taking fourth grade reading tests? So it’s stuff like that; if you’re in it, you feel the frustration. Yes, we need to do a better job as teachers but a lot of times, our voice has been silenced in subtle ways. So we don’t speak out as much to say “hey, this is pointless for this kid.” (Gabrielle Washington)

The lived experiences of participants that contributed to this theme were described in two subcategories: the gap between expectations of policy-makers and administrators and the reality of implementation as Ms. Washington outlined above and the tension between expectations teachers set (or had) for themselves.

The pressures of a Title I school and the laws and policies that come with [being a teacher], and the paperwork and 35 students in the classroom that’s too small and all of those things press back against the expectation I had. (Jada Hill)
Alanis Scotch found those expectations unreasonable: “Everyone must write in cursive”

. . . They can’t even write in print, Friend! Yes, cursive is important but they can’t even
write in print yet.” And, for some like Angelo Jeremiah, this dissonance leads to a
fundamental mistrust of those in authority: “So much of PD and meetings and
observations are just totally fake, a waste of time. Principals are so focused on that next
[standardized test] score that they lose sight of what’s in this child’s best interest.” Others
like Gabrielle Washington are simply robbed of a will to fight: “There are a lot of
teachers who would be willing to take more risks if there was room or support for them to
do that. But I don’t know that teachers feel supported to do something different.”

Crunch of Time

I don’t [even] get a lunch break. There is no lunch break. People say to me “Well,
on your lunch . . .” What lunch? I sit at a table with 20 children! ‘Well on your
break.’ We don’t even get to use the restroom most of the day. So, yeah, there are
a lot of misconceptions about what we do all day. (Gabrielle Washington)

Ms. Washington was one of many participants who talked about time. They talked about
the time it takes to prepare for teaching: “It is impossible to do this job between 7:45 and
3:15” (Ben Owens). They talked about the off-contract time that is necessary to be
effective.

Before teaching, I was a lawyer. If I worked on the weekends, I could bill you for
that. I would bill you for that. I can’t bill for that now. I can’t be like, ‘look
Tamararus, I worked on grading your paper on Sunday so you need to pay me 300
an hour for that.’ I can’t . . . I can’t do that. (Jada Hill)

They shared the simple fact (from their perspective) that they do not have enough time to
do everything they have to do as part of teaching.

You have to bring your A game every single day from 7 until the last student
leaves and it’s not over then; you still have grading, still have prep to do. Two
months off in the summer? A lot of that time is spent going to training or planning
for the next year. (Martha Lesley)
Public Misconceptions

[Non-educators think our job is] to fix their kids. They think that they send their kids to teachers and we’re supposed to send back the next Jane Austen with amazing morals, a love of their community, political writing, and civic duty. It’s just ridiculous what they think we’re supposed to do. I think that they think teaching is easy. If that was the case, I would ask them to homeschool their kids for a while. See how easy teaching is. (Jada Hill)

Without exception, every participant shared that the non-educators they interacted with had a very flawed perception of what teaching involves. George Knepper articulated a perspective shared by the majority of participants: “They [non-educators] think we just stand all day and babysit.” While some participants conceded that their own understanding of the reality of other professions is limited, many expressed frustration with the misconceptions they encountered: “Some of my family and friends think that it’s a babysitting job, not a job—job like being a mechanical engineer. They don’t get the complexity of teaching at all” (Anita Basinger).

On the other end of the spectrum were responses suggesting that some teachers interact with members of the public who wildly overestimate what teaching should be, instead of underestimating what it involves. “[Non-educators] think my job is to know everything and to be fully and totally, in all areas, responsible for students at all times about everything” (Carolyn Jones). What the participants seem to be yearning for is a Goldilocks perception by the public: one that recognizes the weight of teaching and respects the professionals who do it without expecting teachers to be the communities’ panacea for all the needs of students.

In this study, the researcher was also interested in the extent to which (if at all) participants’ own perspectives of teaching matched the areas outlined in the literature and whether participants would explicitly confirm each area of competence and practice
identified through a systematic review of literature (Maxey, 2020) when provided a succinct listing of them. Table 3 represents which of the competencies/practices was mentioned (either explicitly or in substance) before the question that asked participants to respond to the relevance of each area. Far from simplifying the nuance of teachers’ experience with teaching, the intention was to reflect on participants’ descriptions of their experiences through the lens of the expectations articulated in the literature.

Participants’ agreement that each category of practice outlined in the professional literature is in fact part of teaching as they experience it was nearly universal, when presented for consideration late in the interview. It is, therefore, interesting to see which categories were universally identified as relevant unprompted. As the table indicates, every participant mentioned knowing subject matter, planning for practice, and implementing effective strategies as part of their practice. All but two participants (a supermajority) identified knowing students and engagement as an important part of their practice. These patterns suggest that although teaching may include all the other areas of expertise and practice, these five remain at the forefront of teacher’s minds almost universally: knowing their subject matter, knowing their students, planning, actively engaging students and implementing effective instructional strategies.

Most of the remaining categories of practice were mentioned by at least half of the participants unprompted. Interestingly, only two participants alluded to anything related to complying with laws and policies. Indeed, when presented with that practice in Question 4 of the interview guide, several participants expressed surprise to see it on the list. For example, Carolyn Jones said that following laws and policies is “important because you don’t want to get fired or go to jail, of course . . . so I guess we need to
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follow the laws and policies [but] that would not even be something that was on my radar.”

While the framework provided by the professional literature guided the interview process, this study was far more interested in the phenomenon of teaching as expressed by the teacher-participants. More than half of the participants spoke specifically about the importance of professional learning and the ways in which it was part of their practice. Taken together, their perspective was that teaching requires practitioners to engage in ongoing training and learning. As Ben Owens put it, “being a teacher is sometimes not as much about teaching. It’s constantly learning.” All teachers are required to engage in this practice; accomplished teachers engage in it strategically and systematically as a necessary part of maintaining their efficacy. Several participants laid an emphasis on their practice as it regarded technology, allowing expertise in the implementation of technology to support teaching and learning to emerge as part of the core competency expected of teachers. The inclusion of technology implementation as its own competency by these teachers may reflect a tension felt by educators more broadly between viewing technology as an ubiquitous, embedded practice and a competence unto itself alongside and separate from other competencies.

Several other competencies and practices were highlighted by at least one participant during the interviews—practicing professional strategies before implementing them in the classroom, collaboration with colleagues in a variety of contexts and for a variety of purposes, and flexibility in decision-making, or improvisation when the unexpected inevitably happens. “The lesson that I envisioned on Friday night and Sunday night, it takes a life of its own on Monday, Tuesday, Wednesday, Thursday” (Martha
Lesley). While these practices did not emerge as themes in the systematic review of literature conducted by the author, these competencies and practices were mentioned and perhaps should be noted as areas for additional consideration.

**Discussion and Implications**

Teachers participating in these interviews agreed unanimously that teaching is incredibly demanding. Angelo Jeremiah believed that teaching is as much out of school as in school. [It’s] not just the hours that you spend, but the tears that you shed. There's as much going on to be a good effective teacher outside of normal work hours as there is during work hours.

Alanis Scotch agreed: teaching is “not an eight to three job. It's not from end of August to May. [. . . ] All through the summer you're still planning, . . . still thinking . . . going to workshops or conferences . . . It's a constant.”

Teachers *attitudes* about teaching differed notably. As the need for this study was based in part on the *effect* of the complexity of teaching, an acknowledgement of the observation variations in the effect the convoluted nature of teaching has on practitioners is appropriate. Without a formal system for categorizing them, those attitudes ranged from very jaded and bitter to enthusiastically positive. Some teachers described the necessity of enduring expectations to engage in actions that they did not find beneficial. For example, Luann Monroe stated that teachers lose some of our autonomy and authenticity with all these ‘look-fors’ and evaluations that last five minutes and they ‘bing, bing, bing’ on the [observation] list and walk out. [And then the administrators] give you something of a compliment followed by a little jab.

Participants identified a range of frustrations extraneous to but exacerbating the act of teaching itself—from feeling trapped in the classroom, to a perspective that everything outside the classroom (particularly the machinations of administrative staff) is “fake”
(Angelo Jeremiah), to a perspective that students simply do not care and can not be motivated (Ben Owens). Alanis Scotch called teaching “a way of life.” Perhaps most raw was the candor of Ben Owens in this brief exchange.

Primary Investigator: What is teaching, in your experience?

Ben Owens: Well, it’s a lot harder than I thought . . . And, I’m sorry, not good.

Ben may have been the most direct and honest in this initial answer, but he was far from alone in revealing a great frustration with intricacy and demands of his job. The researcher speculated that some of the participants would think poorly of some of the others if they were to meet them and hear how they spoke of their work, the profession, and particularly (in some cases) their students. However, a careful examination of the themes that emerged across interviews reveals that the teachers in this study had far more in common than not.

Cutting across all other factors is an overriding conveyance of the crushing weight of teaching. Some were sanguine about this burden: “Over the weekend, my teaching walks with me. It lives with me in the shower. It rides with me in the car” (Martha Lesley). Some participants explicitly mentioned burnout, others revealed deeply pessimistic perspectives about the profession, still others revealed the great cost they paid to engage in effective practice. Mary Landsbury echoed the factor most commonly mentioned by participants as a heavy burden while being most misunderstood by non-educators: time.

[A significant part of the job is] the time that you have to invest to be good. To be mediocre, I could do a whole lot less. I'm not saying that I'm anybody's star teacher at all. I'm not saying that at all. There's plenty of people who could teach circles around me. However, my husband always asked me, ‘when are you going to get done with your work?’ And I noticed that I’m never finished. There's always something to do. And even if every paper was graded, every grade was
updated, if every parent was contacted, then there's something else that I could have been doing or I should have been doing, so it never finishes. I think [it is important to remember] the time factor, and that there is so much required of us. You can do everything kind of/sort of, or you can do a few things and do those things really well. And I think that each teacher is threatened with that dilemma.

Mary’s response captured a theme that emerged from the interviews: every competence and practice identified by the literature is expected of teachers but there is simply and literally not enough time in a week (much less within a teacher’s contract hours) to do all of those things. It is important to remember that this study acknowledges and sets aside all the other duties required of teachers—bus, hall, and cafeteria duty; meetings; fundraising; paperwork; supervision of athletic and/or extra-curricular events; and many more. The responses from teachers in this study suggest that even if teachers were released from all non-teaching duties, the job would still be overwhelming.

Although this study was far more interested in understanding the phenomenon of teaching as articulated by the professionals doing that work, there is value in briefly considering correlations between the narratives provided by teachers and the description in the literature. With a single exception, interview participants stated that all areas identified through the systematic review of literature (Maxey, 2020) were part of teaching as they experienced it. The areas drawn from the literature and presented to participants for review midway through the interview are as follows.

<table>
<thead>
<tr>
<th>Know Students</th>
<th>Provide Authentic Learning Experiences</th>
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<tbody>
<tr>
<td>Know Your Subject Matter</td>
<td>Support Learning</td>
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<tr>
<td>Demonstrate Pedagogical Expertise</td>
<td>Monitor Learning</td>
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<tr>
<td>Plan for Practice</td>
<td>Provide Feedback</td>
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<tr>
<td>Create a Learning Environment</td>
<td>Know and Follow Laws and Policies</td>
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<td>Engage Students in Learning</td>
<td>Reflect on Practice</td>
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<tr>
<td>Implement Effective Strategies</td>
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That [list] is teaching. Some of these things I do very well. Some of them can always get better at. I don't see anything on this list that is not a very important
part of teaching. And if you took any one of these things off the list, there would be a problem. (Mary Landsbury)

The purpose of this study was to examine the complexity of teaching through the lived experiences of teachers. As such, it was important to seek that perspective as the main objective of the study—not merely feedback on the picture painted by the professional literature. It seems important to note, however, that most of these practices and competencies were included in the participants’ descriptions of their experience with teaching unprompted and all of them were strongly affirmed upon review. Martha Lesley may have put it most eloquently when she asserted that “all of this is a part of teaching. It falls apart if you don’t have any one of these components.”

The results of this study were specifically intended to contribute meaningfully to the ongoing discussion about teacher attrition and retention, growing shortages, and the causes of these phenomena. For that reason, the researcher posed a hypothetical question to participants asking what difference it would make for the public and decision-makers to have an adequate understanding of the complexity of teaching. Participants’ responses fell into three general categories. One group expressed doubt that such an understanding would make a difference. “Being a teacher is kind of like being in the military. They [are] grateful for you being there, but they [don't] necessarily understand why you would choose to do that” (Joseph Reagan). This doubt was often paired with the opinion that the public respects teachers and wishes for more pay and status for them individually but is not willing to support the change necessary to make those conditions possible, such as increases in taxes, for example. Another common response was to assert that such an understanding would be impossible without a personal experience of that complexity.
It would make a huge difference for [state lawmakers] to come and sit in the classroom without me and see what a classroom looks like, because I don't think they know. And I think it would also afford teachers more respect, because I don't think that we get the respect that we deserve. (Maria Gonzalez)

When participants provided a specific, positive prediction of this scenario, their responses most frequently centered around an elevation of teachers’ voice and a greater willingness to “support” teachers. For some, contemplating such a possibility evoked strong emotion.

I take pride in my job, because I came from a long line of teachers, and especially for me, as an African American, I know that . . . that was the only way we made it out. [Begins to cry] So, woah, why did I get emotional about that . . . yeah, respect is important. (Jada Hill)

Anita Bassinger predicted that a better understanding of the complexity of teaching by the public and by decision-makers would lead to more productive conversations. Not that I would get everything that I would want as a teacher, but that we could converse more civilly, more openly, and just have a better idea of what the other person is experiencing.

For some, the ask is simple: time, “What [we] need is more time. People, we need more time!” (Ben Owens) and a little empathy. “I wish people would be a little more empathetic with our struggles” (Jada Hill).

**Implications and Recommendations**

Through face-to-face interviews with teachers assigned to a wide variety of instructional contexts and representing the full range of personal and professional demographics, this study examined the nature of teaching as it is experienced by those professionals. The theme that emerged most clearly from those conversations was the weight of the workload associated with being a teacher. This issue was mentioned by the 1st year teacher and the teacher with 36 years of experience. The source of that weight seems to be the great complexity of teaching as the profession defines it and (perhaps
more importantly) systemic structures that do not acknowledge that complexity. Teachers experience a dearth of adequate time to complete tasks (Foster, 2018), disproportionate administrative responses to less than stellar performance (Angelo Jeremiah, personal communication, October 30, 2019), and a steady increasing of responsibility unmatched by corresponding resources, supports, or compensation (Carver-Thomas & Darling-Hammond, 2017; Glazer, 2018). The recommendation that flows logically from this implication of the study applies most directly to educational decision-makers and administrators. Those with authority over teachers should recognize fully that teaching is immensely complex and places a burden on teachers that is arguably impossible to carry. Taken in combination with rising teacher shortages, this results in a widening mismatch between job expectations and candidate capacity. Although doing so provides no solution in itself, administrators and decision-makers should speak with one voice to acknowledge the complexity of teaching. Furthermore, they should call for and commit to action based on that acknowledgement—a recommendation that will be discussed in more detail below.

The experiences of the beginning teachers in this study provide the basis for concluding that campaigns to recruit teachers and induction programs are insufficient measures. Schools and districts must move beyond induction and engage in the work of professionalizing teaching. If teaching requires extensive preparation and mentoring, it follows logically that the job also demands companion actions for retention. For example, administrators should seek to create schools and districts where teachers are treated like professionals. The evidence that this is not the norm was clearly revealed through the experiences the teachers in this study shared. According to their accounts, workloads in
their schools are not balanced. Neither they nor their peers have adequate time for planning and preparation. Their voices are not always valued and trusted. When funding makes appropriate decision-making difficult or impossible, administrators should engage in advocacy to make the clear case that effective schools require accomplished teachers and no organization can retain a highly effective workforce in unreasonable and disrespectful conditions.

A much more specific recommendation for educational administrators is to place the complexity of teaching at the forefront of decision-making. The researcher sees evidence to suggest that this complexity is not unknown to administrators; however, he knows firsthand how difficult it is to hold that complexity in one’s mind all the time. But it is precisely a commitment to examining all possible decisions through the lens of the complexity of teaching that is likely to yield decisions that improve school culture and teacher satisfaction. This is not to suggest that teaching can or should be simplified; it is to say that given its complexity, teachers should be held in the esteem afforded professionals in similarly complex jobs and provided the support and resources necessary for the successful execution of the job. The unavailability of resources or control to enact this approach does not release any administrator from responsibility, it merely more urgently demands advocacy and solution-oriented practice.

The phenomenon of increasing demands and expectations has elsewhere been labeled “intensification” (Ballet et al., 2006; Woods, 1999). Educators are familiar with the concept of “disproportionality,” particularly in the context of a “difference of children in a service population when compared to their representation in a general population” (Wells, 2011, p. 4). Also instructive to this line of thinking is the idea of an overreaction;
a response that is inappropriate for its scale, not for its timing or for lack of a cause. In the context of the complexity of teaching, perhaps the narrative teachers shared suggests that some of their frustration stems from the nature of the communication they receive from their superiors: inadequate in response to identified needs and concerns and heavy-handed in identifying and addressing professional shortcomings in the teacher. Whether administrators intend those conditions or not, that is the reality teachers describe living:

The bell keeps ringing metaphorically, and you have to be all those things. That’s the complexity of teaching that we need to get out [to people who do not teach], that teachers are called on to have every box checked every time the bell rings. And the very moment that you’re not all those things may be the time that you live to regret. Because you weren’t all things to all people because you were so busy being other things. (Martha Lesley)

A concrete action educational leaders can take in this area is to attend carefully to the proportion or scale of their interactions with teachers. For example, upon observing that a teacher has not posted a learning target in the classroom, consider the value of that practice or its weight in the totality of practice in which the teacher is (or should be) engaged, and provide feedback in proportion to that value. Large problem, large response; tiny detail, tiny response.

Finally, it has been clear for more than 50 years that teacher quality matters, more than nearly any other factor (Goldhaber, 2016). We also know that twin factors are contributing to a teacher shortage: falling enrollment in colleges of education and climbing rates at which teachers are leaving the profession (Allen, 2018; Percy, 2016). While many have dedicated themselves to the study of the causes of these phenomena, teachers themselves often report workload and lack of administrative support as major factors in their decision to engage in work stoppages or to leave the profession (Carver-Thomas & Darling-Hammond, 2017). A synthesis of these findings strongly suggests that
the retention of teachers must be a core strategy for administrators and leadership at every level. It is very important to note that the issue is no longer a matter of determining how to recruit a portion of the deep pool of teachers to one’s school and district; the issue facing public education is to determine how to recruit individuals who have the potential to be accomplished teachers to the profession and to create conditions that entice them to remain in the profession when they come.

**Limitations and Recommendations for Future Research**

This study was designed to address the author’s research question but, as with most studies, it did have limitations. The sample was drawn from a single school district. While this fact has its benefits, such as avoiding variations in culture and experience that occur between districts, it also represents a limitation. While phenomenological studies are not intended to serve as a basis for drawing empirical conclusions, the design of this study creates the limitation of locating the results in this one district.

A second limitation was the relatively low participation of beginning teachers, minority teachers, and male teachers. Each of the preceding demographics were represented by approximately 29% of the participants. Among these, minority teachers and male teachers are underrepresented within the profession so perhaps this distribution is in fact not a liability in that it more accurately represents the general population. However, beginning teachers make up a much higher proportion so the relatively low rate at which they participated in this study was certainly a limitation. Perhaps this rate of participation should not be surprising, however. If teaching is indeed as complex as this study suggests and beginning teachers typically struggle with that complexity, perhaps it
is only logical that more beginning teachers would not be enthusiastic to meet a stranger
to talk about this job that is already taking so much of their time and energy.

Although it is appropriate and customary to offer recommendations for future
research, this author wishes to offer only a few. The current literature study suggested
that we know all that we need to know about this issue—and have for some time. Future
research should focus in three areas. First, the complexity of teaching should be mapped
by other researchers. While many of the details of this research will doubtless provide
fodder for argument regarding the details, it is the fact of the unrelenting tangle of
expectations and ever-expanding conceptualizations of the very nature of teaching that is
key, not universal agreement on all the minutia that constitutes the whole. To make this
mapping useful to a wider audience, development of a visual representation of this
phenomenon would also be beneficial.

Future research should also focus on a synthesis of the vast field of education. For
teachers, the research is simply too vast. A framework for positioning theory, practice,
strategy, and all the other professional research could be useful as a mental model of
teaching. The visual representation recommended above could provide the starting point
for such a project, which would be less interested in anything like a meta-analysis but
more in noting the existence of rich (or sparse) research in a given area and where that
body of knowledge lies relative to the whole of teaching. While such an attempt to
“position” research would likely result in vigorous disagreement about how to categorize
studies, perhaps it would also provide the context for acknowledging this complexity in a
way that is more concrete than theoretical and (perhaps) sparks serious discussion about
what further implications for research and practice may emerge.
Finally, educational researchers must follow in the footsteps of trailblazers such as Linda Darling-Hammond and Marc Tucker to research and recommend promising practices regarding the professionalization of teaching. This researcher holds in very high regard those researchers engaged in studying what works in education. However, if the trend of teacher shortages continues to the point where a majority of the adults working in school buildings are not trained as teachers, such research will surely be irrelevant in the context of the triage such conditions will demand. Future work should involve work to increase pay for K12 teachers to a level on par with professions requiring a similar education and similarly complex work, an elevation of the voice of teachers within their organizations in structured ways, and similar systematic actions to ensure the re-professionalization of teaching.

Conclusion

The findings of this study belong to educational administrators. Luann Monroe spoke for her peers when she opined that administrators think that the practice they are engaged in “is a good thing. And [that] they really get it. But they don't really get it because they're not doing [this job].” As a colleague, this researcher believes that school administrators love students and care about teachers. The complexity of teaching is no surprise and is likely to ring completely true to most administrators. But it is his observation that the majority of administrators struggle to hold this vast tangle of competencies and practices in their heads—specifically because it is so vast. To be clear, there is no evidence that the conceptualization presented here describes what a majority of teachers do well, let alone all teachers. In point of fact, there is clear evidence that many teachers do not enact these competencies and practices. But that fact does not mean
that what the profession expects is less complicated than the picture painted here. Every
time we use the word “just” in the context of setting expectations, we underscore the
unspoken message upon which No Child Left Behind and the entire “school
improvement” movement is built: teaching is not complicated; dramatic and lasting
change is possible if teachers will just do their job.

This study adds one more page to the vast body of evidence that teaching is a
most complex and most demanding profession. It also warns that public education faces
an existential threat to its very future existence if the role of the teacher is not swiftly and
dramatically professionalized. Every child in every zip code deserves an accomplished
teacher; someone who can and does embody highly effective practice in each of the
competencies and practices that constitute teaching. Unfortunately, the perspectives of
the teachers in this study suggest that we may soon struggle to provide most students with
any teacher at all.
References


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CHAPTER IV

TEACHING IS COMPLEX AND THAT MATTERS: A RESEARCH SUMMARY FOR EDUCATORS BY AN EDUCATOR

Teaching is hard. As educators, we know this to be fact. We are teachers, we have been teachers, we observe and coach and support teaching every day. But do we—do educational decision-makers such as building- and district-level administrators—keep the complexity of teaching at the forefront of our minds as we make those decisions? A refrain we often hear from teachers (particularly when a new initiative or tool or structure is being introduced) is that there is “always one more thing.” Teachers complain that public education always adds responsibilities and never removes any.

That concept has more than one name in the literature. This idea of the burgeoning scope of the responsibilities of teachers began appearing at least as far back as 2013 when Michael Apple included it in his book Teachers and Texts. Ballet et al. (2006) called this phenomenon “intensification.” Others, such as a Stanford University professor of education, referred to it as the “deprofessionalization” of teaching (Darling-Hammond, 2005; Walker, 2017).

So why do we (collectively) continue to add responsibilities to the list of expectations for teachers? It is true that pressure to “improve” schools, by increasing student outcomes on standardized assessments, has increased dramatically during the current wave of school reform (Au, 2016). Both the job of the principal (Williamson & Blackburn, 2016) and the job of the superintendent (Trevino, Braley, Brown, & Slate,
2008) are far more complex than they were 20 years ago. But it is also true that teacher attrition rates are rising while enrollment in colleges of education is falling (Allen, 2018; Percy, 2016). This rising shortage of teachers has been blamed on a wide variety of factors including low pay, low societal status, lack of professional voice, poor working conditions, and perhaps most frequently, lack of support (Carver-Thomas & Darling-Hammond, 2017; Glazer, 2018). Not least among factors that impact this issue is the increasing workload for teachers. In recent years, we have, step by step, come to expect teachers to provide services to students for which they have not previously been specifically trained and which “fit” with teaching only insofar as teachers are in daily contact with students (Jhunjhunwala, 2014). You could doubtlessly provide a longer list but these relatively new duties might include counseling and advising students (Goldman, 2017); providing instruction regarding character (Swick et al, 2000); developing students’ social-emotional intelligence (Darling-Hammond, 2019); instruction related to digital citizenship (Ribble, 2015) or similar lessons; and acting as mandatory reporters for a range of suspected abuse, neglect, or harm (Kesner & Robinson, 2002).

What if one reason we continue to add responsibilities to teachers is because we do not have a shared “snapshot” of what teaching is now? Most educators have said or heard someone else say “if we just wrote down everything teachers have to do . . ..” Perhaps an overview like that is exactly what we need to help us as we approach decision-making about initiatives and expectations for teachers and about their role in public education. This article is designed to make that attempt. To capture a “snapshot” of the complexity of teaching at the macro level to better equip educational decision-makers to consider that reality in making decisions.
Research Summary

In this section, I present a summary of research in two parts: first, the trends that emerged from a systematic review of peer-reviewed literature between 2010 and 2019, specifically descriptions of or prescriptions for the practice of teaching; and second, a synthesis of the lived experiences of teachers participating in a research study regarding the act and process of teaching.

As part of my dissertation study, I took a close look at the professional literature over a 10-year period, examining every article published in 11 journals during that time to look for all descriptions of teaching and recommendations (or prescriptions) for teaching. The purpose of the search was to ask What is teaching? according to “the research.” As educators, we are well familiar with “the research”—the golden ticket that we use to justify every program, every initiative, every decision. Many of us are careful students of educational research, reading the entire summary article and the research paper as we seek to deepen our professional knowledge. But if we are honest, we have also been guilty of accepting claims at face value without studying for ourselves.

The purpose of this study was to look deeply and carefully at what the research during the most recent decade says teaching is and should be. I did not approach this task expecting to be surprised by any detail or by the scope of the findings. My job was to create a map of the major boundaries of the component parts of teaching, not to measure, judge, or evaluate anything I found. My theory was that we know this forest and have been looking closely at the trees in it one at a time but struggle to remember the vastness of it overall. Ultimately, 295 articles were included in the study. You can read details of those findings in Chapter II of my dissertation. A summary of what I found follows here.
The professional literature between 2009 and 2019 suggested that teaching has described—and demanded—professional practice that can be captured within 13 broad competencies and practices. Although the act of teaching is neither linear nor sequential, for the sake of logical presentation, these areas are presented in (very roughly) the following order: actions and competencies that exist or are taken before an individual lesson, actions that happen during lessons, and actions that occur after an individual lesson. No representation is made here regarding the importance of any of these actions or competencies nor of the way(s) in which each interacts and/or overlaps with the others. In short, they are presented in a manner consistent with my professional knowledge of the process of teaching. Each is also accompanied by a brief description.

**Know Students**

Knowing individual students deeply in a range of dimensions and using that knowledge to drive professional decisions. For example, knowing each student’s name and how to pronounce it correctly, knowing students’ past and most current learning progress, factors that may impact the students’ learning, and many more details.

**Know Your Subject Matter**

Holding, actively working to expand, and demonstrating strong content knowledge. Researchers have consistently found, particularly at the secondary level, that the teacher’s level of content knowledge is a factor in student achievement. In an era where desperation allows us to assign individuals to teach outside their field of expertise, it is important to remember that content knowledge matters.
**Demonstrate Pedagogical Expertise**

Understanding and enacting effective professional practices related to instruction. Teaching includes a grasp of the theory of the job (understanding the ways knowledge is produced, knowing the way students think) including common errors and misconceptions, anticipating multiple zones of proximal development and considering how instruction is likely to impact a variety of students.

**Plan for Practice**

Routine, strategic, thoughtful planning for both short- and long-term action. This practice includes lesson, unit, and course planning. Plans should include (but are certainly not limited to) questions to ask, assessments to administer, activities to enact, and contingency plans for when the primary plan does not work the way it was designed.

**Create a Learning Environment**

Strategic and continuous action to create and maintain an environment optimally conducive to learning. A core competency of teaching is setting conditions that nurture a classroom culture that values the individual for his/her uniqueness and prioritizes healthy interactions over social and anti-social behavior that would impede learning.

**Engage Students in Learning**

Implementation of activities designed to actively engage students in learning. Teachers set high expectations for all students through a variety of means including the design and implementation of interesting, cognitively demanding learning activities. Teachers make students active participants in their own learning.
Implement Effective Strategies

Knowing which specific instructional strategies work well to support learning and enacting them. Common to the point of cliché is the practice of requiring teachers to participate in professional learning activities for training on an instructional strategy. The literature is rife with evidence of the effectiveness of a laundry list of them. Teaching is not the implementation of any particular strategy, but the expertise to make effective decisions about which strategy to implement under any particular set of circumstances.

Provide Authentic Learning Experiences

Designing and implementing learning activities that are meaningful and relevant to students. Perhaps in response to the growing ease with which information can be accessed, the professional literature lays an emphasis on the importance on learning that is relevant to students immediately and as a basis for future learning and action.

Support Learning

Identifying and providing a wide range of supports to advance student learning. Teaching is not merely the passive dispensing of knowledge but requires teachers to take steps to ensure that learning actually takes place.

Monitor Learning

Actively and continuously monitoring the degree to which students are learning. Intertwined with the previous competence, monitoring includes creating structures and practices that seek evidence of student learning. This competence views the activities students engage in as opportunities to learn and opportunities for the teacher to observe and collect evidence of that learning.
Provide Feedback

Continuously providing specific, descriptive, individual feedback to students about their learning. Grades are a form of feedback but, according to the literature, are far from adequate alone. Teaching includes ongoing dialogue about learning between the teacher and the students and takes a range of forms such as just-in-time comments, written descriptive feedback, and conferences.

Know and Follow Laws and Policies

An active familiarity and compliance with relevant federal, state, and local laws and policies. In spite of the great mass of dictum pertaining to the field, this component of teaching was least mentioned in the literature, perhaps because laws and policies directly govern so many of the other parts of teaching that discourse on the fact of the statutes seems unnecessary. This anomaly notwithstanding, the nature of educational law and policy demands compliance as integral to continued classification as a teacher in good standing.

Reflect on Practice

This is a continuous, deep reflection on professional practice for the purpose of reflection. The professional literature frames reflection as integral to effective teaching and essential to continued professional growth.

The descriptions and recommendations found in the literature depict these practices as interwoven yet distinct. Each is supported by extensive bodies of research. Taken as a whole, “the work of being an educator is extremely complex and fraught with difficulties” (Selkrig, 2017, p. 335). It seems obvious that while the nature of teaching is not immutable, it is knowable and known collectively in spite of remaining “uncaptured”
in a frame that includes the whole. In order to provide a strong complement to the preceding picture the professional literature paints of teaching, the voices of the individuals doing the teaching must be privileged as well. To that end, interviews with 14 teachers from a single large district were conducted as part of this research study. The participants represented a diverse mix of professionals across demographic markers designed to ensure diversity of representation in experience, teaching assignment, experience, and personal demographics. The interviews sought to ask a very similar research question: What is teaching—as lived by teachers? Teachers were first asked to provide as much detail as possible about teaching as they knew it. Later in the interview, they were also asked to review and comment on the results of the systematic review of literature outlined above. Major findings are as follows.

When participants were asked to describe teaching as they experienced it, the vast majority of the answers they provided aligned with the competencies and practices drawn from the literature as outlined above. Every teacher mentioned knowing subject matter, planning for practice, and implementing effective strategies as part of their practice. All but two participants identified knowing students and engagement as an important part of their practice. These patterns suggested that these five areas remain at the forefront of teacher’s minds almost universally: knowing their subject matter, knowing their students, planning, actively engaging students, and implementing effective instructional strategies.

Teachers participating in these interviews agreed unanimously that teaching is incredibly complex. Teaching is as much out of school as in school. [It’s] not just the hours that you spend, but the tears that you shed. There's as much going on to be a good effective teacher outside of normal work hours as there is during work hours.
This is “not an eight to three job. It's not from end of August to May. [...A]ll through the summer you're still planning, . . . still thinking . . . going to workshops or conferences . . . It's a constant.” When presented with a summary of the results of the systematic review of literature as outline above, they each (with a single exception) stated that all areas identified are part of teaching as they experienced it. “That [list] is teaching. I don't see anything on this list that is not a very important part of teaching. And if you took any one of these things off the list, there would be a problem.”

The theme that emerged most clearly and forcefully was a conveyance of the crushing weight of teaching. Some were philosophical about this burden: “Over the weekend, my teaching walks with me. It lives with me in the shower. It rides with me in the car.” Some explicitly mentioned burnout, others revealed deeply pessimistic perspectives about the profession, and still others discussed the great cost they pay to engage in effective practice. One of the participants, Mary Landsbury (a pseudonym) echoed the factor most commonly mentioned by participants as a heavy burden while being most misunderstood by non-teachers: time.

[A significant part of the job is] the time that you have to invest to be good. To be mediocre, I could do a whole lot less. I'm not saying that I'm anybody's star teacher at all. I'm not saying that at all . . . But I notice that I’m never finished. There's always something to do. And even if every paper was graded, every grade was updated, if every parent was contacted, then there's something else that I could have been doing or I should have been doing, so it never finishes. I think [it is important to remember] the time factor, and that there is so much required of us. And I think that each teacher is threatened with that dilemma.

Mary’s response captured a theme that emerged from the interviews: every practice outlined above is expected of teachers but there is simply and literally not enough time in a week (much less within a teacher’s contract hours) to do all of those things. It is absolutely true that teachers almost always have a hefty list of duties to
discharge that are not part of the act and process of teaching. However, the responses from teachers in this study suggest that, even if teachers were released from all non-teaching duties, the job would still be overwhelming. As one teacher put it,

You have to bring your A game every single day from 7 until the last student leaves and it’s not over then; you still have grading, still have prep to do. Two months off in the summer? A lot of that time is spent going to training or planning for the next year.

Implications and Recommendations

When I sought approval for my research, I was not trying to reveal anything surprising to current educators. I was trying to synthesize research that has been conducted in isolation from the whole. It points to a conclusion that educators do not need research to affirm: the profession of teaching and perhaps public education itself is facing an existential crisis due to a disappearing workforce. Simultaneous to that trend—and arguably causing or at least accelerating the process—is the ongoing intensification of teaching. It is indisputably an immensely complex job and the mismatch between that complexity and the autonomy, voice, status, and compensation teachers are afforded is plain to see. From these conclusions seven recommendations can be drawn.

Recognize and acknowledge the complexity. Educational leaders, decision-makers, and those charged with preparing the next generation of teachers must see the complexity of teaching for what it is. Latent tendencies to frame teachers’ voicing of concerns as complaining should be heartily rejected. There are, in fact, individuals employed as teachers within this profession who are objectively unskilled in the work. That fact does not in any way negate or even weaken the perspective that the job is complex. We should consider how to frame our dialogue around teaching to acknowledge
the complexity of the job in ways that move well beyond the clichéd “thanks for all you do.”

Adopt a snapshot to guide your thinking as an educational leader. You already know how complicated this job is. If you have held an administrative position for any length of time, you have directed teachers to complete a very wide scope of tasks. I believe you and I struggle with holding the complexity of those accumulated expectations in our heads. For the same reason that we appreciate maps of cities, states, and countries—although we can only be in one very small part of them at a time—a map of the whole of teaching is likely to provide perspective and better anchor us in this work.

Examine every decision about teaching and teachers through the lens of the complexity of teaching. Decisions that are good in isolation may be less ideal in the context of the greater picture. Teachers must determine how to fit each new directive in among all the ones we have already given them. The least we can do is hold that complexity in our head when we make those decisions. This is not to suggest timidity in decision-making, but skillfulness in tone, in temper, and in tact.

Move beyond recruitment and mentoring. One common response to rising rates of teacher attrition has been the implementation of beginning teacher mentoring programs. They are appropriate and necessary. But the very fact of their necessity is not based on the teachers’ inexperience, but in the complexity of the job. Work to create schools and districts that acknowledge that complex problems require powerful solutions. Look to other professions for inspiration on how to acknowledge and support the heavy workload the professionals in your care are assigned to carry. Look to other educational systems for
inspiration on how to retain accomplished teachers. Hint: Thank you notes and goodies are not enough.

Professors of education, train pre-service teachers to see the complexity they should grow into. It is unreasonable to blame teacher preparation programs for schools’ struggles to produce the student learning outcomes they seek. What is reasonable, however, is a discussion about how preparation programs can improve the preparedness of the teachers they train. Part of that preparation should be a grasp of the totality of the complexity of teaching. Such an understanding would serve as a framework to provide context for the basic competencies required to begin teaching.

Teachers, advocate for yourself and for your peers. The participants in this study provided powerful voices of insight into the reality of teaching as they experienced it. Educational administrators and decision-makers certainly have a role to play in the professionalization of teaching, but the voice of classroom teachers is critical in any such work as well. Consider how you might help non-teachers better understand your job. Join the chorus of teacher-leaders who advocate for students, for their schools, and for the profession itself. Your voice matters. Use it.

Help professionalize teaching. It is my studied perspective that all the actions above amount to triage. They each and together should help improve working conditions for teachers. But my read of the research and current trends is that the future of public education in this country rests heavily (perhaps entirely) on the rapid and complete professionalization of teaching. The roadmap for this work has been drawn by others already. In late 2019, the National Board for the Professional Teaching Standards launched *Teachers 2020 Bill of Rights* (Teachers 2020). This campaign called for
teachers to be provided sufficient resources, meaningful professional growth experiences, voice and leadership opportunities, and compensation commensurate with the complexity of the job. It also called for the diversification of the teaching profession. Strategies to attract enough of the deep pool of teaching talent to your school and district were appropriate 10 years ago. Today that pool is nearly gone and the streams (of new teachers) that feed it are reduced to trickles. Unless we are willing for public education to become a scorched wasteland where powerful districts hoard the scarce talent and all others are helpless to provide teachers of any preparation or talent for their already disadvantage students, we should fight for the type of fundamental change that will make such an apocalyptic future both unthinkable and impossible.
References


CHAPTER V
DISCUSSION AND RECOMMENDATIONS

The purpose of this three-article dissertation was to research, document, and demonstrate the complexity of the process and act of teaching, as expected of and experienced by K12 public school teachers. The researcher’s aim was to produce a study of practical use in informing discussions around teacher retention and the “reality” of teaching. This descriptive study should be useful for those purposes in exploring the complexity of teaching. This chapter includes a discussion of major findings related to the descriptions of and recommendations for teaching in the professional literature and the lived experiences of teachers related to teaching. The chapter also includes a discussion of what implications may be valuable to the discussion regarding growing teacher shortages and the causes of that trend. The findings summarized here may be particularly valuable to educational leaders and decision-makers; the majority of the recommendations are intended for that audience. The chapter concludes with a discussion of the limitations of the study, implications, areas for future research, and a brief summary.

This chapter contains discussion and future research possibilities to help answer the following research questions:

Research Question 1. What is “teaching” as articulated in peer-reviewed and practitioner literature between 2010 and 2019?
Research Question 2. What are the lived experiences of teachers regarding the act and process of teaching?

The systematic review of literature conducted as part of this dissertation study suggested that the act and process of teaching is immensely complex but also includes 13 clearly definable competencies of practice that are both distinct and intricately intertwined. The lived experience of teachers is multi-dimensional and comprised of five themes: (a) workload, (b) knowing students, (c) reality vs. expectations, (d) the crunch of time, and (e) public misconception. The experiences of teachers participating in this study strongly affirmed the picture painted by the professional literature: teaching is incredibly and increasingly complex.

Summary of Findings

The first phase of this dissertation study was a systematic review of literature from 2010 through 2019 and included 11 professional journals. That study asked What is teaching? by examining the professional literature to observe the descriptions of and recommendations (or prescriptions) for teaching provided there. Ultimately, 295 articles met the inclusion criteria and contributed to the development of themes. The finding of that study was that the professional literature advances 13 competencies and practices as integral to teaching. While it was beyond the scope of the study to examine the relative weight or value of each category, the researcher did establish that the professional literature points to each of them as distinct but intertwined parts of teaching. Affirmed by teachers in the second study as part of teaching as they experienced it, those 13n competencies and practices are as follows.
**Know Students.** Knowing individual students deeply in a range of dimensions and using that knowledge to drive professional decisions.

**Know Your Subject Matter.** Holding, actively working to expand, and demonstrating strong content knowledge.

**Demonstrate Pedagogical Expertise.** Understanding and enacting effective professional practices related to instruction.

**Plan for Practice.** Routine, strategic, thoughtful planning for both short- and long-term action.

**Create a Learning Environment.** Strategic and continuous action to create and maintain an environment optimally conducive to learning.

**Engage Students in Learning.** Implementation of activities designed to actively engage students in learning.

**Implement Effective Strategies.** Knowing which specific instructional strategies work well to support learning and enacting them.

**Provide Authentic Learning Experiences.** Designing and implementing learning activities that are meaningful and relevant to students.

**Support Learning.** Identifying and providing a wide range of supports to advance student learning.

**Monitor Learning.** Actively and continuously monitoring the degree to which students are learning.

**Provide Feedback.** Continuously providing specific, descriptive, individual feedback to students about their learning.
**Know and Follow Laws and Policies.** An active familiarity and compliance with relevant federal, state, and local laws and policies.

**Reflect on Practice.** Continuous, deep reflection on professional practice for the purpose of reflection.

A number of these practices require action both outside of and during class time: knowing students, knowing the subject matter, knowing and enacting pedagogical expertise, planning for practice, and reflecting on practice. Some occur almost exclusively within the confines of the classroom: creating a learning environment, engaging students in learning, implementing effective strategies, providing authentic learning experiences, supporting learning, and providing feedback. While a number of these competencies refer to possessing knowledge, the literature makes clear that knowledge-based *action* is the expectation as is the ongoing cultivation of those knowledges. The researcher observed that it is common in the professional literature to make the case for the need for a particular professional practice without acknowledging the totality and complexity of teaching. The study was designed to examine how teaching is described and recommended in the literature. The preceding synthesis of those descriptions and prescriptions reveals a vastly complex job.

The second phase of this dissertation study sought to investigate what teaching *is*—for the teachers participating—in contrast to the perspective of what teaching *should be* from the perspective of educational scholars, policy makers, and administrators. Teachers have expressed frustration with the development of policy by individuals who have not personally engaged in teaching (Cournoyer, 2011) and by the demands placed on them by those whose time in the classroom has long passed (Jorgenson & Peale,
It was the position of the researcher that the question of capturing a snapshot of “teaching” required, by its nature, the inclusion of the voice of teachers directly. This study was designed to complement the systematic review outlined above. Fourteen teachers participated in face-to-face, semi-structured interviews designed to elicit their lived experiences regarding the act and process of teaching.

An analysis of the interview responses provided by participants yielded the following themes: workload, knowing students, reality vs. expectations, the crunch of time, and public misconceptions.

**Workload**

Many of the participants mentioned or alluded to the workload that they experienced as a routine part of teaching. Many noted that they frequently worked far beyond contract hours simply to complete routine tasks and processes required for the job.

**Knowing Students**

Teachers consistently shared and frequently returned to the perspective that knowing students well and deeply is a critical part of teaching. While this can be difficult for teachers who make daily contact with large numbers of students, many explicitly suggested that knowing students is the key practice to success as a teacher.

**Reality vs Expectations**

Lived experiences of participants who contributed to this theme were described in two subcategories: the tension between expectations teachers set (or had) for themselves and the gap between expectations of policy makers and administrators and the reality of implementation.
Crunch of Time

Time was consistently proposed as either the most frustrating barrier or the simplest solution to managing the complexity of teaching. Several participants brought up common stereotypes of teachers suggesting that the job requires fewer hours than others and shared that their experience was, in fact, the opposite: teaching requires the expenditure of time far beyond contract hours.

Public Misconceptions

Not a single teacher participating in an interview reported that members of the public outside public education have an accurate idea of what teaching involves. The impression most teachers reported is that the public thinks teaching is babysitting.

Participants also overwhelmingly affirmed that all of the competencies and practices identified in the literature are, in their experience, part of teaching. Several asserted that removing even a single item from the list would make the list insufficient to describe teaching as they know it.

Seen through the lens of Ingersoll’s professionalism framework, these findings lend credibility to the notion that teaching meets the criteria for being a profession, particularly “specialization” (Ingersoll & Merrill, 2011, p. 186). An occupation that requires knowledge and expertise in such a wide range of competencies and practices as standard practice must be a profession. When combined with teacher perceptions of lack of voice and status and the objectively lower compensation, compared with professions requiring similar education (Allegretto et al., 2018), surely Ingersoll was right to warn that teaching is in danger of radical de-professionalization. Perhaps the antidote is the re-professionalization of teaching, beginning with an acknowledgement of this complexity and the implications such a reality suggests.
Implications for Practice

Several implications emerged from this study regarding the complexity of teaching. First, this synthesis of the professional literature’s description of teaching and the lived experiences of teachers provides the background for including this evidence of the complexity of teaching in the public discussion and debate about education. If teaching is, in fact, a profession that is this complex, that complexity is entirely relevant to discussions about funding, evaluation, decision-making, and (arguably) the bulk of other educational topics.

This description of teaching should have another implication for decision-makers, from school and district administrators to district and state school boards to state and national legislators. These professionals should hold the complexity of teaching in their minds as they make decisions about and interact with teachers. Making decisions that impact large numbers of individuals is admittedly very complex work. Striving to make those decisions in ways that prioritize considering the complexity of teaching is likely to have a positive impact on professional relationships between decision-makers and those under their authority, if nothing else. A commitment to examining all possible decisions through the lens of the complexity of teaching is likely to yield decisions that improve school culture and teacher satisfaction. This is not to suggest that teaching can or should be simplified; it is to say that given its complexity, teachers should be held in the esteem afforded professionals in similarly complex jobs and provided the support and resources necessary for the successful execution of the job. Although doing so provides no solution in itself, administrators and decision-makers should also speak with one voice to acknowledge the complexity of teaching.
The framework offered in this dissertation as a map of the complexity of teaching may serve as an exemplar to accelerate that discussion. It is available to serve itself as the model or map of the complexity it illustrates.

Another implication could be for pre-service and teacher preparation programs to consider the degree to which they prepare teacher candidates to meet these expectations—or even make them adequately aware of this complexity. Perhaps a more systematic approach to equipping future teachers with basic skills in each of these competencies might yield a positive impact in their preparedness.

The complexity of teaching mapped through this study underscores the importance of effective mentoring programs, including a culture of mentoring focused on continuous professional growth, not merely the orientation of beginning teachers. The experiences of the beginning teachers in this interview study provided the basis for concluding that campaigns to recruit teachers and induction programs are insufficient measures. Schools and districts must move beyond induction and engage in the work of professionalizing teaching. If teaching requires extensive preparation and mentoring, it follows logically that the job also demands companion actions for retention. For example, existing models for professional practice that prioritize collaboration should be elevated and normalized. The Association for Middle Level Education has long called for “teaming”—organizing schools so that groups of teachers are assigned to the same students and amplify their efficacy through their collective impact (National Middle School Association, 2010); researchers and educators have advocated for the proliferation of professional learning communities—school-based structures to prioritize collective preparation and practice (DuFour, DuFour & Eaker, 2006).
**Recommendations for Research**

Future research should focus in three areas. First, the complexity of teaching should be mapped by other researchers. While many of the details of this research will doubtless provide fodder for argument regarding the details, it is the fact of the overwhelming complexity that is key, not universal agreement on all the minutiae that constitutes the whole. To make this mapping useful to a wider audience, development of a visual representation of this complexity would also be beneficial. Figure 4 provides such a chart as an example of a visual that may serve this purpose. This document is a visual representation of how the 13 competencies and practices that emerged from this study are visualized by the author. The directional arrows on the chart are meant to indicate how each competence or practice impacts other competences or practices. However, it is important to note that the competencies and practices themselves are supported by this research study, not the relationships between them.

Additional research to examine such relationships or to improve on this research would also be beneficial. For example, how should a teacher’s knowing of students impact the process of planning for practice, how does engaging in the practice of teaching impact a teacher’s pedagogical expertise, and in what ways should monitoring of student learning inform reflection on practice? Research may reveal relationships between practices not indicated here and could provide evidence of the strength of the relationships between practices. Much of this may already be part of existing research and could serve to strengthen the utility and versatility of this instrument.

Future research should also focus on a synthesis of the vast field of education. For teachers, the research is simply too vast. A framework for positioning theory, practice,
strategy, and all the other professional research could be useful as a mental model of teaching.

Figure 4. The complexity of teaching. This figure provides an illustration of the competencies and practices identified as part of teaching in the professional literature.

Finally, educational researchers must follow in the footsteps of trailblazers such as Linda Darling-Hammond and Marc Tucker to research and recommend promising practices regarding the professionalization of teaching. This researcher holds in very high regard those researchers engaged in studying what works in education. However, research, and indeed the news, emerging from public education suggests that catastrophic
shortages of teachers are inevitable barring significant and swift measures to prevent such an eventuality.

**Conclusion**

This research study framed two research questions within Ingersoll’s concept of professionalization and applied a phenomenological lens to the examination of the evidence gathered. Both research questions were answered clearly and in detail. In answering the first research question, *What is “teaching” as articulated in peer-reviewed and practitioner literature between 2010 and 2019?*, the researcher synthesized the literature and documented 13 competencies and practices held as essential to the act and process of teaching in the literature. The clear answer to this research question is that the professional literature from 2010-2019 holds teaching to include all of the following:

- Know Students
- Know Your Subject Matter
- Demonstrate Pedagogical Expertise
- Plan for Practice
- Create a Learning Environment
- Engage Students in Learning
- Implement Effective Strategies
- Provide Authentic Learning Experiences
- Support Learning
- Monitor Learning
- Provide Feedback
- Know and Follow Laws and Policies
- Reflect on Practice

The second research question was designed as a paired set with the first; a question essential to providing a complete view of teaching. *What are the lived experiences of teachers regarding the act and process of teaching?* According to the teachers who participated in this study, teaching is significantly misunderstood by most of the public, requires a deep and broad knowledge of each student, encompasses a workload that demands the investment of much more time than is included in the contract, and exists in a reality far different than they expected, far different from the ideals administrators seem to hold, and every bit as complex as the literature suggests.
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APPENDIX A

SYSTEMATIC REVIEW OF LITERATURE
REFERENCES—ALL INCLUDED ARTICLES


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APPENDIX B

IRB APPROVAL
June 7, 2019

Andrew Maxey
Department of ELPTS
College of Education
Box 870302

Re: IRB # 19-OR-147 “Exploring the Complexity of Teaching”

Dear Andrew Maxey:

The University of Alabama Institutional Review Board has granted approval for your proposed research. Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

The approval for your application will lapse on June 6, 2020. If your research will continue beyond this date, please submit the Continuing Review to the IRB as required by University policy before the lapse. Please note, any modifications made in research design, methodology, or procedures must be submitted to and approved by the IRB before implementation. Please submit a final report form when the study is complete.

Please use reproductions of the IRB approved informed consent form to obtain consent from your participants.

Good luck with your research.

Sincerely,

[Signature]

358 Rose Administration Building  |  Box 870127  |  Tuscaloosa, AL 35487-0127
205-348-8461  |  Fax 205-348-7189  |  Toll Free 1-877-820-3066
Research Proposal Recommendations

The following research proposal was reviewed by the committee and approved for partnership:

**Study Title:** Exploring the complexity of teaching  
**Principal Investigator:** Andrew Maxey  
**Organization:** University of Alabama  
**Faculty Advisor, if applicable:**

**Type of Research Collaboration:** Collection of New Data  
**IRB Approval?** Pending

**Research Abstract:**  
The researcher will solicit teachers to participate in face-to-face and/or focus group interviews to explore the complexity of teaching. Teachers will need to fit into specified demographics in order to be included in the study. Total participants will not exceed 25 teachers. Participants' identities will be kept confidential. All interviews will take place after work hours.

**Committee Recommendation:** The committee approves this research proposal.

**Superintendent’s Approval:** [signature]
APPENDIX C

INTERVIEW GUIDE
A. Introductions
B. Explanation – this interview is part of a study being conducted regarding teachers “lived experiences” related to the nature of teaching. I am interested in answering the question “What is teaching”. I know it is complicated but I want to hear from the professionals living the experience of teaching.
C. You can pass on a question or take a break at any time. As the consent form points out, some of the questions might be upsetting because they ask you to think about the complexity of teaching. You can always skip a question or even end the interview at any time.
D. What questions do you have?

Questions
1. Tell me about what you do to prepare for and present instruction to your students or “teach” in as much detail as possible.
2. List and describe the actions that you regularly take connected to the process of “teaching” itself.
3. Explain how you know what “teaching” includes.
4. The research literature suggests that the following sets of actions are part of effective teaching practice. Describe whether and how they are part of your practice.
   - Know Students
   - Know Your Subject Matter
   - Demonstrate Pedagogical Expertise
   - Plan for Practice
   - Create a Learning Environment
   - Engage Students in Learning
   - Implement Effective Strategies
   - Provide Authentic Learning Experiences
   - Support Learning
   - Monitor Learning
   - Provide Feedback
   - Know and Follow Laws and Policies
   - Reflect on Practice
5. How does your understanding of “teaching” (as you described it at the beginning of this interview) compare with your understanding of it in your first year of teaching?
6. Based on your interactions with members of your community, what do non-educators think your job is or includes?
7. If non-educators and non-teaching members of the profession had a clearer understanding of the complexity of what you do, what difference would that understanding make to you as a teacher?
8. In this research study, I am trying to understand the complexity of teaching. The big question I am asking is “what is teaching”. Setting aside the long list of non-teaching duties all teachers are assigned, what would you like to add to our conversation that we have not already covered?
APPENDIX D

INTERVIEW GUIDE
TEACHING AS DESCRIBED BY THE PROFESSIONAL LITERATURE
The research literature recommends that the following sets of actions be part of teaching practice. Share whether each is part of your practice and (if so) how it is.

- **Know Students**
  - Knowing individual students deeply in a range of dimensions and using that knowledge to drive professional decision.

- **Know Your Subject Matter**
  - Holding, actively working to expand, and demonstrating strong content knowledge.

- **Demonstrate Pedagogical Expertise**
  - Understanding and enacting effective professional practices related to instruction.

- **Plan for Practice**
  - Routine, strategic, thoughtful planning for both short- and long-term action.

- **Create a Learning Environment**
  - Strategic and continuous action to create and maintain an environment optimally conducive to learning.

- **Engage Students in Learning**
  - Implementation of activities designed to actively engage students in learning.

- **Implement Effective Strategies**
  - Knowing which specific instructional strategies work well to support learning and enacting them.

- **Provide Authentic Learning Experiences**
  - Designing and implementing learning activities that are meaningful and relevant to students.

- **Support Learning**
  - Identifying and providing a wide range of supports to advance student learning.

- **Monitor Learning**
  - Actively and continuously monitoring the degree to which students are learning.

- **Provide Feedback**
  - Continuously providing specific, descriptive, individual feedback to students about their learning.

- **Know and Follow Laws and Policies**
  - An active familiarity and compliance with relevant federal, state, and local laws and policies.

- **Reflect on Practice**
  - Continuous, deep reflection on professional practice for the purpose of improvement.