Not Just Common Sense: Principled Sensemaking and Implementation of the Common Core at Two Middle Schools

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BOSTON COLLEGE

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NOT JUST COMMON SENSE: PRINCIPLED SENSEMAKING AND IMPLEMENTATION OF THE COMMON CORE AT TWO MIDDLE SCHOOLS

Dissertation by

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Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

ABSTRACT

NOT JUST COMMON SENSE: PRINCIPLED SENSEMAKING AND IMPLEMENTATION OF THE COMMON CORE AT TWO MIDDLE SCHOOLS

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Across the nation, most states are implementing a new set of standards- and accountability-based reforms: the Common Core State Standards and their accompanying assessments. Unfortunately, the perspectives of school-based educators are largely missing from policy and implementation decisions about the Common Core. To address some of the gaps in previous research, the purpose of this dissertation—a comparative case study of two middle schools on the East Coast of the United States—was to describe and analyze school-based educators' perceptions of and responses to the Common Core and the Smarter Balanced Assessment Consortium (SBAC) Exam.

Data analysis revealed that educators in the two schools generally worked from an inquiry stance on teaching, learning, and schooling (Cochran-Smith & Lytle, 2009) in that they collectively and critically analyzed the intentions of educational policy and practice based in part on their beliefs about student-centered, constructivist teaching and learning. Consistent with this perspective, they made sense of the Common Core and SBAC based on the degree of alignment they perceived between their own educational values and beliefs, on the one hand, and the values and beliefs that animated the policies, on the other hand, which I conceptualized as "principled sensemaking." How the educators actually implemented the Common Core and SBAC was the result of the

intersection of their principled sensemaking of these standards-based reforms and the degree of agency they had over policy implementation. I termed this type of response to policy "principled implementation." Four types of principled implementation were identified: *principled adoption*, *principled neglect*, *principled compliance*, and *principled resistance*.

New understandings of school-based educators' unique, critical, and nuanced perceptions of the Common Core and SBAC and how they believe the Common Core and SBAC influence teaching and learning have the capacity to inform decisions about the future of the Common Core in schools, and contributes to a broader understanding of how school-based educators take up and respond to standards- and accountability-based reforms.



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CHAPTER ONE

Missing Voices, Faulty Reforms: Standards- and Accountability-Based Educational Policy in the United States

Over the past 30 years, most educational policy in the United States has relied on standards- and accountability-based reforms to improve what are perceived as weak schools, teachers, and students. However, many of these reforms and their implementation procedures were decided with little input from school-based educators, and many reforms, most notably No Child Left Behind, have not only failed to improve educational outcomes for students (Ratner, 2015; Simon, 2013), but also by some accounts have had negative impacts on students, teachers, and schools (Au, 2007; Booher-Jennings, 2005; Palmer & Rangel, 2011). The lack of school-based educators' views in the creation of these reforms and in decisions about their implementation is problematic, given that many analysts argue that school-based educators are the key to educational reforms of all kinds (Calfee & Wadleigh, 1992; Hargreaves & Shirley, 2011). In addition, there are often significant discrepancies between school-based educators' and policy makers' views about teaching and learning (Kennedy, 2005), which suggest that unless school-based educators' voices inform the creation and implementation of policy, such policies may be doomed to fail, leaving policymakers and practitioners to continue grappling with the problems the policies were intended to fix in the first place (Cohn & Kottkamp, 1993).

Despite evidence that previous standards- and accountability-based reforms have not achieved their desired outcomes, a new set of standards- and accountability-based reforms—the Common Core State Standards and their accompanying assessments—are

now being implemented in most states across the nation. Yet again, the perspectives of school-based educators are largely missing from policy and implementation decisions about the Common Core (Nadelson, Pluska, Moorcroft, Jeffrey, & Woodard, 2014; Van Roekel, 2014). Although a number of recent large-scale surveys have asked whether or not educators "approve" of the Common Core in a general sense (Hart Research Associates, 2013; Henderson, Peterson, & West, 2015; Saad, 2014), an in-depth understanding about how school-based educators actually make sense of and implement the Common Core is lacking. If the perceptions and perspectives of school-based educators are ever to be integrated into decisions about the Common Core and its accompanying assessments, policy makers and researchers need to understand what those viewpoints are. Consequently in-depth research is needed to uncover and analyze educators' perspectives on the appropriateness, possibilities, and limitations of the Common Core for improving teaching and learning. Therefore, the purpose of this study was to describe and analyze school-based educators' perceptions of and responses to the Common Core and the Smarter Balanced Assessment Consortium (SBAC) exam in two middle schools to find out how they understood, critiqued, questioned, and made sense of the Common Core and the SBAC. New understandings of school-based educators' unique and nuanced perceptions about the Common Core and the SBAC and how they believe the Common Core and SBAC influence teaching and learning have the capacity to inform decisions about the future of the Common Core in schools. This research also contributes to a broader understanding of how school-based educators take up and respond to standards- and accountability-based reforms. Given the central importance of educators' perspectives in policy creation and implementation decisions, the lack of data

on those perspectives, and the novelty of the Common Core and their assessments, it is hoped the findings from this study contribute to positive policy and practice decisions about the use and implementation of the Common Core.

This dissertation is a comparative case study of two schools on the East Coast of the United States, Mountain Top Middle School and Rocky Coast Charter Middle School, both of which were required by their state to align curriculum to the Common Core and to assess students using the SBAC exam for the first time during the spring of 2015 when data were being collected for this study. As I discuss in depth in Chapter Three, a comparative case study design is especially appropriate for understanding a phenomenon within a real-world context (Yin, 2014). For this dissertation, the phenomenon was how school-based educators made sense of and responded to the Common Core as the most visible current example of standards-based reform. In this study, I interviewed teachers and administrators at each school site; observed professional development sessions and team meetings; and gathered school documents and archival material that allowed me to look closely at how educators in these settings made sense of and responded to the Common Core and the SBAC. Sensemaking theory, which I discuss in detail in Chapter Two, suggests that individuals and groups interpret policy based on multiple factors, including individual and situated cognition and how policy is represented to them (Spillane, Reiser, & Reimer, 2002). In this study, as with the pilot study I conducted in preparation for the dissertation (Stern, 2016), I combined ideas from sensemaking theory with Cochran-Smith and Lytle's (2009) notion of inquiry as stance, also discussed in detail in Chapter Two, in order to uncover and analyze educators' critical perspectives about and responses to educational policy.

Research Problem: Missing Voices, Faulty Reforms

Gradually over the past 30 years, a widespread consensus has developed that the quality of the nation's education system determines the health of the nation's economy (Mehta, 2013). Fear about a decline in economic competitiveness as a result of weak schools (and weak teachers) has prompted many policy changes that use market-based approaches, often initiated at the federal level. Although many people now believe that this approach to reform is simply "common sense" (Apple, 2005), market-oriented reforms, such as alternative routes into teaching and high-stakes testing to evaluate teachers, schools, and students, have generated enormous debate among researchers, policymakers, and in the media (Edelman, 2015; Ravitch, 2014; Thompson, 2001). The Common Core, which is English/Language Arts and Mathematics learning standards for grades Kindergarten through 12, and its accompanying exams, was designed "to prepare all students for success in our global economy" (National Governors Association & Council of Chief State School Officers, 2011). In this sense, the Common Core is part of the larger package of "common-sense" educational reforms that currently dominate educational policy and practice in the U.S. and in a number of other developed countries.

Although the public and politicians have weighed in in various ways during national conversations about standards- and accountability-based reforms such as the Common Core, most policy decisions about standards and accountability lack the perspective of those who are arguably best situated to understand how these reforms actually affect the process of teaching and learning in schools—teachers and school-based leaders (Hargreaves & Shirley, 2011; Lefstein & Perath, 2014). In addition, some argue that policies that mandate adoption of standards-based reforms were created

without meaningful consideration of educators' perspectives and insights to purposefully supersede and replace teachers' input into decisions about schooling, given that teachers are often portrayed as a main cause of school failure (Kumashiro, 2012).

Additionally, policy implementation is often viewed in a linear, top-down fashion, based on the assumption that school-based educators will rationally and predictably carry out the reforms they are instructed to implement as a result of new policies. However, this view of policy implementation, sometimes referred to as a technical-rational approach (Datnow & Park, 2009), does not explain the messy reality that exists when policy is interpreted, analyzed, and reshaped at the school level. Spillane, Reiser and Reimer (2002) call the process of interpreting educational policy at the level of schools "sensemaking," because it tries to take into account the personal histories and contexts of educators as they work—literally—to "make sense" of or understand what it is that policy calls for in terms of their daily work. Sensemaking theory, described in Chapter Two, offers researchers a lens through which to understand school-based educators' perspectives about policy and reform that is more nuanced than the perspective of technical-rationality. However, even researchers who use sensemaking theory to understand educators' perceptions of and responses to policy often focus on whether and how well educators understand and implement the policies and reforms, as if it were a given that the policies and reforms were a priori and objectively the "right" answer to the problems they were designed to address. That is, researchers who use sensemaking theory often neglect to interrogate educators' critical perspectives on the actual policies and reforms under consideration, and consequently school-based educators' nuanced critiques

of the purposes, structures, logic, and intended outcomes of policies are not usually exposed in research that uses sensemaking theory.

The result is that in two arenas—research on policy development and implementation, and research on standards- and accountability-based reforms—educators' perspectives and opinions have been marginalized. In addition, as noted above, many previous reforms have not achieved their desired outcomes. Consequently, some critics argue that part of the failure of those reforms is lack of attention to educators' perspectives on the reforms in the first place. Indeed, more than 20 years ago and long before NCLB, Cohn and Kottkamp (1993) argued,

The absence of teachers from the dialogue and decision-making on reform has been a serious omission. It has yielded faulty definitions of the problem, solutions that compound rather than confront the problem, and a demeaned and demoralized teaching force. Efforts to improve education are doomed to failure until teachers become respected partners in the process. If reform is to be successful, their voices and views must be included in any attempts to improve and alter their work. Although their involvement cannot insure success, their absence will guarantee continued failure. (p. xvi)

Unfortunately, Cohn and Kottkamp's critique continues to ring true today. Given that the stated purpose of standards- and accountability-based reforms is to increase student achievement and improve equity, then the perspectives of those charged with implementing these reforms in schools need to be taken into account when reform policies are designed, implemented, and evaluated.

Right now, there is a timely opportunity to investigate educators' perspectives about an entirely new set of standards- and accountability-based reforms. In 2011 and 2012, many states across the country adopted the Common Core and its accompanying assessments. In the spring of 2015, students in these states took one of the two Common Core-aligned high-stakes standardized tests for the first time. This newest set of reform initiatives presents a unique opportunity to investigate school-based educators' views about the Common Core and its assessments in the early stages of implementation. By investigating the Common Core from the perspective of those charged with its implementation, this dissertation research uncovered insights and developed knowledge that could help inform policy and implementation decisions and lead to more positive outcomes for students, teachers, and schools.

Research Questions

My study focused on how teachers and administrators in two middle schools made sense of and responded to the Common Core and the aligned SBAC assessment based on interviews with key participants and observations of work groups at the team and school levels. Throughout the study, I use the term "make sense of" to refer to the ways educators understood, perceived, critiqued, and experienced state policy requiring them to align curriculum to the Common Core and SBAC. Along the same lines, I use the term, "respond to" to refer to the ways educators implemented the Common Core and the SBAC, including whether and to what extent they accepted, complied with, and enacted the Common Core in curriculum and instruction as well as whether and to what extent they ignored, reshaped, and/or resisted the Common Core and its assessments. The two middle schools selected served as two different contexts that shaped the ways educators

individually and collectively made sense of and responded to policy. Accordingly, the research questions for this study addressed both the individual and collective experiences of teachers and administrators in the two settings (Spillane, 2004; Spillane, Reiser, et al., 2002). This study addressed two major research questions with two important subquestions:

- 1. How did teachers and administrators at two middle schools—a charter school and a district public school—make sense of (that is, understand, perceive, critique, and/or experience) the Common Core and its aligned high-stakes examination, the SBAC?

 2. How did teachers and administrators at these two middle schools respond to (that is, implement, comply with, ignore, and/or enact) the Common Core and its aligned high-stakes examination, the SBAC?
 - What ideas, experiences, conditions, school structures, and/or policy tools influenced educators' sensemaking of, and responses to, the Common Core and SBAC?
 - What did educators at each school say about whether or not, to what extent,
 and in what ways the Common Core and SBAC shaped their own and their
 colleagues' curricular, instructional, and assessment practices?

In any study of the sort I conducted here, the educators who participated made sense of and responded to the Common Core in relation to previous major reform policies including state standards and assessments, NCLB, and Race to the Top. Invariably, these previous reforms affect educator sensemaking of the current Common Core initiative. To provide context for the current study, I provide below a brief history of standards- and

accountability-based reforms as a prelude to discussing the creation of the Common Core.

Context: The History of Standards- and Accountability-based Reform in the U.S.

Scholars generally trace the beginnings of the modern standards and accountability reform movement first to Sputnik, in 1957, and then to the publication of *A Nation at Risk* in 1983 (Guthrie, 2004; Lagemann, 2000; McDermott, 2011). Sputnik is commonly described as prompting the Elementary and Secondary Education Act in 1965, with the purpose of establishing a more direct federal role in education to improve the perceived crisis in weak math and science education. Almost 20 years later, *A Nation at Risk* (NAR) warned Americans in no uncertain terms that scores on international exams in the early 1980s were stagnating and that the United States was becoming "globally uncompetitive" as a result (National Commission on Excellence in Education, 1983). The message was very clear that the educational system was failing the country, and that its future was uncertain unless things changed. Even though the alarming language of NAR has been quoted many times, because it makes the direct link between education and the economy, which is a central assumption of today's policy climate (Mehta, 2013), I quote the entire introductory paragraph to the report:

Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world. This report is concerned with only one of the many causes and dimensions of the problem, but it is the one that undergirds American prosperity, security, and civility. We report to the American people that while we can take justifiable pride in what our

schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people. What was unimaginable a generation ago has begun to occur--others are matching and surpassing our educational attainments.

(National Commission on Excellence in Education, 1983, p. 5)

The National Commission on Excellence in Education identified four major causes of the "risk" that the country would become economically uncompetitive: content, expectations, time, and teaching. Content, or curriculum, was described as "diluted," with too much student choice over courses (p. 18). Expectations, defined as the "level of knowledge, abilities, and skills" all students were expected to attain (p. 19), were determined to be too low for both high school graduation and college admission. NAR also concluded that too little time was spent in school and on school-related activities, such as homework, as compared to the time distribution of other higher achieving nations. Finally, teaching was deemed "at risk" because teachers were not academically competitive with other college graduates, were not paid adequately, and were both in short supply and not qualified in high-need areas such as math and science. It is worth noting that all of these presumed causes of "decline" in quality of the education system were located inside schools, and accordingly, the best solutions to these problems were focused solely on the educational system itself instead of (or in addition to) other causes of poor educational performance, such as poverty and inequitable opportunities.

NAR made a number of recommendations. First, the report suggested that all high school students should be required to take five "New Basics," which included four years of English, three years each of math, science, and social studies, a one-half year of computer science. For each subject area, the report suggested four recommendations about what students should learn; for example, in social studies, one of the four recommendations was that students should learn to "understand the broad sweep of both ancient and contemporary ideas that have shaped the world" (p. 26). In addition to course-specific recommendations, NAR stated that "schools, colleges, and universities [should] adopt more rigorous and measurable standards and higher expectations, for academic performance and student conduct" (National Commission on Excellence in Education, 1983, p. 27). The message of the NAR report was clear: to reduce the "risks" of becoming economically uncompetitive, it was vital that the country have rigorous learning standards, defined as what students should know and be able to do as a result of their coursework, and appropriate assessments that measured the degree to which students met the standards.

NAR unleashed a "virtual standards tidal wave" (Wilson & Floden, 2001, p. 193). Politicians, the business community, and policy makers began to agitate for improved student achievement through stricter graduation requirements, more rigorous and wide-sweeping curriculum standards, and standardized tests (Cuban, 2007). Although some states had been working on developing plans for reforming their educational systems prior to the release of the report, after 1983 many states began to develop K-12 curriculum standards in earnest (Franklin & Johnson, 2008). Another contributing factor to the development of state standards and assessments was an education summit held in

Charlottesville, Virginia in 1989, where President George H. W. Bush and the nation's governors met to discuss performance goals for public school students, defined by standards and measured by standardized assessments. By 1995, a mere six years after the education summit in Virginia, every state except Iowa was in the process of creating state content standards for grades K-12, and many were creating standardized assessments as well (Gandal, 1996).

It is important to note that learning standards were not a new concept. For example, social efficiency experts in the 1920s, including Mayer Rice, a medical doctor turned education reformer who spent years researching the day-to-day experiences of children in classrooms all over America, believed "clearly defined standards" would ensure meaningful student achievement and eliminate "wasted" curriculum and instruction (Kliebard, 2004, p. 20). In 1949, Ralph Tyler published the Basic Principles of Curriculum and Instruction, which established the now ubiquitous principle that curriculum planning must to start by identifying desired educational outcomes. Classroom-level educational outcomes were the precursor to today's learning standards, which are generally lists of learning objectives that identify what students should know and be able to do at a certain point in time in a particular content area. However, it is also important to note that it took the "moral panic" created by NAR to align these standards across schools, states, and eventually, the nation (Ladson-Billings & Brown, 2008, p. 157). That is, while standards today are an assumed part of the educational landscape (Mehta, 2013), they became entrenched not because they were the only, or best, way to improve teaching and learning, but because of the fear of the nation becoming economically uncompetitive.

The standards that many states initially produced during the 1990s received much criticism. Many were found to contain "vague language and [had] insufficient grounding in content . . . [and while some] states recognize[d] the need for internationally competitive standards, few [took] steps in this direction and none [did] a thorough job" (Gandal, 1996, p. 11). Complicating the standards creation scene was the attempt to construct disciplinary national standards, as recommended by the governors at the education summit in Virginia. History, the first discipline to tackle the task, created such a public uproar over the "political" bias of its proposed standards that the U.S. Senate voted to condemn the standards by a vote of 99 to 1 (Ravitch, 2000). However, states and national disciplinary groups persevered, and by 2007, all states had content standards in place.

Federal legislation regarding assessment kept pace with the states as they worked to establish standards. With the passage of No Child Left Behind in January of 2002, states were formally required to assess all students using standardized tests in grades 3-8, and once in high school, in math and literacy. Standardized tests, defined as tests that are administered, scored, and interpreted in a standard, predetermined manner, have been a part of the educational landscape of the United States for over 100 years, and they have an even longer history in some other parts of the world (Fletcher, 2009). However, even though the majority of states had some form of state-level assessment in place prior to NCLB and some states had high stakes attached to those assessments, NCLB represented a major shift in education because it brought high-stakes accountability reform to each and every state (Dee & Jacob, 2010).

In this study, I make an important distinction between standards-based and accountability-based reform. On the one hand, standards-based reforms rest on the proposition that holding all students to the same learning standards promotes equity and improves achievement (Thompson, 2001). The idea is that the implementation of standards drives desired changes, such as meaningful curriculum about worthwhile knowledge and skills. On the other hand, accountability-based reforms "monitor and evaluate the educational system" (Wohlstetter, 1991, p. 31), based on the proposition that educational improvement depends on holding stake-holders (teachers, schools, and students) accountable for change, as measured by tests, with sanctions imposed for failure (Hamilton, Stecher, & Klein, 2002). While some consider standards-based reform as inclusive of standards as well as their accompanying testing programs and accountability measures (e.g. Mehta, 2013), for the purposes of this study I consider standards-based reforms and accountability-based reforms as two related but different approaches to reform in part because the educators I interviewed in the pilot study for this dissertation had very different views about standards and their cousins, high-stakes assessments.

Although standards-based reforms have always had detractors, many consider the shift in the early 2000's from standards-based reform to mandatory accountability-based reform the root of many of the current problems plaguing education today (Franklin & Johnson, 2008; Thompson, 2001). Under NCLB, schools were accountable for meeting Adequate Yearly Progress (AYP) goals on their standardized assessments, both across individual schools and within school subgroup populations. Sanctions for not making AYP included loss of federal funding, mandates about how to use federal funding (such as paying for tutors outside of the school district for students), lay off of teachers and

administration, school take-over by a charter corporation, and school closure. These pressures were enormous and caused major changes in how schools and teachers structured the learning environment for students. For example, there is very strong evidence that as a result of high stakes tests, the curriculum was "narrowed to tested subjects, subject area knowledge was fragmented into test-related pieces, and teachers increased their use of teacher-centered pedagogies" (Au, 2007, p. 258). Other consequences included increased stress on teachers, decreased professional autonomy, and attrition attributed to accountability pressures (Costigan, 2005; Olsen & Sexton, 2009; Smith & Kovacs, 2011). These changes are addressed in more detail in Chapter Two.

There is no shared agreement on what roles standards- and accountability-based reforms should have in education. Some argue that education driven by national standards and accountability policies has the potential to become "distinctly undemocratic" by removing local control over curriculum (Sleeter, 2008, p. 141) and exacerbating already-existing differences in the opportunities and outcomes of groups differentiated by socioeconomic, racial, language, and other characteristics (Berliner, 2013). Supporters insist that high standards and their accompanying accountability mechanisms are the appropriate solution to the problem of a weak public educational system (Finn, 2013; Haycock, 2011; Walberg, 2011). Still others support the use of standards but not the use of high-stakes assessment to measure students' progress towards meeting those standards (Lyons, 2014; Restorff, Sharpe, Abery, Rodriguez, & Kim, 2012; Shaver, Cuevas, Lee, & Avalos, 2007; Stern, 2016; Thompson, 2001). There is overwhelming evidence about the negative effects of accountability-based reforms on

students, teachers, and schools (Au, 2007). And yet, over the past two decades of standards- and accountability-based reforms, the high school graduation rate in the United States has increased from 74% in 1990 to 81% in 2013, (National Center for Education Statistics, 2014, 2015), an increase that some claim is linked to standards- and accountability-based reforms (Bidwell, 2015).

Although there is no shared agreement over the efficacy, purpose, or success of standards- and accountability-based reforms, they continue to be at the center of many federal educational policies, and they have expanded in recent years. In 2009 the National Governors Association (NGA) and the Council of Chief State Schools Officers (CCSSO) spearheaded the effort to develop a set of learning standards in English/Language Arts and Mathematics that would eventually become the Common Core. The Common Core and its accompanying assessments are the most current, farthest-reaching attempt to establish and sustain national standards and assessment, and as suggested above, they provide an excellent new opportunity to investigate how teachers make sense of standards- and accountability-based reforms.

The Common Core State Standards: History and Controversy

The idea of *national* standards and assessments has long been debated within the educational policy arena. Eleven years after NAR recommended that schools "adopt more rigorous and measurable standards," (National Commission on Excellence in Education, 1983, p. 27), Congress passed the "Education America Act," or Goals 2000, the purpose of which was to "improve learning and teaching by providing a national framework for education reform . . . [and] to promote the development and adoption of a voluntary national system of skill standards and certifications" (US Congress, 1994). Despite

pushback against the idea of a "national curriculum," in 2010 the National Governors Association in partnership with the Chief Councils of State Schools Organization published the Common Core. The Common Core website describes the process that was used to develop the standards as "relying on teachers and standards experts from across the country" (Common Core State Standards Initiative, 2015a). However others, who claim few or no teachers were involved in their development, question this assertion (Cody, 2009; Strauss, 2014b), and a list released by the National Governors Association of the people who were part of the work and feedback groups for the Common Core includes only one classroom teacher (National Governors Association, 2009).

The Common Core mathematics and English/language arts standards are organized differently from one another. The Common Core math standards include eight "mathematical practices" based on the National Council of Teachers of Mathematics standards and a National Research Council Report on mathematics (National Council of Teachers of Mathematics, 2000; National Research Council, 2001). These eight practices, which include "Reason abstractly and quantitatively" and "Construct viable arguments and critique the reasoning of others," cut cross all grade levels and content areas and are described at different levels of depth depending on the grade level in question. In addition to the eight mathematical practice standards, there are 11 "domains" of standards, which also cut across grade levels; however, not every domain is taken up at every grade level. For example, "Number and Operations in Base 10" is a domain that is addressed in grades K-5 while "Geometry" is addressed in grades K-8, and "Ratios and Proportions" is addressed in grades 6 and 7. The mathematics Grades K-8 standards are organized by grade level. The six sets of high school standards are number and quantity, algebra,

functions, modeling, geometry, and statistics and probability. According to the Common Core website, these six sets of high school standards are intended to be interwoven into the course structure offered in high schools, regardless of whether the high school follows the traditional sequence of algebra, geometry, etc. or whether the high school follows a Math 1, Math 2, Math 3, etc. sequence (Common Core State Standards Initiative, 2015b).

The Common Core ELA standards are organized in three sections: a K-5 section, a 6-12 English/Language Arts section, and a 6-12 section titled, "Literacy in History/Social Science, Science, and Technical Subjects." The sections are organized by four "strands": Reading, Writing, Speaking and Listening, and Language. Each "strand" has anchor standards that cut across grade levels at increasing levels of difficulty. For example, in 2nd grade, one of the Reading standards is to "identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text" (CCSS ELA-LITERACY.RI.2.2). In 12th grade ELA, that standard reads, "Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text" (CCSS ELA-LITERACY.RI.11-12.2).

It is important to note that the Common Core is not a stand-alone set of learning standards. It is to be accompanied by one of two standardized exams, the Smarter Balanced Assessment Consortium (SBAC) exam or the Partnership of Assessments for College and Career Readiness (PARCC) exam. These two consortia were allocated \$330 million by the federal government as part of the Race to the Top initiative of 2010 to develop "next generation" exams aligned to the Common Core (Smarter Balanced Assessment Consortium, 2015b). These "next generation" exams were intended to differ

from previous standardized exams because they included open-response items, had the possibility of including computer-adaptive technology, and contained "performance tasks that ask[ed] students to demonstrate an array of research, writing, and problem solving skills" (Smarter Balanced Assessment Consortium, 2015b). Proponents claimed these exams were a vast improvement over the "bubble tests" of the past because

guessing and memorizing do not work and true understanding, analyzing, and problem solving are required, so they [are] aligned with what [students] need to know to be successful in college and life and will be more accurate than previous standardized tests. (Edelman, 2015)

Others have posited that regardless of the quality of the tests themselves, the fact that they are high stakes means they will continue to have negative effects on students and schools, as their predecessors have had (Welner & Mathis, 2015). This point was recently underscored by over 2000 education researchers who signed an open letter to Congress and the Obama administration advocating for a departure from the test-based policies that have been a part of the Elementary and Secondary Education Act since Goals 2000 (NEPC, 2015).

Debate over the Common Core and its assessments has escalated in recent years, and the debates are multi-sided, divisive, and public (Martin, 2014; Ravitch, 2014; Rix, 2013; Strauss, 2013a; Tucker, 2016). The Common Core has also created strange bedfellows; although for vastly different reasons, parties on both the political right and left are opposed to the Common Core and its assessments. Opponents on the left characterize the Common Core and its assessments as a corporately-sponsored initiative designed to produce profit for curriculum and testing companies, hold public schools

"accountable" in unethical ways, and eventually privatize the entire public education system (Kilfoyle & Tomlinson, 2014; Ravitch, 2014). Most opponents on the political right claim that the Common Core is an over-reaching federal intrusion into states' rights to regulate and control education (Arana, 2014; Strauss, 2013a). For example, in June of 2014 Governor Jindal of Louisiana wrote a letter to the Commissioner of the PAARC requesting immediate withdrawal of the PAARC from Louisiana because it "remove[s] Louisiana's control over its assessments, and thereby its curriculum and pedagogy. While PARCC has assured states that curriculum is a local matter, the reality is what is assessed is what is taught" (Jindal, 2014). Other right-wing opponents, such as Glenn Beck, feel the Common Core reflects "leftist indoctrination" and believe that it signifies "the progressive movement coming in for the kill" (Wilson, 2013). Other non-partisan critiques are also part of the national discourse about the Common Core, such as the critique that the Common Core is developmentally inappropriate, especially for young children, and as such has no place in schools (Miller & Carlsson-Paige, 2013; Strauss, 2014a).

Both opposition to and support of the standards span political camps and agendas, creating dynamic debate in the media on an almost daily basis. In the middle of these debates are the public school teachers and administrators charged with Common Core implementation. While the majority of classroom teachers seemed initially to approve of the Common Core and believe it would help them effectively prepare students for "college and career" (Hart Research Associates, 2013), more recent surveys have found that the Common Core is approved by less than half of classroom teachers, with a

growing percentage opposing the standards (Education Next, 2014; Hollingsworth, 2015; Saad, 2014).

This dissertation takes a close-up look at how and why educators in two middle schools made sense of the Common Core and the SBAC in order to deepen understanding of poll numbers like these. What do "approval" or "disapproval" mean at these two schools, and why? And what are the implications of these understandings for policy, practice, and research? These questions and many others are explored in this study.

Pilot Study

In the spring of 2014, I conducted a pilot study as a prelude to this dissertation that focused on the responses of school-based educators at Grove Middle School¹, an Expeditionary Learning middle school, to both the No Child Left Behind Act of 2001 and the Common Core, which was very new at that point. For the pilot study, I interviewed six veteran teachers and three administrators two times each at Grove, exploring their individual and collective perceptions of and responses to those two policies. I also conducted observations of staff development meetings, team meetings, and classrooms. In the pilot study, I identified organizational affiliation, school mission and values, and school leadership as three major factors that impacted how teachers at that school made sense of and responded to NCLB and the Common Core. I also found that educators' responses were shaped in part by the stance they took on both policy and schooling. By taking an "inquiry stance" (Cochran-Smith & Lytle, 2009), I found that educators were reflectively critical about policy, which enabled them to either neglect or comply with policy based on the policy's alignment with their own professional and school values.

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¹ The names of all schools, and all participants, are pseudonyms.

Educators at Grove Middle School did *not* substantially shift their curriculum and instructional practices in response to NCLB. However, they *did* shift curriculum and instructional practices in response to the Common Core. Drawing on a sensemaking framework (Spillane, Reiser, et al., 2002) coupled with the assumptions and ideas about practitioners underlying the notion of *inquiry as stance* (Cochran-Smith & Lytle, 2009), I theorized these reactions as the result of "principled neglect" and "principled compliance," terms I developed to describe responses to policy that reflected the alignment between the perceived values of the policy in question and the deeply held values of the educators responding to that policy.

I found that educators at Grove Middle School, supported by their principal, complied only with the technical requirements of NCLB law. That is, unlike educators at so many other schools, educators at Grove did not change their teaching practices by narrowing and fragmenting curriculum, implementing teacher-centered activities, or teaching to standardized tests in response to NCLB; instead, to a great extent, with the support of their principal, they ignored the policy based on their educational principles. Conversely, educators at Grove did implement many aspects of the Common Core because they perceived that the values inherent to the Common Core were aligned with their own professional values as well as with the stated values of the school.

This dissertation continued the line of research I began in the pilot study by looking at educators' sensemaking of and responses to the Common Core in two other middle schools: Rocky Coast Middle School, a charter school, and Mountain Top Middle School, a district public school. I chose these schools, which I describe in detail in Chapter Three, in part because they had different organizational structures (charter vs.

public) and guiding philosophies (Expeditionary Learning vs. non-Expeditionary Learning) from one another and from the study in the pilot. However, to my surprise, the two schools in this study had a number of striking similarities not only to each other but also to Grove. These similarities, including strong principals who actively supported teacher leadership and agency, shared school visions based on student-centered, real-world teaching and learning, and teachers who worked from an inquiry stance (Cochran-Smith & Lytle, 2009), outweighed the contrasts between the schools. Expectations of difference notwithstanding, the data from this study led me to deepen the analyses I began in the pilot study.

In this dissertation, I build two main arguments. First, I suggest that because the majority of educators at Rocky Coast and Mountain Top worked from an inquiry stance, they engaged in *principled sensemaking* of the Common Core. I define principled sensemaking as how educators critiqued, understood, and questioned the educational principles that they perceived were promoted or undermined by educational policies, and compare those perceived principles to their own professional principles. I further suggest that the educators in this study engaged in *principled implementation* of the Common Core and SBAC. Principled implementation is how educators take up, adopt, adapt, and/or reject educational policy in their curriculum and instruction based on their principled sensemaking and the degree of agency they had over implementation. I therefore argue that these two concepts—principled sensemaking and principled implementation—capture ways of understanding how educators who work from an inquiry stance understand and act on educational policy that can contribute valuable

improvement suggestions to policy development and implementation schemes, practice, and research.

In Chapter Two, I describe and unpack the two theoretical frames that guided this study: sensemaking theory (Spillane, Reiser, et al., 2002) and inquiry as stance (Cochran-Smith & Lytle, 2009). I then describe how the two frames were used together to guide data analysis. Following the discussion on framing, I give a brief history of standards-and accountability-based reforms in the United States to provide context for this current study. Then, using the lens of "research as social practice" (Cochran-Smith & Villegas, 2014, in press) I review three bodies of research and consider how research problems and questions were constructed, the assumptions that underlay those problems and questions, and where relevant, the positionality of the researchers. These three bodies of research are standards-based reforms, high-stakes testing, and the Common Core State Standards. Throughout the discussion, I examine trends in the findings of the studies and provide critique of the research.

Chapter Three provides detail about my research design. I first describe the reasons I chose to conduct a comparative case study and the scope of each case. Next I introduce the schools in this study and outline the demographics, location, and size of Rocky Coast and Mountain Top. Then, I describe the data—including interviews, observations, and school documents—I collected at each school. Finally, I discuss in detail how I analyzed the data from the study.

Chapters Four through Six present the major findings of this study. In Chapter Four, I give in-depth descriptions of the schools, their teams, and the educators involved, both to provide context for the analyses I offer in Chapters Five and Six, and to show

how most educators in this study took an inquiry stance on teaching, learning and schooling. Taking an inquiry stance enabled these educators to make sense of and respond to the CCSS based on their educational beliefs and values. I therefore used the inquiry as stance framework generatively in this chapter to describe the ways Rocky Coast and Mountain Top educators conceptualized knowledge, practice, communities, and the purposes of education—the four components of the inquiry as stance framework. This use of the inquiry of stance framework highlighted the values and beliefs of the educators in each school, providing the basis for the analysis in Chapters Five and Six.

In Chapter Five, I address the first major research question that guided this dissertation: "How did educators at two middle schools make sense of the Common Core and SBAC and what influenced their sensemaking?" In this chapter, I argue that the educators in this study understood the Common Core and the SBAC by engaging in what I called "principled sensemaking." Principled sensemaking, as described above, is a concept for understanding how educators who work from an inquiry stance make sense of educational policy based on their values and beliefs. Therefore in this chapter I argue that the educators at Rocky Coast and Mountain Top made sense of the Common Core and SBAC based on how they critiqued, understood, and questioned the educational principles that they perceived were promoted or undermined by these policies.

Building on the concept of principled sensemaking, Chapter Six shifts from educators' interpretations to their actions. To address the second major research question of this dissertation, which is "How did educators at two middle schools respond to the Common Core and SBAC, and why?", Chapter Six analyzes whether, how, and why the educators in both schools used, adopted, adapted, and/or rejected the Common Core and

the SBAC in their curricular, instructional, and assessment practices. I argue that two main factors drove educators' responses to these two initiatives: the perceived alignment between the policy and their principles, on the one hand, and the degree of agency educators had over implementation, on the other. Combinations of these two factors led to four different types of implementation, all of which were based on educators' principles. These four types were *principled adoption*, *principled resistance*, *principled compliance*, and *principled neglect*. Each type is described and analyzed in this chapter.

Finally, in Chapter Seven, I summarize major themes from this comparative case study, and offer contributions to and implications for policy, research, and practice. Specifically, I deepen and extend the principled sensemaking framework I proposed in Chapter Five as a potential contribution to and next step in research. I then explore the implications and contributions this work makes to the field of policy creation by looking at the role of school-based educators in the policy-making process. I also consider ways the principled responses framework could be used to improve understanding of educational policy implementation. Finally, I consider the implications of this study for practice by considering the role of school administrators in the implementation of standards-based reforms, and ways that professional development could be reimagined based on findings from this study. In conclusion, I propose that in research, policy, and practice, the profession must increase the attention paid to educators' voices and create opportunities for all members of the profession to work from an inquiry stance.

CHAPTER TWO

Sensemaking, Inquiry as Stance, and Educators' Perceptions of and Responses to Standards- and Accountability-Based Reforms

Two theoretical frameworks and a critique of previous literature informed this study about educators' sensemaking and implementation of the Common Core and the SBAC examination. In this chapter, I begin by reviewing the two frameworks that guided this research— sensemaking theory and inquiry as stance—and discuss how they worked together in this study to guide data analysis. I then conduct a review of the literature to identify previous research on standards- and accountability-based reforms and situate this current study as a needed next step in research on educators' sensemaking of standards- and accountability-based reforms.

Theoretical Frameworks: Sensemaking and Inquiry as Stance

For my pilot study, two theoretical frames, sensemaking and inquiry as stance, guided both the design of the study and the collection and analysis of data. These frames helped shed light on how Grove Middle School educators made sense of and responded to NCLB and the Common Core. By using both frameworks together, I was able to identify the *critical* ways educators analyzed the two policies. For this study, I also used both frames to analyze how educators at Rocky Coast and Mountain Top made sense and responded to the Common Core and SBAC.

Sensemaking Theory

Policy implementation at the school level has been the subject of much research and debate (Datnow & Park, 2009; McLaughlin, 1987). Datnow and Park (2009) suggest

that over the past fifty years, understanding of policy implementation has shifted from a technical-rational perspective, which assumes a linear and top-down path between policy and implementation, to a mutual-adaption perspective, which holds that local factors influence implementation. Datnow and Park (2009) suggest that more recently, "sensemaking" perspectives have emerged as helpful approaches for examining educational policy as it is enacted at the school level. From a sensemaking perspective, policy implementation is neither top-down nor bottom-up, but rather is based on an "open, multi-layered system" of individuals, contexts, and organizations (Datnow & Park, 2009, p. 349).

Sensemaking frameworks have been used in education to unpack and account for educators' understandings of and responses to policy (Spillane, 2004; Spillane, Reiser, et al., 2002). Sensemaking theory emerged from the field of organizational psychology, where it is used to examine how individuals develop shared awareness and understandings of their organizations (Weick, 2001; Weick, Sutcliffe, & Obstfeld, 2005). In the field of education, Spillane has suggested that sensemaking theory sheds light on how educators "figure out what a policy means and whether and how it applies to their school to decide whether and how to ignore, adapt, or adopt policy locally" (Spillane, Diamond, et al., 2002, p. 733). Looking closely at policy implementation at the classroom level, Palmer and Rangel (2011) draw on the work of many theorists to suggest that sensemaking theory is "the missing link [that] illuminat[es] the process by which teachers make sense of policy, either individually or socially, and then implement it in the classroom" (p. 618). In education, sensemaking theory is described as having three components: individual cognition, situated cognition, and the role of representation

(Spillane, Reiser, et al., 2002). Table 1 presents Spillane et al.'s three components of sensemaking.

Table 1
Spillane et al.'s (2002) Three Components of Sensemaking Theory

Spitiatic ci di. 5 (2002) Tirec Components of Schschauting Theory		
Individual Cognition	Situated Cognition	Role of Representation
An individual's	 Workplace structures 	A policy's
 Prior knowledge 	 Social networks 	 Purposes and principles
 Experiences 	 Professional affiliations 	 Rationale
 Beliefs 	• National/ethnic identity	 Language
• Values	 Social class 	 Context
Views of "salient cues"	 Religious affiliation 	 Consistency
 Human capital 	Political party	 Difference from
 Emotions 	 Social resources 	previous policy

Sensemaking theory's first component, individual cognition, includes an educator's prior knowledge and experiences as well as his or her beliefs and values. New information, including new policies, filter through existing understanding and beliefs.

Thus, the more familiar the sense-maker is with the new idea or information, the more likely it is to be embraced and acted upon (Spillane, Reiser, et al., 2002). In addition, people notice the similarities of surface features rather than deeper, structural differences between new and known information—what Weick (2001) calls "salient cues" used as confirming evidence (p. 462). As a result, sensemaking has been characterized as a conserving process in which sense-makers "preserve [their] existing mental scripts rather than radically overhaul them," meaning new policy that represents a significant deviation from current policy may be interpreted as less different than it actually is, resulting in smaller or fewer changes than the policy was designed to produce (Spillane, 2004, p. 78). Educators' related skills, knowledge, and expertise (referred to collectively as "human")

capital") impact the depth to which they understand and respond to policy (Spillane, 2004). In addition, feelings play a role in sense making. Spillane et al. (2002) posit, "accessing emotional associations can affect the judgments people make; for example, negative affects may lead to more pessimistic judgments" (p. 402). Therefore, from this perspective of sense making, analyses of educators' reactions to new policy and reform efforts have to consider the beliefs, values, emotions, and experiences of the educators themselves if deep understanding of and meaningful response to new policy is desired.

As Spillane, Reiser, and Reimer (2002) point out, people make sense in particular contexts, not in a vacuum. Here, however, context is "not simply a backdrop for the implementing agent's sensemaking but a constituting element in that process" (p. 389). Cognition is situated, which is the second component of sensemaking theory; it is a process that involves traditional conceptions of context, such as workplace structures, social networks, and professional affiliations, as well as macro level "thought communities" such as shared national or ethnic identities, religious affiliations, and political parties (Spillane, Reiser, et al., 2002, p. 404). Additionally, both present and historical contexts influence sensemaking. Spillane and colleagues emphasize that situated cognition is often mediated by "social resources" (p. 98), and Daly (2009) points out that access to strong professional networks as well as high levels of trust within schools impact the willingness of educators to grapple with new policies and reform efforts. Situated cognition, therefore, is a significant element of sensemaking and has a large impact on educators' perceptions of and responses to policy.

Finally, the third component of sensemaking theory, policy representation, involves the ways in which policy is written as well as how it is explained to individuals.

How policy makers represent policy "enable[s] or constrain[s] implementing agents' sensemaking" (Spillane et al, 2002, p. 416). Spillane and colleagues argue that communicating underlying purposes and principles as opposed to surface elements of policy is crucial for educators who are learning about and making sense of new policy, given the role of individual cognition in sensemaking and the tendency for new policy to be superficially compared to previous policy. For example, Spillane (2004) studied response to revised science standards that focused more on the practice of "doing" science and less on memorization, a shift that was misunderstood by some educators who believed they were already doing "hands-on" science (Spillane, 2004). The main point here is that how leaders, policy documents, and the media represent the rationale, language, context, consistency, and differences between new and previous policy all affect educators' reception of and response to new policy.

Sensemaking's theory's three components—individual cognition, situated cognition, and the role of representation—proved to be very useful concepts for interrogating and analyzing how teachers and administrators in both the pilot study and this dissertation study understood and responded to educational policy. However, this framework alone did not sufficiently account for either the ways participants critiqued these policies or the ways they conceptualized their own roles and agency as professional educators who were collectively engaged in teaching as an intellectual and political activity. To account for these aspects of response to policy, I also drew on the framework of *inquiry as stance* (Cochran-Smith & Lytle, 1999, 2009).

Inquiry as Stance

Inquiry as stance is not a policy analysis framework but a "grounded theory of action that positions the role of practitioners and practitioner knowledge as central to the goal of transforming teaching, learning, leading and schooling" (Cochran-Smith & Lytle, 2009, p. 119). Inquiry as stance describes teachers as reflective, critical practitioners who are professional and who are valuable knowledge generators as well as consumers.

Cochran-Smith and Lytle (2009) suggest that the concept of inquiry as stance has four dimensions: (1) *knowledge* that bridges local and global contexts; (2) *practice*, defined as the interplay of teaching and learning; (3) *inquiry communities*, conceptualized as catalysts for teacher learning; and (4) *democratic purposes and social justice ends*. Figure 1 is Cochran-Smith and Lytle's (2009) graphic representation of these four dimensions of inquiry as stance.

INQUIRY AS STANCE

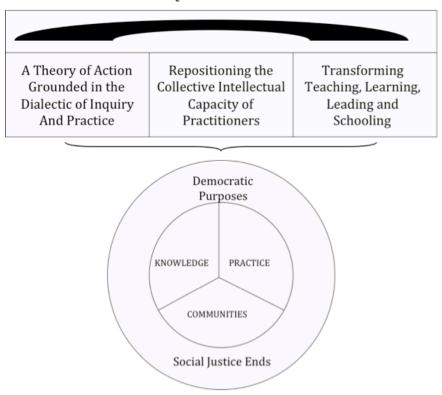


Figure 1. Cochran-Smith & Lytle's (2009) graphic representation of Inquiry as Stance

Inquiry as stance is built on the premise that educators are active participants in generating, not just consuming, knowledge based on their unique understandings of their teaching contexts and their unique perspectives as insiders. Accordingly, the traditional distinction between "practical" knowledge and "formal" knowledge is rejected and replaced with the understanding that teachers generate local knowledge *of* practice that is both relevant in their classrooms and is "inevitably a process of theorizing" (Cochran-Smith & Lytle, 2001, p. 48). Teachers who work from an inquiry stance on teaching and learning raise questions not just about how to teach, but also about what to teach, for whom, and for what purposes. Taking an inquiry stance, thus, means problematizing policies and practices that are often accepted as "normal" and also questioning "business

as usual." Cochran-Smith and Lytle suggest that these sorts of questions are not raised behind closed doors; rather they are interrogated within inquiry communities where teachers enact this theory of action. In short, inquiry as stance positions teachers as professionals, defined by Cochran-Smith and Lytle (2009) as educators with the abilities to collaboratively pose and solve problems, design and create curriculum, and continually reflect upon and improve their practice based on their unique knowledge about their schools, communities, and students within the wider milieu of educational research and policy.

Although several frameworks exist that help to develop and deepen the notion of teachers as professionals (eg Achinstein & Ogawa, 2006; Hargreaves & Fullan, 2012; Lieberman & Miller, 2004), I found that inquiry as stance worked particularly well as a complement to sensemaking theory because it accounted for educators' critical understandings of and responses to policy. Because inquiry as stance is a framework that holistically encapsulates educators' ideas about knowledge, practice, and the purposes of schooling, it was appropriate to apply the tenets of inquiry as stance to help unpack educators' views on policy. In addition, because educators in both the pilot and current studies did not respond to education policy in typical ways, and because of the collaborative structures in place in all three schools, inquiry as stance as a conceptualization of teacher professionalism offered a means to describe and explain the educators' sensemaking of and responses to educational policy in ways that were not possible through the use of sensemaking theory alone. Indeed, sensemaking has been described as focusing largely on interpretation of external policy, while "the processes of sensemaking [as they] play out in schools more generally have, in many respects, been

left underdeveloped" (Krumm & Holmstrom, 2011).

Because previous uses of sensemaking theory in general, and some of Spillane's (1999, 2002) research in particular, have tended to "assum[e] that all reform initiatives are worth implement[ing]" (Friedman, Galligan, Albano, & O'Connor, 2009, p. 252), they have left little room for the possibility that teachers' responses to policy may include questioning its validity and the quality of the policies themselves (e.g. Louis, Febey, & Schroeder, 2005; Märza & Kelchtermans, 2013; Spillane, 2004). Instead, with sensemaking theory, teachers who critique the policies in question have sometimes been described as "antagonist[ic]" in their attempts to "resist" and "undermine district policy" (Spillane, Diamond, et al., 2002, p. 759) and/or as lacking the "willingness and propensity to change" (Louis et al., 2005 p. 198). The idea that teachers might problematize the purposes and values of policies in the first place, rather than simply misunderstand them, has not been a salient feature of current research that employs sensemaking theory, although Spillane, Reiser and Reimer's (2002) original development of sensemaking theory in education did caution that not all policy should be viewed as "right" (p. 389).

Another limitation of sensemaking theory as used in previous research is the deficit approach researchers use when considering the role of individual cognition in sensemaking. Individual cognition is framed as either right or wrong—that either educators have enough of the "right" cognition to understand policy, or they need more training. For example, based on their study of teachers' responses to accountability measures in three states, Louis, Febey, and Schroeder (2005) speculated that only through additional explanation of policy, which would lead to more individual understanding of

the policy, (and therefore more of the "right" sensemaking), would teachers become willing and able to change and begin to "accep[t] external standards and policies" (p. 201). In studies like these, teachers are treated as deficient. Other researchers have noted "the centrality of identity construction to sensemaking processes," and found that while traditional sensemaking theory is based on multiple components, the role of the individual needs further evaluation (Helms Mills, Thurlow, & Mills, 2010, p. 188).

In the pilot study, using the notion of inquiry as stance as a complement to sensemaking theory substantially enriched the image of teachers as those who engage in reflection and critique. The combination of sensemaking with ideas related to the notion of inquiry as stance served as a new lens through which to understand educators' responses to policy, allowing for analysis of educators' critical reflections about policy (and many other aspects of schooling) as positive, professional practices. In this current study, the use of both sensemaking theory and inquiry as stance also ensured that educators' perspectives were viewed from an asset-based viewpoint.

Integrating ideas from the notion of inquiry as stance is not the only way to account for the possibility of educators' critiques of policy when employing sensemaking theory. Others have combined sensemaking theory with various additional theoretical frames. For example, Coburn (2006) combined sensemaking with frame analysis, and Palmer and Rangel (2011) documented the influences of classroom context and knowledge of students on teachers' sensemaking. For both the pilot and dissertation study, the integration of concepts derived from inquiry as stance with sensemaking theory was intended to develop, deepen and clarify the particular *critical* ways that educators made sense of NCLB, the Common Core, and/or the SBAC. The two frameworks can be

seen, therefore, as complementary. Sensemaking focused analysis on the educators' perceptions of educational policy, and inquiry as stance enriched that analysis by accounting for educators' principled critique of policy. Individually, neither lens provided enough guidance for understanding educators' responses to educational policy, but together, they allowed deep and nuanced understandings to emerge. Indeed, using both frames led to the development of a modified version of sensemaking I called "principled sensemaking," and discuss in depth in Chapter Five.

Review of the Literature

This study about educators' sensemaking of the Common Core and the SBAC builds on previous conceptual and empirical research about standards and standards-based reform, educator sensemaking of standards, educator sensemaking of high-stakes assessment, and the growing body of research about the Common Core. In this review of literature, I consider the questions, "What does previous research say about how educators perceive and respond to standards-based reform and high-stakes assessment?" and "What does previous research say about the Common Core State Standards?" Figure 2 is a graphic representation of the outline of this literature review.

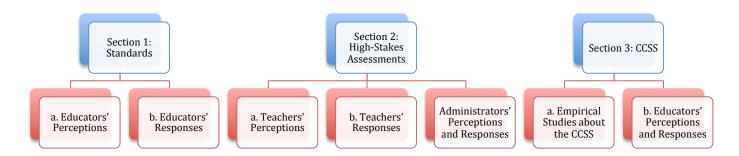


Figure 2. Literature review outline. This figure illustrates the sections of the literature review.

Sections One and Two, about standards-based reforms and high-stakes assessments respectively, begin with an overview of the research that has been conducted about these two topics overall. The overviews situate the main focus of this review—educators' perceptions of and responses to these reforms—within the wider field of educational research. Following these two sections of the review, I then address research about the Common Core in Section Three. Because the Common Core is a relatively new initiative, the body of research about the Common Core is somewhat smaller than the bodies of research addressed in the first two sections of this review. However, I bring a similar approach to this section of the review in that I first convey a broad picture of the field of research that takes up the Common Core, focusing on the empirical research that has been published in peer-reviewed journals. I then focus more specifically on research that investigates educators' perceptions of and responses to the Common Core.

A note about perceptions: In this study, I focused specifically on a particular way of understanding educators' perceptions about standards and high-stakes assessments, the way that educators *made sense of* standards and high-stakes assessments. Sensemaking, as it was used in this study and as I reviewed above, has been used in previous research about standards and assessments, but most of the research about educators' perceptions of these topics does not employ a sensemaking framework. Therefore, I conducted a wider search than just sensemaking to capture the phenomenon I studied. Using search terms such as "views," "perceptions," "beliefs," and "opinions," I attempted to capture all of the research that asked teachers and administrators what they thought about standards and high-stakes assessments. Similarly, this study investigated what educators thought their responses were to the Common Core, and accordingly I reviewed studies about what

educators *said* their responses to standards and high-stakes assessment were, not what researchers observed educators' responses to be. I grouped these studies together as educators' "responses" to standards and high-stakes assessments, instead of the more commonly used terms "practices." I did not research the participating educators' practices; rather, I researched what they reported their responses were to the Common Core and the SBAC.

Research as Social Practice

Reflecting the ideas of many educational policy researchers, Coburn (2006) states, "Policy problems do not exist as social fact awaiting discovery. Rather, these problems are socially constructed as policymakers and constituents identify and interpret some aspect of the social world as problematic" (p. 343). So too is research. Research studies are constructed by their authors: the "problem" is defined, the questions are asked, and the data is collected according to the socially constructed traditions, practices, beliefs, and perspectives of the researchers. Accordingly, this literature review borrows ideas from the "research as historically-situated social practice" framework developed by Cochran-Smith and Villegas (2013, 2014), which they originally developed to examine research on teacher preparation. According to this framework, scholarship intended to produce knowledge both shapes and is shaped by larger social, economic and political forces (Mannheim, [1936]1949). Cochran-Smith and Villegas (2013, 2014) maintain that history, politics, and competing assumptions about education and society must be taken into account when analyzing and reviewing research. Similar to research on teacher preparation, the fields of educational policy and reform are no strangers to political motivation, power, and widely varied assumptions about the role of education in society.

In this review, I focus on the "social practices" aspect of this framework, which asserts that "the interests, commitments, and social experiences of researchers—and not simply their epistemological or methodological perspectives (i.e., their research paradigms)—guide the research questions they pursue and the frameworks they adopt (Herndl & Nahrwold, 2000)" (Cochran-Smith & Villegas, 2014, p.5). Therefore, in this review I consider how research problems and questions are constructed, the assumptions that underlie those problems and questions, and where relevant, the positionality of the researchers. Finally, as with more traditional reviews of the literature, trends in the findings of the studies as well as critique of the research are also provided throughout the sections.

Locating the Research

The majority of the empirical research included in this review was limited to research conducted in the United States, although I did occasionally draw on international literature, specifically about sensemaking, when the literature deepened understanding of educators' perceptions of standards and/or high-stakes assessments. These studies were identified by conducting ERC database searches of key terms, as described above, and by following the "web of citations" in the literature identified through the database searches. All literature identified was published in peer-reviewed journals between 1983 and 2016. 1983 was chosen as a starting date as many agree that the modern standards movement began with the publication of A Nation at Risk (Liebtag, 2013; Orfield & Walo, 2000).

Section One begins with an overview of the research published about standards and standards-based reform in the United States based on a RAND report published in 2008 that reviewed literature about standards-based reforms (Hamilton, Stecher, & Yuan,

2008). I then focus on research that reports specifically on teachers' and administrators' perceptions of and responses to standards and standards-based reform. Section Two follows a similar format, but focuses on high-stakes assessment, of which the overview is based on four metasyntheses of the effects of high-stakes assessment on different aspects or recipients of schooling, including curriculum and instruction (Au, 2007), English Language Leaners (Solórzano, 2008), and student achievement (Lee, 2008; Phelps, 2012). Finally, Section Three describes the research published about the Common Core, with a particular focus on the varying ways the Common Core is represented in the literature, then shifts to examine research about educators' perceptions of and responses to the Common Core.

Section One: Standards and Standards-Based Reform

As discussed in Chapter One, although the concept of aligning instruction to academic standards dates back to the early 1900s, the current standards-based reform movement in the United States gained serious traction in the mid 1980's with the publication of *A Nation at Risk* (National Commission on Excellence in Education, 1983). A recent review of the research about the modern standards movement identified three major research foci: research about the quality of standards, research about the links between standards and instruction, and research about the links between standards and student achievement (Hamilton et al., 2008, p. 36). These three bodies of research evolved along with the standards movement: originally, most of the research was focused on the content of state and disciplinary standards, and over time, the research changed to reflect the effects of the standards on classrooms and students. Although it is beyond the

scope of this review to examine all aspects of this enormous body of research, overall findings for each area of research are described briefly below.

Based on their research, Hamilton et al. (2008) found very little agreement in the literature about what constitutes "quality" standards. They suggest that the "disagreements among researchers who have evaluated standards reflect much broader disagreements over what constitutes high-quality instruction and curriculum" (Hamilton et al., 2008, p. 38). Illustrative of this perspective is an early analysis of the National Council of Teachers of Mathematics standards (Hiebert, 1999). Hiebert (1999) posited that research cannot be expected to prove a "best course" of action with regards to standards, because "decisions about curriculum and pedagogy are always tentative, made with some level of confidence, a level that changes over time with new information and changing conditions" (p. 7). Despite the constantly changing nature of curriculum and pedagogy, and disagreement about what comprises "good" standards, Hiebert (1999) found that the NCTM standards demanded higher-order thinking skills than had traditionally been taught in American math classrooms, and that these standards could be met with reformed teaching practices. Teaching practice as a result of the standards was the second focus in Hamilton et al's (2008) review of research on standards.

Regarding the links between standards and instruction, Hamilton et al (2008) found the majority of this body of research focused on the effects of high-stakes assessment as a component of standards-based reform. The other components of standards-based reform, including alignment of curriculum to the standards, professional development or other learning experiences for educators concerning the standards, and accountability provisions, received much less attention. As I discuss in the second section

of this literature review, assessments that are tied to standards have driven instruction in negative ways such as narrowing and fragmenting instruction and increasingly teacher-centered, as opposed to student-centered, pedagogy (Au, 2007; Booher-Jennings, 2005). Research about the other aspects of standards-based reform aside from assessment indicated that standards have

Led to some beneficial changes in school practices at both the organizational and classroom levels, but [they have] also led to responses that are less clearly desirable, and [standards-based reform] has not always produced the kinds of instructional improvement that advocates hoped for. (Hamilton et al., 2008, p. 42)

These "improvements" refer specifically to student achievement outcomes, the third and final body of research about standards identified by Hamilton et al (2008).

In their analysis of the third and final body of research about standards-based reform—student achievement outcomes— Hamilton et al. (2008) hypothesized that comparing research about standards and student achievement was a "challenge" because "the variation in state standards and accountability tests makes it difficult to compare achievement gains across states" (p. 42). Additionally, different states are implementing multiple reforms at the same time, making it difficult to draw causal links between standards-based reforms and achievement. Hamilton et al. (2008) also cautioned against using test scores as a measure of student learning, not only because the scores represent only a sample of many possible questions, but also because teaching to the test can cause "score inflation" (p. 43). Indeed, they found research has consistently demonstrated higher gains on high-stakes state achievement measures than on low-stakes measures

such as the NAEP. However, they also found that research has demonstrated overall gains in achievement on both high stakes and low stakes measures, indicating that standards-based reforms could be having an impact on student achievement, although it "is impossible to determine whether they are due specifically to SBR" (Hamilton et al., 2008, p. 44). Finally, they found no evidence in the research that the gains since the passage of NCLB were greater than those prior to NCLB.

Hamilton et al.'s (2008) review of the research on standards and standards-based reform demonstrated there is a significant body of research documenting standards-based reforms' effects on students, instruction, and student achievement. I now focus on a narrow slice of that research that is directly relevant to this study: research that investigates educators' stated perceptions of and responses to standards.

Educators' perceptions of standards. This section examines the empirical research about educators' perceptions, views, and sensemaking of standards, focusing on the ways researchers constructed their research problems as well as the implicit and explicit assumptions about standards-based reform present in their research. Fourteen studies in this review focused on educators' perceptions of standards, with the majority (11) focused on teachers. Each study focused on a particular set of standards, either content standards such as the National Council for the Teachers of Mathematics (NCTM) standards or a set of state standards. The vast majority of the studies used interviews and observations as data collection methods, while only three used surveys. Most of the studies described the importance of investigating teacher perceptions similarly to Donnelly & Sadler (2009), who stated, "Teachers' views of the standards are important because they, along with other factors, influence teacher practices" (p. 1055). This

connection between beliefs and practices is well established in the literature (Futch & Stephens Jr., 1997). Despite similar constructions of the research purpose (We need to know what educators think because their beliefs affect their teaching practices.), the studies varied in the ways that authors posed their research questions. Some questions implied an assumption that the standards in question were a positive phenomenon, while other questions raised the possibility that the standards themselves were not necessarily constructive for teaching and learning. I describe this prior category—studies that assumed the standards were positive—first.

Studies that assumed that the standards in question were positive asked questions about whether or not teachers agreed with the beliefs underlying the standards themselves (Chen, 2006; Floyd & Rice, 2009; Futch & Stephens Jr., 1997; Maccini & Gagnon, 2002). Three out of four of these studies were about the NCTM standards, and all three used survey methodology to collect data. None used a sensemaking framework. These studies located their research problems in the capacity of a set of standards to influence the beliefs of teachers, asserting that "inappropriate teaching practices are linked to inadequate teacher beliefs about mathematics, and teachers' adherence to a particular set of beliefs may set limits on mathematical learning by students" (Futch & Stephens Jr., 1997, p. 242). Similarly, Floyd and Rice (2009) posited "Research literature supports the use and efficacy of the NCTM Standards in general education settings," prompting them to survey special education teachers about their beliefs regarding the standards, under the assumption that the standards "should foster and focus on student thinking and reasoning with opportunities for invention and practice" (p. 73). Asking questions about whether teachers agreed with the standards precluded teacher reflection on whether or not the

standards were a positive tool to improve teaching and learning, and focused attention instead on teacher compliance and alignment with the standards in question.

Two of these studies compared teachers' self-reports of understanding of the standards with those teachers' attitudes towards the standards. In a study based on 25 interviews and 78 observations of physical education teachers, Chen (2006) found that "a majority of the teachers with a deep understanding of and familiarity with the standards tended to have positive attitudes toward the standards" (p 136). Chen found these teachers' attitudes and knowledge were influenced by the degree of personal commitment teachers showed toward learning about the standards, as demonstrated by the reading they did about the standards and their attendance at conferences and workshops. Similarly, the survey responses of the 129 teachers in Maccini and Gagnon's (2002) study that compared special educator and general educator beliefs about the NCTM standards found "teacher confidence in the ability to teach math relative to the goals of their NCTM Standards was strongly correlated with familiarity of the goals (r=.74) (p. 335). The two other studies in this subgroup found that teachers generally "agreed with the standards" (Floyd & Rice, 2009, p. 77) in the sense that they supported the practices promoted by the NCTM standards, including problem solving, collaborative work, and students justifying their thinking. A few teachers expressed disagreement with the standards as well; for example, some teachers in Futch and Stephens' (1997) study disagreed with the use of calculators suggested by NCTM, and some of the special educators in Floyd and Rice's (2009) study disagreed that the emphasis on higher order thinking skills was an advantage. Overall, though, while these studies investigated teachers' perceptions of standards, they did so from the particular vantage point that the

standards themselves are "correct," and as a result, measured teachers' perceptions in relation to their agreement with the standards. They did not take up teachers' analysis of the standards based on their educational principles. This practice stands in contrast to the other studies in this section of the review, which invited educators' reflections on the standards themselves, albeit with varying degrees of critique.

Six studies examined teachers' beliefs about the standards without making assumptions about whether the standards were "correct." These six studies examined a wide range of standards, including Wisconsin's Standards for Reading (Cawthon, 2004), various state science standards (Donnelly & Sadler, 2009), foreign language standards (Cisar, 2005), and state standards or accountability initiatives in general (Kauffman, Johnson, Kardos, Liu, & Peske, 2002; Louis et al., 2005; Nadelson et al., 2012). Two of the studies employed surveys, while the other four were based on interviews, some as part of specific-site case studies and others across multiple sites. In these studies, the research questions asked how teachers perceived, characterized, or "grappled" with standards (Donnelly & Sadler, 2009 p. 1055). Although only one study formally used a sensemaking framework (Louis et al., 2005), most of the studies included interview or survey questions that helped explain why and how the teachers in the studies were making sense of the standards in question.

With the exception of one study in this group, there were mixed perceptions of standards in these studies. The 22 secondary science teachers in Donnelly and Sadler's (2009) study described both positive and negative aspects of the standards. Similarly, Cawthon's (2004) survey of 36 teachers of deaf and hearing students demonstrated that most teachers believed the state's reading standards were too prescriptive, although most

of the deaf-only teachers were in support of the standards "because they provide[d] an opportunity for deaf and hearing students to gain educational equity" (p. 432). Perhaps because of their collaboration, the three French teachers in Cisar's (2005) case study of collaborative teacher research were all very supportive of their state's foreign language standards.

Numerous studies identified connections teachers made between their professionalism and/or autonomy and standards-based reform mandates. Similar to teachers' perceptions of the standards, these connections were mixed. For example, teachers in Nadelson et al's (2012) study of the effect of standards-based reform in a metropolitan area in the northwest United States stated that the reforms were having a negative effect on their autonomy and creativity, but a positive impact on their effectiveness in the classroom. Similarly, teachers at Angiers High School in Louis et al.'s (2005) study believed there was "no need for state standards [and] this was based on the almost unanimous assumption that local control and teachers' own professionalism were best suited to providing Angeirs's students with a high-quality education" (p. 183). However, teachers at another school in this study, West Patterson High School, "supported state standards because they believed that they promoted better teaching" (p. 186). These mixed perceptions aligned with how the teachers reported their district leaders interpreted the reform policies, leading Louis et al (2005) to conclude that the ways that teachers made sense of standards-based reform depended largely on district approaches to reform. Similarly, the teachers in Kauffman et al.'s (2002) investigation of first and second year teachers in Massachusetts found the state standards to be too broad, although the teachers' primary concern was a lack of curriculum provided to help

students meet the standards. These teachers felt anxious and overwhelmed by the enormity of standards-based teaching, because tangible materials were not provided to use in the classroom. Although Kauffman et al. (2002) voiced support for teacher autonomy and urged resistance to "calls for formulaic specification of teaching practice," they also "reject[ed] the premise that new teachers should start with little or nothing to guide them, particularly given the current context of standards and accountability" (p. 293). It is clear from these studies that teacher professionalism, autonomy, creativity, and job satisfaction as they were impacted by standards-based reform varied widely based on length of teaching service, context, expectations, and leadership.

Finally, three studies in this group of studies that examined educators' perceptions of standards looked at *school leaders* perceptions of standards. Interestingly, two of these three studies specifically examined rural principals' views of standards, citing the potential mismatch between the needs of rural communities and the standardization approach that may mask important differences between rural and urban areas (Budge, 2010; Howley, Larson, Andrianaivo, Rhodes, & Howley, 2007). These two studies were similar to the second group of studies about teachers' beliefs in that they asked questions about school leaders' perceptions of standards without the assumption that the standards were "correct." Budge (2010) found that while teacher leaders in her study supported standards-based reform, rural school leaders were generally opposed to it. Budge (2010) stated,

As an administrator, Charley's comment is illustrative. '(K)ids are in different places and it [standards-based reform] doesn't take into account where kids are. So, I tend to be more in favor of a continuous progress

approach, but that's not what we're dealing with now-a-days.' On the other hand, he spoke of "people finally getting on board.' (Budge, 2010, p.

6)

Budge (2010) argued that both standards-based reforms and rural place sensibilities are important to "ensure that schooling supports individual student success and the needs of rural communities" (p. 1). In their study based on interviews with 20 principals from rural Ohio schools, Howley et al (2007) found similarly conflicted responses among principals. While the principals in their study did not question the reforms required by the math standards in Ohio, they also did not fully embrace the reforms despite supporting their implementation. Rural identities, from these studies, appear to shape to some degree how administrators unpacked and analyzed standards-based reforms.

The third study that addressed administrator's beliefs about standards was written by an administrator who had been involved with the writing of the College, Career, and Civic Life (C3) standards for the Social Studies State Standards (National Council of the Social Studies, 2013). Not surprisingly, Long (2013) supported the C3 Standards, citing many examples from his school where the standards shifted instruction from teacher-centered to student-centered and positioned students as producers of knowledge instead of recipients of it. As a sort of self-study, this article adds to the evidence base of support for standards, but must be understood as almost promotional material given the role of the author in the standards' creation.

What do these three groups of studies that investigate educators' beliefs about standards—studies that questioned whether teachers agreed with standards, studies that questioned what teachers thought about standards, and studies that questioned what

administrators thought about standards—tell us in relation to the current study? First, taken holistically, these studies reported mixed perceptions about the various standards under question. Some educators fully supported standards and felt they would lead to improved teaching and learning, while others questioned their role in their schools and classrooms. According to the literature reviewed here, these perceptions were based on leadership, professional development (and knowledge of the standards), school context (including student demographics and school location), and teacher experience, all of which were taken up in the current study. Second, the current study did not presume that the Common Core was "correct," and is therefore quite different from the first group of studies that investigated whether or not teachers agreed with the standards in question. Third and finally, the remainder of studies in this section of the review, although they did not assume the standards in question were "correct," largely did not invite particularly critical, nuanced reflection on the standards, but rather more generally considered teachers perceptions of whether they believed standards were positive or negative. In this current study, I attempted to illicit educators critical reflections on the Common Core and SBAC, which guided and shaped the analysis of the data I collected and analyzed through the lenses of sensemaking and inquiry as stance.

Educators' responses to standards. The previous group of studies took up educators' perceptions of standards. This next section reviews studies about how educators reported they *responded* to standards. As I clarified in the introduction to this chapter, this study investigated "responses" to policy as reported by the educators, not as measured by external researchers. Of course, self-report has limitations, such as inaccurate memories and reporting (Paulhus & Vazire, 2007). However, these limitations

are outweighed by the necessity of capturing educators' perceptions of their own actions—one purpose of this dissertation—and because it is educators' voices that are largely missing from the research on standards-based education.

Nine studies are included in this section of the review. Three of these studies (Coburn, 2006; Desimone, 2013; Loeb, Knapp, & Elfers, 2008) also investigated teachers' responses to high-stakes assessments, and thus will be considered both in this section of the review and the next. Additionally, several studies in this subgroup investigated teachers' responses to standards-based curriculum. Such studies were only included for review if they explicitly made the link between the curriculum and the standards, thus putting the focus on the standards. One study used survey data as the sole data source (Loeb et al., 2008), one study used survey data in addition to interview data (Harris, 2012), and the remaining seven studies used case study methodology that included combinations of interviews and observations. The research designs were strikingly similar in design, with four of the seven case studies focusing on either three or four teachers.

Interestingly, all of these studies addressed issues of educational equity in one way or another. In reviewing these studies as a group, a spectrum of perspectives on the role of standards in creating educational equity became evident. On one end of the spectrum was one researcher who implied that standards and/or standards-based curriculum represented an equitable and ethical way to reach diverse students, and on the other was a practitioner researcher who stated that standards and/or standards-based curriculum were "scripted" and a "slap in the face . . . [they] deliver the message that educators cannot be trusted to provide their students with rigorous instruction suitable to

the needs of the students" (Eisenbach, 2012 p. 154). These two different views of equity—access to the same standards vs. access to individualized instruction to meet differing needs—reflect some of the debates in the field about standards and standardization (Desimone, 2013). In between these two views were researchers who presented standards and standards-based curriculum as a possible way to close achievement gaps, a lever whose potential was not yet decided because of a lack of research on the issue. These researchers positioned the studies as adding to the conversation about the role of standards in promoting equity (Desimone, 2013; Obara & Sloan, 2010) without taking a firm stand on either side. Figure 3 represents this spectrum of perspectives.

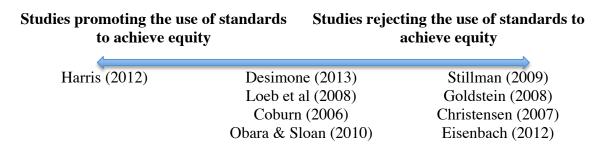


Figure 3. Equity perspectives in studies about educators' responses to standards-based reforms.

I discuss this group of studies as they are positioned along this continuum, beginning with Harris (2012) and ending with Eisenbach (2012).

Working from the perspective that America's Choice—a comprehensive, standards-based school reform model that includes doing away with ability grouping—would promote equity if implemented correctly and in the same manner to all students, Harris (2012) surveyed and interviewed middle school teachers in schools implementing

America's Choice. Harris (2012) found that the program was not in fact being implemented in the way its authors intended. Instead of teaching students to the same standards, teachers lowered standards in response to their perceptions of students' abilities, a fact she attributed to the "deficit beliefs" of the teachers she interviewed (Harris, 2012, p. 130). This framing of the problem—teacher beliefs are the reason that students are not succeeding in school—stands in contrast to the rest of the studies included in this review; however, this should not indicate this study represents a minority perspective in the field. To the contrary, some argue the entire standards-based reform movement is based in large part on the assertion that schools have failed because of the inadequacies of teachers (Kumashiro, 2012). However, this perspective is not well-represented in this subset of literature that investigates teachers' responses to standards.

Four studies about educator responses to standards acknowledged the debate about the role of standards in achieving educational equity without "taking sides" (Coburn, 2006; Desimone, 2013; Loeb et al., 2008; Obara & Sloan, 2010). Desimone (2013) asked: "How do state and district administrators, principals, and teachers describe their responses to standards-based reform, in terms of beliefs, understanding, and attitudes, as well as behavior?" (p. 1). Using interview data from 2000, Desimone concluded that the educators in her study paid more attention to struggling learners, taught to the test, took responsibility for student learning, and changed classroom content and pedagogy to reflect the standards. In a case study of three sixth-grade teachers and their math coach, Obara and Sloan (2010) reported that although teachers stated their curriculum had changed in response to state-level standards, the actual changes to their practice (according to their math coach) were somewhat minimal, perhaps reflecting what

Spillane, Reimer and Reiser (2002) describe as an overreliance on "superficial similarities" between new and old practices, instead of recognizing deeper differences in principles (p. 396). Similarly, as I described in the theoretical framework of this study, Coburn (2006) used sensemaking and frame analysis to analyze one school's response to the California Reading Initiative, and found that educator responses were largely motivated by "how teachers and principals constructed their understanding of the relevant problem to be solved" (p. 344).

Finally, based on a critique of the assumptions embedded in Washington state's standards-based reforms combined with survey data, Loeb et al (2008) found that while teachers "report[ed] adjusting instruction to meet standards" (p. 3) and that they saw standards as relevant, they also saw "problems with the inherent logic of the state's reform regarding how well it serves a diverse population" (p. 2). These four studies represent a middle ground between Harris (2012), who, based on her research, advocated using standards to promote equity, and the authors of the remaining four studies, who either questioned or decidedly opposed the use of standards to improve equity.

Stillman (2009) provided an interesting case study of three teachers whose teacher education took place in "equity-minded" preparation programs that focused on social justice, yet were teaching in an elementary school that required the use of Houghton Mifflin's "Reading California" program, a state-approved, standards-based English/Language curriculum for elementary school. These three teachers had mixed views about the actual standards addressed in the program, yet overall felt the standards were a "useful technical tool" to guide their instruction (Stillman, 2009, p. 5). Teachers viewed Reading California, however, as "pedagogically shallow" (Stillman, 2009, p. 6).

According to Stillman (2009), "the teachers avoided condemning the standards per se, and instead disapproved of the systemic use of them, which they argued standardized the language arts curriculum," limiting their ability to reach students on an individual, personalized basis (p. 6). In response to the standards and Reading California, the teachers "took back the standards" by selecting what they viewed as the most important standards to teach and modifying the Reading California lesson plans so that they were more student-centered (Stillman, 2009, p. 6). These responses demonstrate teachers exercising autonomy and manipulating the required curriculum while still teaching for social justice.

Similarly, the four kindergarten teachers in Goldstein's (2008) study did not "voice concerns about the specific content" in the kindergarten state standards, agreeing the "skills and knowledge... were age appropriate for typically developing 5-year-olds" (p. 458). However, the teachers believed "instructional planning guides" developed by the school district were not developmentally appropriate, and as such, modified or ignored the guides. Goldstein (2008) argued these responses to standards-based curriculum were driven by their "professional beliefs, preferences, and strategic knowledge base" (p. 448). She linked these response choices to teachers' understanding of developmentally appropriate practices for kindergarteners, which teachers considered part of their own "professional expertise" (Goldstein, 2008, p. 471). Both Stillman (2009) and Goldstein (2008) stressed the role that professional autonomy and choice played in the way that teachers responded to standards and standards-based curriculum.

Finally, at the far right end of the spectrum, were two studies written by classroom teachers (Christensen 2007; Eisenbach, 2012). Neither minced words in their

descriptions of the damage done by standardizing curriculum in the name of "equity." Christensen is a well-known advocate for student-centered, equity-based English/Language Arts curriculum. She presented the case of the Portland, Oregon school district attempting to require standardized "anchor" assessments for all students, and argued that the "majority of reforms . . . equate "equity" with standardization" (p. 145). She claimed, "As teachers, we need to decode the rhetoric and talk back to school districts that speak of equity and social justice but treat us like robotic hands that deliver education programs designed and shipped from sites outside of our classrooms" (Christensen, 2007, p. 146). Similarly, Eisenbach (2012), an 8th grade English/Language Arts teacher in Florida, interviewed three teachers, whom she analyzed as "the accommodator" (who implemented scripted curriculum in spite of her professional disapproval of the curriculum), "the negotiator" (who adapted and modified the scripted curriculum in line with her teaching ideologies), and "the rebel" (who stated, "I simply don't do the scripted curriculum")" (p. 155). Eisenbach (2012) concluded,

Ultimately, we must remember that, as educators, we are held to a higher moral and ethical standard than most. It is our obligation to meet the needs of every child who passes through our classroom door. We are professionals who must make responsible decisions in an uncertain environment. (p. 156)

She urged fellow educators to consider these responsibilities as they weigh other considerations, such as contracts and district mandates.

How do these nine studies about how educators responded to standards relate to the current study? Looking at this research through the lens of social practice, we see that the assumptions embedded in the studies in this section, both implicit and explicit, center on issues of equity as it relates to standards. Educators were in disagreement about whether standards promote equity by raising the bar for all students, or whether they decrease equity by requiring the same curriculum and instruction for all students, regardless of student need. Although these educators were generally in support of standards—with those who are more familiar with standards having stronger support than those who are less familiar with them—there was still some hesitation about what role they should play in the education of students. This hesitation is more easily understood when viewed in concert with educators' perceptions of and responses to standards' "evil twin," high-stakes assessment (Thompson, 2001), the focus of Part Two of this review.

Section Two: Educators' Perceptions of and Responses to High-Stakes Assessment

Characterizations of high-stakes assessments range from measurements that "help ensure greater educational equity and improve instruction and learning in today's global world" (Stanford, 2014) to what Thompson (2001) called "the evil twin" of standards-based reform in order to emphasize the differences he saw between learning standards (which he considered to be positive) and high-stakes assessments (which he considered to be negative). Although high-stakes assessments have permeated the American educational system at least since NCLB and Race to the Top (although with deeper roots), most evidence does not demonstrate that these assessments are helping to improve student learning, which is their stated intention (Ratner, 2015; Simon, 2013). For example, after the most recent round of PISA testing, which demonstrated that American students' average scores have not changed in the past decade, Education Secretary Arne Duncan called U.S. performance "a picture of educational stagnation" (Simon, 2013).

Even for schools that have successfully increased test scores, improved scores and student learning are not necessarily related. For example, researchers from Harvard University, the Massachusetts Institute of Technology, and Brown University, in a recent study of 1,400 eighth graders in Boston, Massachusetts, found that

Some schools have successfully raised their students' scores on the Massachusetts Comprehensive Assessment System (MCAS). However, those schools had almost no effect on students' performance on tests of fluid intelligence skills, such as working memory capacity, speed of information processing, and ability to solve abstract problems. (Trafton, 2013)

The implication here is that schools that focus primarily on test-taking skills may be doing so at the expense of other desirable learning habits and skills.

Multiple large-scale reviews of the literature have documented numerous trends in the effects of high-stakes assessment. For example, Au (2007) conducted a metasynthesis of 49 empirical, qualitative studies published before 2006 that examined the effects of high-stakes testing on curriculum and pedagogy. Au (2007) coded the evidence presented in the studies for three aspects of curricular change (subject mater content alignment, form of knowledge, and pedagogic change). Each aspect of curricular change was then coded for the direction of the change: for example, subject matter content alignment either contracted or expanded, and pedagogy could change to be more teacher-centered or student-centered. He also included studies that demonstrated no changes in these three aspects of curricular change. Au (2007) determined that the evidence

Strongly suggests that as teachers negotiate high-stakes testing educational environments, the tests have the predominant effect of narrowing curricular content to those subjects included in the tests, resulting in the increased fragmentation of knowledge forms into bits and pieces learned for the sake of the tests themselves, and compelling teachers to use more lecture-based, teacher-centered pedagogies. (p. 264)

Au (2007) did point out, however, that some notable exceptions existed in which "high-stakes tests have led to increases in student-centered pedagogy and increases in content knowledge integration" (p. 264). These few exceptions were found in studies in which teachers believed the tests were "well designed and [did] not promote drill and rote memorization" (Au, 2007, p. 264). Au suggested that the large effects of high-stakes testing, either positive or negative, demonstrated the significant amount of control that these assessments exerted over curriculum and instruction, a finding that is evident in the vast majority of the studies I review in the second portion of this section.

It is important to understand Au's (2007) research within the context of his positionality as an outspoken critic of standardized testing and accountability reforms (Au, 2010). In fact, researcher positionality is especially significant for understanding the research in this section because positionality varied widely, unlike the researchers' positionalities in the previous section. To a certain degree, researcher positionality in general has been found to correlate with study approaches, questions, and findings, in that one's approach to research is shaped by one's field of study; economists and political scientists, for example, frame research quite differently from teacher educators (Cochran-

Smith et al., in press). As I discuss at the conclusion of this overview, research as social practice is an especially helpful tool for unpacking the reviews of research I present here.

Another large-scale review of the literature investigated the specific effects of high-stakes standardized testing on English Language Learners (ELLs) (Solórzano, 2008). Based on a review of 32 empirical studies as well as numerous other policy documents, conceptual pieces, and media reports, Solórzano found widespread evidence that high-stakes assessments had had a deleterious effect on ELLs, and that the tests themselves have not been valid, reliable, or ethical for use with ELLs. He stated, "The results from the research and literature review are compelling. Unless tests are developed that specifically include ELLs during all stages of test development, their use is highly suspect, especially to make high stakes decisions concerning instructional placement, retention, and the awarding of diplomas" (p. 314). Solórzano is the Associate Dean for Equity and Diversity at UCLA's School of Education, and has used Critical Race Theory extensively to problematize and analyze equity issues in education, which perhaps structured the particular critical lens through which he viewed these studies.

In a third review of research about high-stakes standardized testing, Lee (2008) conducted a metasynthesis of 14 studies that reported statistical effect sizes of test-driven accountability policies on student achievement. Lee is a school of education dean, and his stated research interests include accountability reforms, high-stakes testing, and educational equity and achievement gaps. Lee (2008) cited flaws in previous research reviews about the effects of high-stakes assessments (including overly inclusive criteria, being descriptive rather than analytic, and focusing on samples from single states or districts) as the impetus for this metasynthesis. Studies were included in this

metasynthesis if they had a focus on accountability policies and high-stakes standardized tests as the independent variable, and student achievement in reading and/or math as a dependent variable. All of the research in this metasynthesis was published after 1990, and all student samples were representative of the general US student population (samples of students taking the SAT, for example, were excluded, because the demographics of students that take the SAT are not representative of the demographics of all US students).

Aggregating 76 effect sizes across the 14 studies using a student-level standard deviation, Lee (2008) found that "individual students may improve their reading or math achievement by 8% of 1 standard deviation (e.g., from the 50th to the 53rd percentile) relative to the national population of all students across states, when their own state switches to high-stakes testing or moves from weak accountability to strong accountability" (p. 264), the equivalent of 2 to 3 months of learning. Additionally, Lee (2008) found "no significant effect on narrowing the racial achievement gap," one of the stated intentions of high-stakes accountability reforms (pp. 268-269). Lee (2008) stated that because many of the studies had great discrepancies, "educational policy makers and practitioners should be cautioned against relying exclusively on research that is consistent with their ideological positions to support or criticize the current high-stakes testing policy movement" (p. 269).

Very few of the 14 studies in Lee's sample focused on the potential negative effects of standardized testing. These studies stand in stark contrast to the qualitative studies reviewed by Au (2007), perhaps reflecting the contentious debate in the field

between supporters and opponents of standardized testing as well as debates in the educational research community about qualitative versus quantitative research.

Although Lee found minimal increases in student achievement resulting from high-stakes assessments, these results focused on state-level assessments and not on comparisons to how U.S. student achievement has changed relative to other countries. As I discussed in the introduction to this section, US student achievement as measured by the National Assessment of Educational Progress (NAEP) has shown no increase in student achievement (Ratner, 2015; Simon, 2013). In addition, most of the research reviewed in the other two literature reviews cited above and the vast majority of the research I located about educators' perceptions of and responses to high-stakes assessment found multiple varied, negative effects of high-stakes assessment.

As I have shown, the above studies reached negative or neutral conclusions about the impact of high stakes testing regimes on students' achievement. In order to ensure that I presented a balanced view of the effects of high-stakes assessments, I conducted a sustained, intentional search for a review of the literature that found positive outcomes of high-stakes assessment. I was only able to locate one such review of the literature, which claimed that testing over the past 100 years (including, but not limited to, high-stakes assessments) had increased student achievement. In this seemingly massive review of hundreds of studies, Phelps (2012) constructed his claim based on rather problematic coding of three types of studies: quantitative studies; studies that used surveys to measure teacher and student perceptions, beliefs, and opinions; and qualitative studies. Within these categories, like *items* were then grouped. Coding survey studies, for example, Phelps (2012) coded the following survey item as "improving instruction: 'The diploma

examinations have positively affected the way in which I teach.' Forty-one percent responded favorably, 32% unfavorably, and the remaining were neutral (or unresponsive)" (p. 36). Whether 41% is positive or negative is debatable, yet based on this type of logic, Phelps (2012) claimed "the results are overwhelmingly positive whether the survey item focused on testing's affect on improving learning or improving instruction" (p. 37). In addition, Phelps found 93% of the qualitative studies in his review demonstrated that assessment has had a positive effect on achievement.

In addition to his problematic coding methods, Phelps' other writing also indicates he is fully aligned with the reform agenda that supports the use of high-stake testing for accountability purposes, as is evident in his recent review of the book "The Test: Why our schools are obsessed with standardized testing—but you don't have to be," by Anya Kamentez (2015). One of his major critiques of Kamentez' book is that she claims that very little evidence exists that is in favor of standardized tests. He countered this assertion, stating, "In fact, an enormous research literature revealing large benefits from standardized, high-stakes, and frequent education testing spans a century (Brown, Roediger, & McDaniel, 2014; Larsen & Butler, 2013; Phelps, 2012)" (Phelps, 2015, pp. 1-2). His citations here do not match his claim, however. The two citations other than his are a book and a study, respectively, based on cognitive psychology research, that reported on the ways that frequent quizzing can increase memorization.

Finally, unlike the researchers who conducted the other metasyntheses in this section, Phelps has a PhD in public policy, not education or educational measurement. He has held multiple positions in the field of assessment, however, including positions as the director of assessment for the Washington, DC, public schools, the Director of Policy

Research at ACT, Inc., the manager of Technical Reports at Pearson Evaluation Systems, and as a Research Fellow at Educational Testing Service. Differences between Phelps' positionality and the positionality of the other three researchers who conducted reviews of high-stakes assessments may help explain the differences between findings.

Therefore, while the example of Phelps' (2002) research reinforces Lee's (2008) call to resist "relying exclusively on research that is consistent with [one's] ideological positions to support or criticize the current high-stakes testing policy movement" (p.269), it is evident that reviews of research I have described here have not been able to fully resist ideology's pull. Using the analytical framework of research as social practice to unpack these reviews, we can see that researchers' identities and positionalities may play a large role in the way that these reviews are framed, conducted, and presented (Cochran-Smith & Villegas, 2014). Who the researchers are, who they represent, and perhaps most importantly, the "relationships of the research to policy, political, professional, and other agendas" strongly shaped this research about the contentious topic of high-stakes standardized assessment (Cochran-Smith & Villegas, 2014, p. 6).

This section reviewed four large literature reviews concerning the multiple effects of standardized testing. In the next section, I review a narrow set studies about educators' perceptions of and responses to testing. Like the literature reviews in the previous section, these researchers use their research findings to build a case about the appropriate role of standardized testing in education. The role of positionality is again important, as almost 100% of the studies I review below found that teachers do not support the use of high-stakes standardized assessments, and the researchers used these findings to create a

case *against* high-stakes standardized tests. Positionality and other social practices are considered throughout the discussion as well as in the conclusion of the next section.

The remainder of Section Two is broken into three sections: teachers' perceptions of high-stakes assessments; teachers' responses to high-stakes assessments, and administrators' perceptions of and responses to high-stakes assessments. When organizing all of the studies about high-stakes assessments, it became evident that broadly speaking, administrators and teachers held different views of high-stakes assessment, and, partially because they held different positions with different responsibilities in the schools, had different responses to the assessments. I therefore consider teachers and administrators separately and across studies, which results in some studies being discussed in both portions of the review.

Teachers' perceptions of high-stakes assessment. In the following description and analysis of the studies that looked at teachers' perceptions, I look mainly across the studies by sharing what the educators in the studies said about high-stakes assessments. This approach is possible because the research questions in this group of studies were very similar to each other, allowing the data to be quite comparable. In addition, unlike studies about educators' beliefs about standards, most of the studies in this group used surveys as the main source of data, which somewhat mitigates nuances of context that affect case studies based on interviews and observation. Where data is drawn from case studies or studies where context is reported to have had a large impact on teacher beliefs, I include that information in my analysis. Broadly speaking, however, the question, "What does previous research say about how educators perceive high-stakes

assessment?" is best answered by focusing on educators' words, survey responses, and reflections across studies.

The studies are clear: teachers do not like high-stakes assessments. Teachers who support and utilize their states' learning standards and value standards-based education as an equitable, ethical way to teach students of diverse backgrounds find that the highstakes assessments that ostensibly measure whether their students have met those standards are "a poor measure of student learning" (Grant et al, 2002, p. 495) that can "hurt" students (Palmer & Rangel, 2011, p. 636) and are "undermining public education," (Segall, 2003, p. 29). The studies in this section were largely qualitative, using observations and interviews as data collection methods. Some used surveys of teachers in specific districts and then conducted follow-up interviews. These data collection strategies enabled researchers to share teachers' voices in their manuscripts, providing personal and intimate understandings of the teachers' perceptions. These studies about teachers' perceptions can be grouped into 3 general categories: 1) teachers' perceptions about standardized tests in light of their beliefs about education, 2) how the tests affect classrooms (including teachers and students), and 3) how the tests relate to the context of standards-based and accountability-based reforms. Each category is reviewed briefly below.

Testing and teachers' beliefs about education. Across the studies, it is clear teachers disliked the tests as instruments because they believed they were not accurate measures of learning (Coburn, 2006; Grant et al., 2002; Jones & Egley, 2004). Some research also demonstrated that teachers believed the tests had a negative effect on learning (Jones & Egley, 2007), especially for English Language Learners (Palmer &

Rangel, 2011; Shaver et al., 2007). Many teachers stated that the use of high-stakes tests didn't connect to their educational philosophies based on constructivist ideals (Segall, 2003; Shaver et al., 2007) or forced them to "abandon middle school philosophy" which is intended to be very student-centered (Faulkner & Cook, 2006). Many teachers also worried about the inequities they perceived happening as a result of the tests, including the inappropriateness of the test for special education students (Jones & Egley, 2004) and ELLs being tested in English (Coburn, 2006). Although some teachers in Desimone's (2013) study felt that the testing led them to increase their focus on all students, overall teachers in her study felt the tests were unfair and negative.

Testing's effect on classrooms, teachers, and students. Teachers perceived the effects of the high-stakes tests on their classrooms to be numerous and generally negative. Many teachers spoke about the time that was lost as a result of testing—sometimes in regards to loss of time to teach non-tested subjects (such as social studies) (Palmer & Rangel, 2011), and often lamenting the way that testing took time away from learning in general (Jones & Egley, 2004). Some teachers felt they had to teach more rapidly to cover more tested content (Thomas, 2005). Teachers also worried about the lack of time they had to support ELLs linguistic needs (Palmer & Rangel, 2011).

Teachers also stated they worried about the effects on testing on instruction, as they believed testing was narrowing the curriculum (Jones & Egley, 2004) and shifting instructional time to test prep (Loeb et al., 2008; Palmer & Rangel, 2011).

Teachers also felt pressure on themselves and their students as a result of the tests. In fact, the word "pressure" appeared in almost all of the studies in this category. Some teachers reported feeling pressure to ensure that the school's public "score" would be

high. Shaver et al (2007) reported, "[Teachers] agreed that the use of test results to award letter grades A to F to each school was a misuse of the results, which would have negative effects on students and teaching staff. One teacher noted, "That's why a lot of good teachers leave the system because of that pressure" (Shaver et al, 2007, p. 733). Indeed, evidence of teachers leaving the education profession, or transferring to school districts where they feel there will be less pressure to increase test scores, is well documented in the literature (Boyd et al., 2011; Costigan, 2005). Another teacher stated, "The pressure to keep the scores up and rising is constant, I think, for all teachers" (Faulkner & Cook, 2006, p. 5). Other teachers felt pressure to limit their curriculum to privilege test prep (Palmer & Rangel, 2011), or general pressure to raise test scores (Coburn, 2006; Jones & Egley, 2004). Some teachers reported that test pressure permeates teaching, as was described by one teacher in Segall's (2003) study of teachers in Michigan: "You teach with the pressure of the MEAP (Michigan's state assessment)" (p. 309). Reading across studies, it becomes clear that the pressure to respond in various ways to high-stakes assessments was sustained, intense, and unwelcomed.

Teachers also reported that the pressure extended to their students (Jones & Egley, 2004). Some teachers reported that the tests made them feel disempowered (Segall, 2003), partially because they viewed testing as so political that they had no control over it (Jones & Egley, 2004; O'Shea, 2007). Finally, some teachers felt that the tests took away their sense of creativity. As one teacher reported, "It [testing] is draining. It's boring. It's frustrating. It takes all the fun out of actually learning something and enjoying it" (Palmer & Rangel, 2011, p. 632).

Tests in relation to standards- and accountability-based reforms. Although the teachers in this set of studies overwhelmingly disliked high-stakes assessments, many of these same teachers were supportive of the standards that the tests were intended to measure. Although some did see a disconnect between the tests and the standards (Grant et al., 2002), many teachers found the standards relevant (Loeb et al., 2008) and helpful for planning instruction (Thomas, 2005). Teachers also explicitly stated that they viewed the standards more favorably than they viewed the tests (Restorff et al., 2012; Shaver et al., 2007), although some teachers in Coburn's (2006) also questioned the standards in relation to testing and accountability.

Teachers had more mixed views on the role that accountability measures played in assessment. Some teachers liked the idea of teachers being accountable for student learning (Jones & Egley, 2004; O'Shea, 2007). However, teachers also disliked many aspects of accountability, such as comparing schools, especially publically (O'Shea, 2007; Segall, 2003). Some also felt that accountability measures were more about politics than education. Segall (2003) reported that two of the teachers in his study of teachers in Michigan felt the state accountability system "symbolized broader issues that pertained not only to the relationship between politics and education, but also to the politics of education" (p. 295). Thus, while teachers were sometimes eager to agree with the language of accountability, they viewed the practices in place to enforce accountability negatively and suspiciously.

It is clear that teachers had negative perceptions of high-stakes standardized tests, and that they felt the tests were damaging their sense of professionalism, how they taught, and their students. How, then, did these teachers respond to high-stakes assessments? I

now turn to findings, again across studies, about how teachers reported that they responded to high-stakes assessments.

Teachers' responses to high-stakes assessments. Thirteen studies, many of which were survey-based, investigated teachers' responses to high-stakes assessments. Similar to findings about teachers' perceptions of high-stakes assessments, most studies were extremely consistent in their findings about teachers' responses to the exams. In addition, the findings in these studies, half of which were published after Au's metasynthesis of this type of study was published in 2007, were very similar to Au's. In general, teachers reported that their practices shifted and they were no longer able to teach in ways that they believed would best support their students (Wills & Sandholtz, 2009), they reported focusing on more teacher-centered instructional methods, such as lectures, worksheets, and whole class discussion (Faulkner & Cook, 2006), and they focused more on basic skills in some settings (Dooley & Assaf, 2009).

However, some teachers reported more positive responses to high stakes assessment. For example, one school aligned their reading curriculum across the grade levels (Coburn, 2006). Relatedly, Desimone (2013) reported, "In this study, it seems that the accountability system and focus on test results and leaving the means up to the teachers resulted in a major emphasis on conceptual and engaging teaching, at least as articulated by teachers" (p. 38), which raises the question, why did teachers respond as they did to high-stakes assessment? Teachers' self-reports are important, but without understanding the sensemaking processes that led some teachers to narrow curriculum and teach in ways they disagreed with, and others to become more "engaging," implications for future practice are limited.

Because many of the studies in this category were based on surveys, they generally did not sufficiently analyze the links between perceptions of and responses to high-stakes assessment. For example, Faulkner & Cook (2006) conducted a survey of middle school teachers in Northern Kentucky, and found that while the majority of teachers both supported the concept of middle schools as student-centered, constructivist-based learning environments, they also reported adjusting their teaching to prepare students for the tests in ways that didn't align with their teaching philosophies. Why teachers felt one way and responded another way was not a part of their analysis, perhaps because the data gathered through a survey did not allow for deeper probing into thinking. The researchers did recommend additional research on this topic based on qualitative research. Other survey-based studies that also simultaneously asked about both perceptions of and responses to reforms did not sufficiently draw the link between perceptions and responses (Jones & Egley, 2004, 2007; Loeb et al., 2008).

Qualitative studies that investigated both teacher beliefs and responses to high-stakes assessments uncovered much richer and more detailed information about how teachers' sensemaking of assessments influenced their responses to them. These qualitative studies were much more akin to the study I conducted for this dissertation. Knowing that teachers "do not like" tests and respond to them in negative ways is useful information, but does not explain *why* there is a mismatch between perception and response. The answer to why there is a mismatch between perceptions and response may hold the key to changes in policy, leadership, and practice. One powerful example of this type of research is Coburn's (2006) study I described in Section One that used sensemaking theory and frame analysis as complementary analytical frameworks. In her

analysis of the data that specifically related to high-stakes assessment, Coburn found that initially, teachers understood the tests as inappropriate and unjust measures of student achievement. However, in faculty meetings, the principal reframed the tests as providing "equal access" to underperforming students, causing some teachers to adjust practice to teach towards the test, and causing others who disagreed with this frame to cease speaking out against the test and remain silent about their disapproval (Coburn, 2006).

Palmer & Rangel (2011) also used sensemaking theory to understand why bilingual teachers in Texas responded to the Texas state assessment in the ways they did. Palmer and Rangel (2011) found that

In response to explicit and implicit pressures to present students with isolated knowledge and test strategies, bilingual teachers select more highly directive teaching styles, leaving behind the space they may have otherwise provided for children to develop critical thinking skills, formulate and defend their own opinions, and build their independent problem-solving skills. (p. 630)

These "explicit and implicit pressures" were not named or described by the teachers, but the researchers conveyed throughout the text that these pressures came from "their campuses" (p. 636), their districts, and from the high-stakes that students would face if they did not pass the tests. These findings are similar to the other qualitative studies in this section (Segall, 2003; Shaver et al., 2007; Wills & Sandholtz, 2009), leading to what Wills and Sandholtz (2009) termed "constrained professionalism, a new situation in which teachers retain autonomy in classroom practices, but their decisions are

significantly circumscribed by contextual pressures and time demands that devalue their professional experience, judgment, and expertise" (p.1066).

Finally, in a cross-case analysis of two teachers who strongly disagreed with the uses of testing in their districts, Dooley and Assaf (2009) found it was the suburban and urban contexts that were the strongest mediators of how the teachers responded to testing pressures. The teacher in the suburban school was able to maintain constructivist-based teaching, while the teacher in the urban school focused on explicit instruction of test-taking skills because of accountability pressures. These findings about the influence of context, district and school pressures, and high-stakes outcomes for students, were all woven into the interview questions for this dissertation to elicit teacher and administrator sensemaking of these same topics.

Administrators' perceptions of and responses to high-stakes assessments.

This last part of Section Two takes a critical look at the nine studies that specifically considered administrators' perceptions of and responses to high-stakes assessments. Only three of these nine studies addressed responses, and all three were in studies that investigated both responses and perceptions simultaneously. In addition, three of these articles were written by the same two researchers, and are three different slices of information about administrators perceptions based on the same survey of principals in Florida: principals' views about high-stakes tests in general (Jones & Egley, 2010), rural principals' views as compared to their suburban and urban colleagues (Egley & Jones, 2004), and how principals' views compare to teachers' views (Jones & Egley, 2006).

There are surprisingly few studies that take up administrators' perceptions of high stakes assessment, and even fewer that ask administrators about any changes they have

made as a result of the assessments. This previous lack of research was noted by multiple researchers when describing the need for their studies (Egley & Jones, 2004; Spillane, Diamond, et al., 2002). Of the studies in this group, all nine of the studies included information about administrators' perceptions, and four of the nine studies also asked about responses. Of the four that took up perceptions and responses, three were qualitative and one was a survey-based study. The remaining studies were quantitative. Figure 4 displays the methods researchers used to understand administrators' perceptions of and responses to high-stakes assessments.

	Administrators' Perceptions	Administrators' Responses		
Quantitative	Jones & Egley (2010)			
Studies	Jones & Egley (2006)*			
	Egley & Jones (2010)			
	Guskey (2007)*			
	Lyons & Algozzine (2006)			
	Ladd & Zelli (2002)			
Qualitative	Coburn (2006)*			
Studies	Desimone (2013)*			
	Spillane et al (2002)			

^{*} Compared teachers and administrators

Figure 4. Research methods and topics of studies about administrators

Overall, these studies reflected a more positive and complex view of high-stakes assessments by administrators than the studies about teachers. While teachers almost universally did not approve of high-stakes assessments, administrators had more mixed and sometimes conflicting feelings about them. These mixed views of assessments were not correlated to whether the research was quantitative or qualitative. Many administrators felt that the tests, generally speaking, were accurate and valid measures of

student achievement (Coburn, 2006; Guskey, 2007; Ladd & Zelli, 2002) and some felt they reflected the standards (Ladd & Zelli, 2002). Some administrators saw the assessments as tools to help them focus on equity issues, such as enabling them to focus more on struggling students (Desimone, 2013; Jones & Egley, 2010), allowing them to investigate teachers' expectations and students' race (Desimone, 2013), and creating the opportunities to talk about equitable outcomes for students (Coburn, 2006).

However, other administrators, such as the administrators in Jones and Egley's (2010) survey-based study of 325 administrators in Florida, did not approve of the use of the tests for ELLs or special education students, and one principal in Coburn's (2006) comparative case study felt that the tests were "biased" and that "kids who take it are not on an equal playing field . . . every thing is biased. And so we've got to teach the kids how to play the game in mainstream society and give them the tools they need to win at that game" (p. 361). These conflicting views of the role of high-stakes assessment demonstrate the complexity of how administrators across these studies perceived the effects of the tests on issues of student equity.

Administrator views were also mixed on the accountability aspects of the assessments. Some administrators liked that the assessments were linked to teacher performance bonuses (Lyons & Algozzine, 2006), while others did not approve of these financial rewards (Jones & Egley, 2010; Ladd & Zelli, 2002). And while many administrators believed the assessments had a positive influence on their ability to shape curriculum and instruction based on testing data (Ladd & Zelli, 2002; Lyons & Algozzine, 2006), they did not generally approve of the public rankings or the pressure to raise test scores (Egley & Jones, 2004; Lyons & Algozzine, 2006).

Administrators' reported responses to high-stakes assessments were less varied than their perceptions of the assessments. All four of the studies that took up administrator responses in some way found that the administrators in their studies respond to assessments in ways that complied with the accountability measures aligned with the tests. As discussed previously, the principal in Coburn's (2006) study framed the assessments as a problem the whole school was facing, and led her staff through a collaborative process to choose a cross-grade level reading comprehension program. In doing so, this leader increased time for collaboration between teachers. Administrators in Ladd and Zelli's (2002) study also added meeting time, and shifted the focus of those meetings to help teachers integrate literacy and math instruction into science and social studies. Many principals in that study also redirected resources to math and reading, and encouraged teachers to teach more test-taking skills. Spillane, Diamond et al.'s (2002) study of how administrators made sense of accountability policies found that sensemaking was based on administrators' personal biographies, their building histories, and their roles as intermediaries between the district and their teachers, and based on the confluence of these three factors, either encouraged collaboration or autonomy. Many administrators, across contexts, developed a large focus on assessment data to shape school improvement plans (Coburn, 2006; Ladd & Zelli, 2002; Spillane, Diamond, et al., 2002). Indeed, Ladd and Zelli (2002) found that, regardless of how principals viewed the assessments, "the incentives within the ABCs program (North Carolina's accountability program) [were] sufficiently powerful to alter the behavior of all principals" (p. 516).

Clearly, administrators' perceptions of and responses to high-stakes assessments were different from teachers'. Spillane, Diamond et al. (2002) posited that these

differences could be because the assessments "pressed school leaders to think about their student body in the aggregate whereas teachers who thought more in terms of particular students pressed for more of a focus on the individual student" (p. 760). In a follow up to their large survey studies of teachers' and administrators' perceptions of high-stakes assessments, Jones and Egley (2006) conducted separate focus groups of teachers and administrators, and asked them to discuss why they felt that administrators and teachers responded differently to the survey. (They shared the survey results with the groups, then asked them to discuss their opinions about the data.) These administrators also felt that while administrators must focus on the aggregate of students, teachers focus on individuals. In addition, some teachers felt that the scores were more personal reflections of their teaching, whereas the principals were more removed from the scores. Teachers also reported that "they saw some principals as "political machines" who were not likely to say too much that was negative about the testing," partially because doing so could risk their jobs (Jones & Egley, 2006, p. 768).

So perhaps administrators perceived the stakes differently and perhaps the vantage point of seeing the entire school as a unit instead of as individual students also played a large role in the variations between administrator and teacher perceptions and responses. Regardless, the implications of these differences are an important backdrop to the study I conducted, which focused on both administrators and teachers. An important finding from the pilot study I conducted for this dissertation and this current study was the large role principals played in how teachers made sense of standardized tests. These studies speak to that same phenomenon but also highlight the importance of investigating the different factors that influence sensemaking for educators in different roles.

Section Three: Research about the Common Core State Standards

Because the Common Core is a relatively new initiative, research on the Standards is limited but growing. A significant portion of research about the Common Core published in peer reviewed journals is "how to" articles, which cover a broad range of topics such as how to incorporate the Standards into music and art instruction (Draper, 2015; Smith, 2014), how to align the Common Core with instruction for students with learning disabilities or other special needs (Fraser, 2013; Haager, 2013; Marsh, 2015), and how the Common Core could be taught in social studies (Beriswill, Bracey, Sherman-Morris, Huang, & Lee, 2016; Gilles, 2013; Kenna, 2013). Most of these "howto" pieces employed a technical-rational view of policy implementation (Datnow & Park, 2009), which assumes changes based on policy are linear, top-down, and aligned with the original policy intentions. For example, many of these studies discussed how current teaching practices would need to change based on perceived differences between current practice and the teaching practices required to teach the Common Core effectively. These pieces were generally short and were intended to guide practitioners, step-by-step, through Common Core implementation. Critique, analysis, and questioning of the standards were not components of these pieces. This underlying conceptualization of teachers as technical implementers of the Common Core, not critically reflective professionals, reinforced the need for this dissertation study that investigated the complex ways that educators made sense of and responded to the Common Core.

A second group of studies and articles about the Common Core analyzed the standards themselves. Four studies compared the content of the Common Core to the content of state or international standards (Moustafa, 2012; Porter, McMaken, Hwang, &

Yang, 2011; Schmidt & Houang, 2012; Wolf, 2014). Porter et al (2011) and Schmidt and Houang (2012) conducted similar studies using a variety of statistical measures to compare the content of the Common Core to the content of other standards. Porter et al (2011) compared the Common Core to state standards, the standards of a few "top performing" countries, and the standards assessed by the National Assessment of Educational Progress (NAEP) exam. Schmidt and Houang (2012) compared the Common Core math standards to international exam standards and NAEP and TIMMS standards. Porter et al (2011) determined that the Common Core were quite different from current state standards and also "different from the standards of countries with higher student achievement" (p. 114). However, Schmidt and Houang (2012) arrived at a different conclusion. They wrote,

What is clear to us at least is that the new Common Core State Standards for Mathematics deserve to be seriously implemented. The consistency of them with the benchmark derived from standards of the top-achieving countries suggests that the goal of the authors'—that the Common CoreM are consistent with the internationally benchmarked standards and as a result are coherent, focused, and rigorous— has been achieved. One can quibble about some details, but the pattern is clear. The relationship of performance on state NAEP in 2009, and the closeness of the state standards in effect around 2009 to those of the new Common CoreM is also encouraging. (p. 307)

Differences in conclusions may be due to how standards were coded, given that codes involve value judgments about what constituted "high" vs. "low" cognitive demand, for example. In addition, it is clear that Schmidt and Houang (2012) support the

Common Core, while Porter (2011), in a commentary piece titled, "In Common Core, Little to Cheer About" in *Education Week*, stated, "If new standards don't bring us better curricula than what we already have, don't help us catch up with our international competitors, and don't lead to better assessments, then all the hoopla over the common core may turn out to be much ado about nothing." Although Porter stated he had hoped the standards would be a "fresh start in the standards-based-reform business," Porter's hopes were based on the same technical-rational view of policy implementation that many of the other Common Core studies were based on: if you build better standards, you will get better outcomes, or in this case, what Porter (2011) described as a "stronger, outcomes-oriented educational system that serves all of our young people, in every state and at every income level." Part of the purpose of this study was to trouble the prevalent assumption in the literature that the "right" policy can lead to the "right" outcomes, and to unpack the market-based approach from which most of the research and policy regarding the Common Core is emerging.

In addition to Porter et al.'s (2011) and Schmidt and Houang's (2012) studies, several others analyzed the inclusion of particular academic content in the Common Core, such as the Common Core middle school geometry standards (Teuscher, Tran, & Reys, 2015), the linguistic demands of the Common Core (Roberts, 2012), the text complexity trajectory in the Common Core (Hiebert, 2014; Williamson, Fitzgerald, & Stenner, 2013), and the writing practices required by the Common Core (Shanahan, 2015; Troia & Olinghouse, 2013). These studies took a much more narrow approach by basing their interpretations of the standards on a variety of limited aspects of previous research, and were generally much more conceptual and theoretical as opposed to empirical.

A third group of studies that was particularly relevant to this current study was research about educators' perceptions of and responses to the Common Core. I located four studies published in peer-reviewed journals that investigated educators' perceptions of and/or beliefs about the Common Core (Ajayi, 2016; Davis, Drake, Choppin, & McDuffie, 2014; Glaus, 2014; Wolf, 2014), four studies that looked specifically at implementation of the Common Core (Asunda, Finnell, & Berry, 2015; August, 2014; Barrett-Tatum, 2015; Barrett-Tatum & Dooley, 2015; Sundeen, 2015), and two studies that examined both perceptions and implementation (Burks et al., 2015; McKim, Lambert, Sorensen, & Velez, 2015). This small number of studies perhaps reflects Ajayi's (2016) claim that "there are more scholars theorizing about the CCSS than those who are actually collecting and analyzing data from teachers who are responsible for implementing the standards" (p. 3). In addition to being limited in number, the studies' researchers assumed the Common Core was a positive development, and therefore worked from the premise that teachers' perceptions needed to be understood to facilitate implementation of the standards. Teachers' perceptions, considered in this narrow way, did not include teachers' problematizing the standards themselves from a critical perspective.

Along these lines, Davis, Drake, Choppin, and McDuffie (2014) developed and administered two surveys and used exploratory factor analysis "to identify the factors under-girding middle school mathematics teachers' perceptions of the Common CoreM" (p. 15). These researchers were interested in in-depth understanding of teachers' perceptions and they critiqued previous large-scale surveys that asked teachers about what their perceptions were but did not pinpoint *why*. However these researchers defined

"perceptions" in a limited way and did not attempt to examine teachers' voices in critical ways. Qualitative studies based on case study methodology also did not give educators the opportunity to problematize the Common Core. For example, in her study of four high school English Language Arts teachers, Glaus (2014) worked from the standpoint that the Common Core are a positive initiative that teachers should learn to implement. This assumption was hidden somewhat by the way Glaus (2014) framed her study. She stated, "My goal was to understand how English language arts teachers understand changes taking place at this time, and to share their voices because they have largely been left out of the conversation surrounding educational policy and debates in public education" (Glaus, 2014, p. 48). However, her interviews focused on changes in curriculum and teaching practices, and the data she collected did not speak to teachers' evaluations of the Common Core as an initiative. Similar to Davis et al.'s (2014) survey study, Glaus's (2014) findings contained interesting information about teachers' perceptions of the technical supports needed, such as new texts and tools to determine text complexity levels, for successful Common Core implementation, but the Common Core itself was not problematized.

Learning from the Literature

My review of the prior research that investigated educators' perceptions of and responses to standards and high-stakes assessments, as well as a wide range of literature about the Common Core, revealed four themes that were relevant to this study. First, policy initiatives that are high-stakes and punitive are increasing in frequency but are widely disliked by teachers. This disconnect between the understanding of policy makers and that of educators is not surprising, but it is worrisome, given that educators are the

implementers of school-based policy. In this current study, one objective was to uncover educators' perspectives about two new policies, the Common Core and the SBAC.

Understanding of educators' perspectives could help decrease the gulf between policy that educators view negatively, and policy implementation agendas.

Second, the majority of the published research reviewed here portrayed the Common Core as a neutral or positive phenomenon. Although there is raging debate in the daily media about the Common Core, most of the published research more or less ignored that debate. Using the lens of research as social practice, it is clear that the public conversations about the role of the Common Core in education was suppressed and/or ignored in this research. By not raising issues about the political history of and arguments concerning the Common Core, these studies failed to contextualize what is an inherently political debate about standards- and accountability-based reforms. These debates most likely influence, in minor or major ways, educators participating in research studies, and should be interrogated in the research about the Common Core.

Third, sensemaking theory was often underdeveloped and weakly implemented in the studies that used it. Reviews of sensemaking theory in the literature focused on narrow slices of the theory instead of taking up its multiple parts. Even when it was used in its full capacity, sensemaking theory did not fully uncover answers to some of the questions I had when I was reading this research: questions about opinions, contexts, and power. Further development of sensemaking theory, and concerted efforts to exercise it fully in research, could benefit understanding of how educators make sense of policy.

Finally it is clear that the existing studies of educators' understandings and responses to the Common Core generally did not take up questions about power,

accountability, knowledge, and access. With some exceptions (e.g., Christensen, 2007; Eisenbach, 2012), this resulted in a general lack of understanding about how teachers critically made sense of educational policy. This current study attempted to address this gap in previous literature by purposefully interrogating educators' critical perceptions of the Common Core and SBAC.

CHAPTER THREE

Research Design: A Comparative Case Study of the Common Core and the SBAC

Using the lenses of sensemaking and inquiry as stance, this dissertation asked how educators at two different schools made sense of and responded to the Common Core and their accompanying high-stakes examinations, and also asked why they responded in the ways they did. As noted in Chapter Two, I was interested in individual educators' perceptions of and responses to policy as well as how educators made sense of policy collectively. These purposes made case study design a perfect methodological match for this study. I treated groups of educators at each of the two schools as cases of how educators individually and collectively made sense of and responded to standards-based reforms.

Stake (2006) argues, "Qualitative understanding of cases requires experiencing the activity of the case as it occurs in its contexts and particular situation. The situation is expected to shape the activity, as well as the experiences and the interpretation of the activity" (p. 2). In this study, it was clear that the "activity of the case" (educators making sense of and responding to the Common Core and SBAC) would take place primarily within the two schools. Case study design aligned with not only the research questions I was asking within two different sites of inquiry, but also with the theoretical frameworks of sensemaking and inquiry as stance, creating an "opportunity to shed empirical light about some theoretical concepts or principles" (Yin, 2014, p. 40).

The two contexts for this study were Rocky Coast Charter Middle School and Mountain Top Middle School. These contexts had certain important similarities—they were both middle schools in the same East Coast state, and neither had entrance requirements for students. Additionally at the time of this study, both public and charter schools in the state were required to follow the Common Core, and both schools were required to administer the SBAC exam during the spring of 2015, which was during the data collection period. However, the differences between the contexts are also important to get at the heart of what is being examined in this research. My pilot study had suggested that organizational affiliation had a significant impact on the ways educators made sense of and responded to policy in the Expeditionary Learning school I studied. Whether or not this was true in other school settings with different structures was one of the research questions of this dissertation. The two dissertation study contexts and the pilot study context represent three different arrangements for schooling: a traditional public middle school, a new charter middle school, and an Expeditionary Learning middle school. These three contexts served as strategic research sites (Merton, 1973) for my study of school-based educators' interpretations of and responses to standards- and accountability-based reforms.

Scope of the Case Studies

According to Yin (2014), who is widely cited as an authority on case study methodology, case study research is defined by two aspects: the scope of the case study and the features of the case study. Yin (2014) posits that case studies are the appropriate method of choice when conducting empirical research intended to investigate a phenomenon in the real world context, when "the boundaries between phenomenon and

context may not be clearly evident" (Yin, 2014, p 16). The contexts in this study were schools, of course, but also districts and the larger educational policy climate. The dialectic therefore—between individuals and context—was the foundation for my study; sensemaking is an exploration of the ways individuals both shape and are shaped by their contexts. Appropriately, the choice of case study methodology allowed a close-up look at individuals' interpretations and responses within the multiple embedded contexts in which they worked—their schools, districts, and state, certainly, and also the larger policy climate as it was influenced by the media, wide-spread beliefs about education, and state and federal regulations. Certainly some information about how educators perceive and respond to standards-based reform policies can be obtained through other types of research, such as belief surveys or even solely through interviews. However in order to understand in depth how educators interpreted and critiqued the standards as they played out in their daily curriculum and instructional work while simultaneously taking into account the multiple, embedded contexts that influenced their perceptions and responses, it was necessary not only to talk to them face-to-face on multiple occasions, but also to observe them in work groups and school meetings, talk to principals and other administrators, and get to know the schools as cultures and communities with particular missions and objectives.

Specifically, my study was a comparative case study of educators' sensemaking of and responses to the Common Core State Standards and the accompanying SBAC examination at Mountain Top Middle School and Rocky Coast Charter Middle School. Comparative case studies are commonly used to understand how a new innovation, policy, or practice in education is being taken up in different settings (Yin 2014). In this

comparative case study, I approached each school site in a similar way. I collected data at each site using similar plans and protocols, but I analyzed each site individually. I then compared the two sites to deepen my analysis. Yin (2014) calls the selection and treatment of multiple sites "replication," although he defines this term much differently from the way quantitative researchers do. Yin (2014) advocates selecting multiple cases "as one would consider multiple experiments" (p. 57). The end objective of this kind of "replication" is not simply to compare the two sites for similarities and differences, as one might do with survey data, for example, but to assess the prevalence and nature of a phenomenon either within or across groups. In this study, by "replicating" the study across multiple sites, site-specific contexts were used to explain differences and similarities in how and why educators interpreted and implemented the Common Core in their particular contexts.

These aims suggest that the selection logic of the two contexts is particularly important. Stake (2006) asserts that "cases in the collection are somehow categorically bound" (pp. 5-6), or similar in some key aspects. In this study, the schools were contexts where educators were grappling with the Common Core. Within a set of possible categorically bound cases, there are multiple reasons for selecting particular sites, including selecting unusual, critical, common, or revelatory cases (Yin, 2014). The pilot study conducted for this dissertation was conducted in what Yin would consider an "unusual" site. The site, which I called Grove Middle School, was selected because the educators there did not respond to NCLB in the typical ways that had been well-documented in research about the school effects of NCLB. One of the major findings from my pilot study was that the Expeditionary Learning model, the school support

organization with which Grove was affiliated, had a large effect on how teachers made sense of and responded to both NCLB and the Common Core.

Based on the pilot study, part of the impetus for this dissertation was to see how educators made sense of the Common Core in settings that were not affiliated with the Expeditionary Learning model. I chose a charter school as one context because I wondered if the increased flexibility afforded to charter schools would impact educators' sensemaking, either similarly to or different from a school support provider like Expeditionary Learning. Currently, there are two charter middle schools in the state where this study was located. One is part of a K-8 school with approximately 30 students in 6th through 8th grade and is located in a very remote part of the state. The other, Rocky Coast Charter Middle School, a site of this study, is part of a school that will, by 2017-2018, serve grades 6 through 12 and is located in a more populous area of the state, although it is still quite rural. For the school year of my dissertation study, the middle school at Rocky Coast had 63 students in grades 6 and 7 combined. The school's location made it a good site for this study because it is serves similar students to the other school in this study.

The second school context in this study, Mountain Top Middle School, is located in the same geographic area as Rocky Coast Charter Middle School, and many of the students who attended Rocky Coast lived in the Mountain Top Middle school district. I chose Mountain Top because its student population at the time of the study was similar to that of Rocky Coast, and the school was located within the same geographic area. One major difference between the schools, however, was their size. Mountain Top served approximately 600 students in grades 6 through 8, while, as noted above, Rocky Coast

served 63 students. There were, of course, differences as a result of size, which I address in detail in subsequent chapters. However, because of the ways I selected participants for this study, the ways educators made sense of and responded to the Common Core at the two schools were comparable for a cross-case analysis.

Because one intention of this study was to describe what I assumed would be variation in educators' perceptions of and responses to the Common Core and SBAC across different types of schools (charter, district, and Expeditionary Learning), I chose to study two schools for this dissertation that were programmatically and organizationally different from one another and from Grove. To my surprise, however, over time, it became clear that both Rocky Coast and Mountain Top were somewhat similar to Grove in their philosophies, structures, leaders' styles, and approaches to teaching and learning. Instead of uncovering and unpacking differences between the schools, these similarities, which are addressed at length in subsequent chapters, served to validate and deepen the claims I initially made about how educators who work from an inquiry stance make sense of and respond to educational policy based on their educational principles.

Throughout this study, I focus on teams as the unit of analysis when discussing the Common Core because teams generally worked together to make sense of and implement the Common Core. I focus on school wide sensemaking of and response to the SBAC, because educators understood and responded to the SBAC as an entire school community, not as separate teams. Throughout, I also include information about how school administrators made sense of and responded to both policies as the administrators had a large impact on team and school sensemaking and response.

When describing sensemaking of the Common Core, at Rocky Coast Middle School, the team I studied was the entire middle school faculty, comprised of three classroom teachers who, together, served 63 students. At Mountain Top Middle School, I focused on two teams: the Andes Team, which comprised four 7th grade classroom teachers who taught the same 70 students and met together regularly to plan curriculum in ways that were similar to the teachers at Rocky Coast. I also studied the Cascades Team, which had 4 teachers who taught the same 70 8th grade students. Table 2 gives an overview of each school's size and demographic information.

Table 2

Demographics and Size of Case Study Schools

Rocky Coast Charter Mountain Top					
Location	Rural town (population 4,700)	Consolidated district serving 1 small town and 3 rural towns (population 19,470 total)			
School Type	Charter school: Open to all students in the state via lottery; currently students attend from 11 surrounding towns. Founded 2013.	Only public middle school serving the 4 towns (above)			
Grades Served (2014-2015)	6 and 7	6-8			
Student Demographics	 63 students 90% White, 10% students of color 40% female, 60% male 0% ELL 37% Free/Reduced Lunch 30% on IEPs 	 605 students (approximately 70 students per "team") 94% White, 6% students of color 47% female, 53% male .7% ELL (4 of 605 students) 33% Free/Reduced Lunch 16% on IEPs 			

I used the pilot study I had conducted earlier as a source of comparison for the other two schools. The data collection methods, research questions, and theoretical

frames were similar, which allowed me to compare the findings of the pilot study to findings from the current study. The pilot study was also used to triangulate the information from the current study and provided a third point of reference for understanding the elements that affected educators' sensemaking of the Common Core and SBAC. The pilot study was organized somewhat differently, however, as I did not focus on specific teams of teachers, but on veteran teachers who taught on different teams. Additionally, the pilot study took place during the school year prior to implementation of the SBAC exam, and the pilot study examined educators' sensemaking of both NCLB and the Common Core, which resulted in less focus on the Common Core than the current study has.

Features of the Case Studies

Yin (2014) posits that case studies have three major methodological characteristics: one, the site(s) is distinctive and has many "variables of interest," two, the case relies on multiple sources of evidence, and three, the case "benefits from the prior development of theoretical propositions to guide data collection and analysis" (Yin, 2014, p. 17). As I have described above, the school contexts I selected were distinctive yet comparable, and were chosen for those reasons. Additionally the schools' different sizes, charter vs. non-charter status, and new vs. well-established school status were all "variables of interest" that had an influence on how educators at each school made sense of and responded to the Common Core and SBAC. Using a survey to find out how educators make sense of the Common Core would have limited their answers to my preconceived notions of what affects sensemaking; using a case study method allowed nuance and variation to emerge from the specific sites.

The second methodological characteristic of case studies is the multiple sources of evidence on which the case is based. Although case study research does not follow a single formal protocol, Yin (2014) suggests using as many of the following data sources as possible: documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts. Of these, I used every method except participant-observation, as I did not "assume a variety of roles within [the] fieldwork situation [or] actually participate in the actions being studied," although I did conduct many direct observations (Yin, 2014, p. 115). In case studies, these multiple sources of data serve to illuminate a variety of perspectives, possibilities, and interpretations of the cases, and also serve as a way to triangulate findings during data analysis (Stake, 2006; Yin, 2014). Figure 5 gives an overview of the data sources and participants in this dissertation, and I explore each in detail following the figure.

Data Source	Rocky Coast Charter	Mountain Top	TOTALS
.0 2 3.2 2 0	Teac		
	3 interviews each with 3 teachers	3 interviews each with 5 teachers, 2 interviews each with 2 teachers, 1 interview with 1 teacher	29 teacher interviews
	Administrators		
Interviews	3 interviews with the principal and 2 interviews with the assistant principal	3 interviews each with 1 administrator, 2 interviews with the ELA Curriculum Coordinator, and 1 interview with the Math Curriculum Coordinator	11 administrator interviews
	Team meetings		
	1 time	Biweekly, 1/15-6/15	10 team meeting observations
	Whole scho	ol meetings	
Direct Observations	Biweekly, 1/15-6/15	N/A	10 whole school meeting observations
	Professional Development Sessions		
	N/A	1 session	1 PD session observation
Documents, Archival Records, and Artifacts	 School and/or district policy documents about the Common Core and SBAC Website information about the Common Core and SBAC Memos or other communication pertaining to the Common Core and SBAC Newspaper reports about the schools concerning the Common Core and testing Photographs of displayed student work Teacher-created signs about curriculum (standards, targets, etc) Lesson plans on Google Drive Charter application School testing data from 2002-present, including AYP status 		

Figure 5. Study Data Sources and Participants

Interviews. At each school, I interviewed all administrators and one or two teams of subject area teachers (English, math, science and social studies). I generally conducted three interviews each with teachers and school administrators: two in February-April and one after the Smarter Balanced exam took place, in mid to late May. Three teachers at Mountain Top asked to be interviewed fewer times; I interviewed one of those teachers one time, and two of them twice. Interviews loosely followed the suggestions of Seidman (2013) and Yin (2014), but unlike Seidman's interviews they were not phenomenological in nature. Seidman (2013) recommends that researchers conduct multiple interviews in order to understand the depth of participants' experiences with and understanding of the particular topic under review. Under Seidman's (2013) protocol, the first interview is a focused life history, another focuses on "the details of experience," and the final interview asks participants to reflect on the meaning of their experiences (p. 21-23). This general interview protocol fits well with Spillane et al.'s (2002) sensemaking theory as it focuses attention on the experiences of the individual as he or she works to understand his or her world. However, I did not focus primarily on participants' life histories in the first interview because, as Stake (2006) argues, in case studies "an interview should be less about the interviewee than about the case," although he does agree that "the researcher needs to find out a little about the interviewee to understand his or her interpretations" (p. 31). I therefore balanced Seidman's (2013) interview protocol suggestions with recommendations from Yin (2014).

In his description of case study interviews, Yin (2014) suggests structuring interviews more as guided conversations than heavily scripted protocols. This allows the interview to be fluid and lets the interviewer follow up on leads presented by the

interviewee. Similar to Seidman (2013), Yin (2014) recommends prolonged interviews, either in one two-plus hour sitting, or over multiple sittings, which is how I conducted the interviews in this study. The interviews were grouped by general themes. The first interview covered some initial background information about each participant, his or her views of teaching, and his or her understandings of and experiences with standards and the Common Core. The second interview focused on understandings, experiences, critiques, and responses to the Common Core and reported its effects. The third interview took place after the SBAC was completed by students, and focused on the SBAC as a high-stakes assessment. In all three interviews, I asked questions about how participants personally thought about these initiatives, and how they worked as a team to make sense of and respond to the initiatives.

The interview protocols were semi-structured, with slightly different protocols for administrators and teachers (see Appendix A for example interview protocols).

Additionally, there were slightly different questions for participants depending on their school. (For example, I asked a question pertaining to charter schools for Rocky Coast participants but not Mountain Top participants.) The protocols had main questions and potential follow up or clarification questions, depending on the response of the participant. The interviews took between 40 and 60 minutes each. Participants choose the times and places of the interviews, and I recorded the interviews with their permission.

I structured the interview questions to reflect the three components of sensemaking theory and the concepts of inquiry as stance in order to ensure I asked questions that revealed how participants critically made sense of the Common Core. In order to align these theoretical frames with the questions, I created an interview matrix

that laid out the topics I wanted to cover in each interview in columns and the components of sensemaking and inquiry as stance in rows (see Appendix B). I then created questions for most of the intersections of the matrix. There were ten topics covered over the course of the three interviews. Figure 6 is an excerpt from the interview matrix of three of the topics I asked about during the first interview. The entire interview matrix is included in full as Appendix B.

Influencers of sensemaking → TOPICS:	Individual Cognition and Inquiry as Stance Questions	Situated Cognition and Inquiry as Stance Questions	Role of Representations (in the media, by the principal, district and state) Questions
Standards-based	-What do you think	-What is the	- How did you
learning	the role of standards	expectation of SBL	develop that opinion
	should be in	at this school?	of standards—what
	teaching and	-How are standards	influenced you?
	learning?	used here?	-Any learning
	-When did you first		experiences that you
	start teaching with		remember?
	standards? How has		
	it changed over time?		
Perceptions of	-What is Common	-What is role of	-Where else did
Common Core	Core?	Common Core at	your info come from
	-When did you learn	this school?	about the Common
	about them? -What	-What PD have you	Core?
	did you think at the	had? What other	-How has the
	time?	learning	principal talked
		experiences?	about the Common
		-What are the	Core? What do you
		expectations around	think his opinion is?
		the Common Core	Why?
		here?	
Current beliefs	-Do you consider	-How well does the	
about Common	the Common Core a	Common Core fit in	
Core	positive or negative	with the mission and	
	overall	vision of this	
	phenomenon? Why?	school? Why?	

Figure 6. An excerpt from the Interview Matrix, which aligned interview questions, topics, and the sensemaking and inquiry as stance frameworks

Direct observations. In addition to interviewing participants, I also collected observational data to help capture interactions between participants, how school leaders represented educational policy to participants, and how participants collectively made sense of educational policy. I conducted observations from January to June, 2015, at Rocky Coast Charter Middle School and Mountain Top Middle School. Because the schools were set up differently, the observation schedule varied at each school. As much as possible, I tried to spend full days at each school every other week, observing the ebb and flow of the school day as well as any meetings that might be taking place at that time. However, I also observed meetings that fell on different days from my scheduled visits but were of importance to this study.

Unlike the interviews I conducted, I did not audio record the interactions that occurred during my observations. Instead, I took notes (with permission of those I observed) on my computer or by hand on a t-chart with one column for direct observations and including time stamps every few minutes, and the other side for reflections and questions that arose as I was observing. In addition to keeping track of the main thread of the conversation, I also noted references to any of the following: the Common Core, the SBAC, instructional strategies, curriculum planning, leadership, or critical sensemaking of the Common Core or assessments. The consistency of this observation protocol across schools and settings facilitated my analysis.

I spent every other Wednesday at Rocky Coast Charter Middle School. Every other Wednesday morning, the whole staff met from 8-10 am for meetings that were generally focused on curriculum, instruction, and teacher development such as supervision and inquiry. Topics varied, and were chosen and facilitated by the principal

of the school. This was not generally a meeting time in which logistics, such as scheduling and student behavior, were discussed—those meetings took place on the opposite Wednesdays when I did not observe. In addition to these whole-school meetings, I also observed one middle school team meeting. I would have liked to have observed more, but planning time was somewhat nonexistent and when the team was able to meet together, that time was not planned in advance. I also was able to observe whole school meetings of all faculty and students a number of times. These meetings took place almost daily, and included a reflective reading, sharing of announcements, and five minutes of silent meditation.

Observations at Mountain Top Middle School followed the same general guidelines but instead of spending every other week with the whole staff, I spent every other week with the Andes Team. The Andes Team met every other Tuesday for 45 minutes to plan their integrated curriculum. The other team in this study, the Cascades Team, did not meet to plan curriculum. They met occasionally (every month or so) to discuss student needs and behavior, and I attended one of those meetings to get a sense of those interactions. The whole Mountain Top school did not meet as a whole staff. However, the school did provide occasional professional development sessions about Common Core related topics, such as the *Units of Writing* curriculum that is aligned to the Common Core, and I attended one of those sessions, which was facilitated by a consultant from Teachers College.

Documents, Archival Records, and Artifacts. Although document analysis is often used in grounded theory, which I did not conduct, documents did play an important role in constructing the arguments in this dissertation. As I laid out in Figure 5, I

collected and analyzed a variety of documents from each school. These documents included school and district policy documents about the Common Core and SBAC, website information, memos from school leadership pertaining to the Common Core and SBAC, and lesson plans. I asked both principals to include me on emails to faculty about the Common Core and SBAC, and both agreed. I also collected newspaper articles about the schools with regard to the Common Core and/or testing that were published between January and June of 2015. These documents showed how the Common Core and SBAC were represented by administration and in the media.

Teachers at both schools shared their unit and lesson plans on Google Drive, and gave me online access to some of those documents to include in this study. These unit and lesson plans were additional data sources that highlighted and helped triangulate interview and observation data regarding participants' values and beliefs about how students learn, developmentally appropriate curriculum, and the importance of student-centered, hands-on learning experiences that support and develop critical thinking. I also used excerpts from these lesson plans to give examples of sensemaking and policy implementation throughout the discussion of findings.

There were not very many archival records that were included in this study, especially because the Common Core is a rather recent phenomenon and most of the records concerning it are not yet "archived." However, there were two specific archival records I did collect. The first included statewide assessment data for each school. I gathered all of this data for Mountain Top Middle School from state records, along with AYP status for each year since 2003. Because Rocky Coast Charter Middle School had only been open for one year, I collected only last year's testing data from the principal.

The second archival document I collected and analyzed was the charter application for Rocky Coast, which was available online.

Although physical artifacts did not play a large role in this study, I did consider a few artifacts as types of "visual" observations; that is, I took photographs of the student work found on the walls, and I took photographs of evidence of the Common Core that was found on the walls. For example, teachers often posted their learning standards in the hallway, or on the wall of their rooms, and I occasionally snapped a photo of the poster. I made no attempt to collect those photographs systematically, but I used them rather as examples of ways teachers communicated the Common Core to students as well as the ways students interpreted the standards in their work. All student work was deidentified, as I did not have IRB approval for student participation.

Data Analysis

Yin (2014) suggests that data analysis is one of the least developed parts of the case study process. Additionally, he contends that there are no formulaic ways in which to analyze case study data. Instead, "much depends on a researcher's own style of rigorous empirical thinking, along with the sufficient presentation of evidence and careful consideration of alternative interpretations" (Yin, 2014, p. 133). Yin does, however, suggest that careful thought should paid to the analytic plan in advance of data collection in order to "help make sure that data will be analyzable" (Yin, 2014, p. 136).

Heeding Yin's (2014) advice, before making decisions about the specific techniques to employ, I considered four general data analysis strategies. These strategies were relying on theoretical propositions; developing a case description; examining plausible rival explanations; and working the data from the ground up. I chose to focus on

relying on theoretical propositions as the main data analysis strategy, while also developing case descriptions and examining plausible rival explanations. Because sensemaking theory (Spillane, Reiser, et al., 2002) and the inquiry as stance framework (Cochran-Smith & Lytle, 2009) drove the research questions, interview questions, and data collection of this study, relying on these "theoretical propositions" to help analyze data was a natural fit. I did not use Yin's (2014) fourth data analysis strategy, as he describes "working your data from the ground up" as a form of grounded theory that should be used when theoretical frameworks are not guiding the research; thus it was an inappropriate strategy for my data analysis process.

During the data collection period, I wrote analytic memos (Charmaz, 2004) to capture connections between this study's questions and the data I was collecting through interviews and observations. When data collection was complete, I read through these memos and developed a list of potential themes I had noticed throughout the data collection period. These themes were eventually compared to and merged into the list of codes I developed while reading all of the interview and observation data multiple times.

Initially I read interview data, which was the primary data base, in three different ways: by interview topics, by participant, and by team. As stated previously, the first interview focused on educators' background and experience, views of teaching, and experiences with educational standards. The second interview focused on how participants understood, critiqued and implemented the Common Core in practice, and the third interview focused on the SBAC. The first time I read through the interview transcripts, I began with Rocky Coast interviews and read all of the first interviews, then all of the second interviews, and finally all of the third interviews across participants. As

I read, I highlighted text segments that stood out as important because they showed how sensemaking occurred (either individually, collectively, or as policy was represented) and/or they showed how participants conceptualized the four components of inquiry as stance (knowledge, practice, communities, and the purposes of education). I then read through all of the interview transcripts from Mountain Top in the same manner. Table 3 shows the codes I used to highlight evidence of sensemaking and inquiry as stance in the interview transcripts.

Table 3

Use of theoretical frameworks to guide data analysis

Ose of theoretical frameworks to guide adia analysis				
Codes	Subcodes			
Sensemaking of the CCSS	Individual			
	Collective			
	Role of Representation			
Sensemaking of the SBAC	Individual			
	Collective			
	Role of Representation			
Educators taking an inquiry stance	Knowledge			
	Practice			
	Communities			
	Purposes of education			

This process of highlighting salient sections of text that corresponded with the two theoretical lenses that informed the study is similar to what Miles and Huberman (1994) call "pattern coding," or what Yin (2014) calls "pattern matching," where researchers compare empirical patterns with predicted patterns—in this case, the predicted pattern was sensemaking. In this pattern coding stage, I began to see how participants made sense of the Common Core and SBAC in relation to the big ideas that made up the theoretical lenses that informed the study. Interestingly, preliminary analyses

suggested that participants were making sense of the Common Core and the SBAC in ways that were similar across the two schools, which were in turn similar to some of the themes that I had identified in the pilot study. That is, educators at all three schools appeared to be working from an inquiry stance to understand and critique the Common Core and SBAC. As in the pilot study, educators at the two schools critiqued the initiatives along the lines of their educational values and beliefs, which led me to develop initial codes and subcodes for the second read through of the data that centered on educators' beliefs. Table 4 shows the codes and subcodes I used to analyze the data the second time I read through the interview transcripts.

Data analysis codes and subcodes

Table 4

C. 1	0.1. 1
Codes	Subcodes
Beliefs about students	Beliefs about student growth/capacity
	Beliefs about how students learn
	Beliefs about influences on student learning
Beliefs about teaching and learning	Student choice/autonomy over curriculum
	Educational values
	Curriculum and instruction
	Role of standards
	Educator autonomy/control over curriculum*
Beliefs about and implementation of	Fair/equitable
the Common Core	Fit with mission
	Positive aspects
	Negative aspects
	The CCSS in relation to SBAC*
	CCSS implementation/effects
Beliefs about standardized testing	Preparation for testing
	Role and use of testing
Beliefs about and responses to the	SBAC positive
SBAC	SBAC negative
	Student responses to SBAC
	Effects of SBAC

^{*}Added during round three of reading through the data

For the second read through of the interview transcripts, I uploaded the transcripts into ATLAS.ti, a computer assisted qualitative data analysis program. I inputted the initial list of codes and subcodes I had developed based on the memos I had written and the first read-through of the interview transcripts (see Table 4). I then read through all of the interview transcripts a second time, this time by participant. This time, I coded the data in ATLAS.ti using the initial lists of codes and identifying sub-codes for each theme as I analyzed the data (see Table 4).

During this second round of data analysis, in addition to highlighting these codes and subcodes, I also tracked instances of sensemaking (either individual, collective, or how policy was represented) and instances of educators working from an inquiry stance (as shown through approaches to knowledge, practice, communities, and purposes of education). These text segments were highlighted in addition to the codes and subcodes; often, text segments had more than one highlight to reflect, for example, how a teacher simultaneously demonstrated his or her understanding of knowledge (one of the four components of inquiry as stance) and his or her beliefs about how the Common Core could be implemented. An example of this combination was the Mountain Top principal's refection that teachers have the knowledge to work with and manipulate the Common Core so the standards are clear to students. He stated, "Sometimes there is a certain standard that just seems really dense and we are like, well, we can't really unpack it any further, but yet there is a whole lot in here. So, you can tweak it using your expert opinion" (Miller, interview 2). This excerpt was coded for both "IAS: Knowledge" and "CCSS implementation/effects" to indicate that Principal Miller was conceptualizing

knowledge from an inquiry stance (teachers had "expert" opinions) and indicating how he thought the Common Core should be implemented (in a "tweaked," not standardized, manner).

For the third read-through, I read all of the interview transcripts by team and also read all of the observation notes and documents by team. I took note of where, in my observation notes, sensemaking and examples of inquiry as stance occurred, and coded those sections. I also made notes on the documents of illustrations of codes: for example, how a Common Core standard was used, or how teachers integrated a topic across content areas. I also refined the initial subcodes by adding two additional subcodes, "Educator autonomy/control over curriculum" and "The CCSS in relation to SBAC," which I had not coded previously but found to be important concepts for addressing my research questions. Throughout this third stage of reading the data, I paid particular attention to Yin's (2014) suggestion to examine plausible rival explanations, by reviewing all codes and subcodes and considering what other tentative conclusions could be made based on the evidence. This read through of all of the data by team was particularly important because sensemaking and policy implementation were generally team-based—as opposed to individual—activities.

Following these three readings of the data, I then conducted cross case analysis of the way educators in each school setting made sense of and responded to the Common Core. Following Stake's (2006) suggestion, I read through the codes by team (each team was a "case"), and compared the codes across cases. This prompted me to evaluate the "utility" of each code for each case (Stake, 2006). As I discuss in the next chapter, there was a surprising amount of similarity between two of the three teams in this study. For

that team's educators made sense of and responded to the Common Core and SBAC, although they did so somewhat differently from the other two teams. Throughout this data analysis process, I continued to write memos (Charmaz, 2004) and look for confirming and disconfirming evidence for the themes that were emerging across cases (Creswell, Hanson, Plano Clark, & Morales, 2007).

In addition to following Yin's (2014) approach to qualitative analysis, I also drew on Erickson's (1986) approach to data analysis and reporting. Like Yin (2014), who suggests reading and rereading data, identifying patterns, and looking for disconfirming evidence as part of data analysis, Erickson (1986) suggests that, in order to arrive at valid empirical assertions, researchers must "establish an evidentiary warrant for the assertions one wants to make ... by reviewing the data corpus repeatedly to test the validity of the assertions that were generated" (p. 146). In this study, I built initial "sub-assertions," or propositions about why and how educators made sense of the Common Core and SBAC, based on evidence from the data, and then began organizing and merging those assertions together at higher levels of abstraction. Erickson (1986) offers an example of a branching, tree-like diagram, with multiple subassertions leading up to fewer main assertions, which are the larger arguments researchers make (p. 148). Each subassertion is supported by multiple data sources. To aid data analysis, I created a diagram following Erickson's (1986) format, which helped me reflect on relationships between the study data, analytic codes, and patterns I saw during data analysis, and led to development of the arguments I made in this study (see Figure 7).

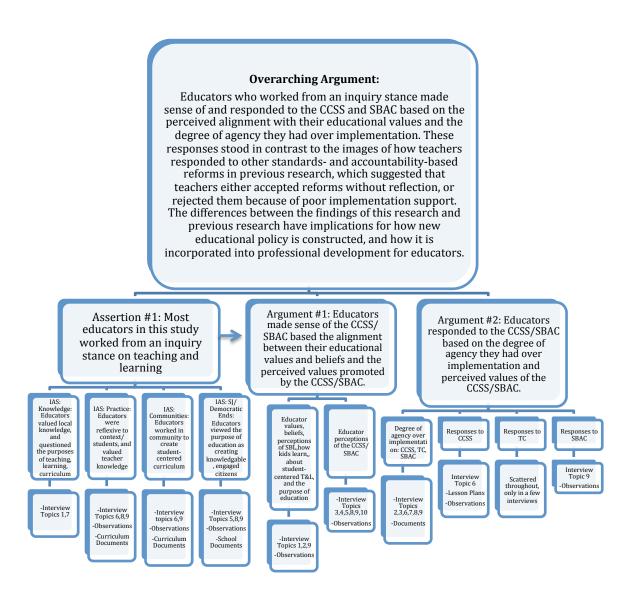


Figure 7. Key linkages between data, assertions, and arguments

Figure 7 is a graphic representation of how the data from this study (in the bottom row) informed the subassertions, which merged at a higher level of abstraction to inform the arguments. These arguments then led to the overarching argument I make in this dissertation. The first main assertion is that that the educators in this study generally worked from an inquiry stance. Based on that assertion, the dissertation makes two main

arguments: one, that educators who take an inquiry stance enacted "principled sensemaking" of the Common Core and SBAC, and two, that because of that principled sensemaking, they participated in "principled implementation" in response to these two policies. Chapter Five takes up the concept of "principled sensemaking," and Chapter Six takes up the concept of "principled implementation." First, though, Chapter Four provides in depth descriptions of the participants and schools in this study, through the lens of inquiry as stance. I argue that principled sensemaking and principled implementation are types of policy sensemaking and response by educators who hold an inquiry stance on teaching, learning, and schooling. In this sense, Chapter Four's assertion lays the foundation for the arguments in Chapters Five and Six.

CHAPTER FOUR

Working from an Inquiry Stance: Educators' Beliefs and Values

In this dissertation, I show how teams of teachers at two schools made sense of and responded to the Common Core State Standards and the Smarter Balanced Assessment Consortium exam (SBAC). As I describe in detail below, for most of the teams I studied, the educators generally worked diligently and collaboratively to create rigorous, engaging curriculum based on real-world issues related to their students' lives. These curricula were based on the Common Core and reflected educators' beliefs and values about teaching, learning, and schooling. In contrast to what the educators in this study thought about the Common Core, none of them believed the SBAC aligned with their beliefs and values about teaching, learning, and schooling, and as a result, the SBAC was not a driver of their curriculum and instruction. These educators' contrasting conceptualizations of and responses to the Common Core and the SBAC—two related, but also very different initiatives—shaped the basic arguments I make in this dissertation.

Based on the interviews, observations, and school documents I analyzed, the next three chapters of this dissertation make two major arguments. First I argue that the educators I studied collectively and individually made sense of the Common Core and SBAC based on the alignment they perceived between their own educational principles, on the one hand, and the principles they believed were promoted by the policies, on the other hand. I refer to this type of sensemaking throughout the rest of this dissertation as "principled sensemaking," which is the specific topic of Chapter Five. This argument about how educators make sense of new policies contrasts to a certain extent with

previous research, which has concluded that educators generally make sense of new policies based primarily on how well they understand them (Spillane, 2004). This implies that when educators do not take up or fully implement new policies, it is because they lack knowledge and understanding. My study offers a different way to think about educators' interpretations of policy.

Second, this dissertation argues that the ways and the extent to which the educators I studied responded to and implemented the Common Core and the SBAC depended not only on their principled sensemaking of the policies, as above, but also on the degree of autonomy and choice they had over how the policies were implemented. Chapter Six takes up the topic of the educators' implementation of the policies (that is, how they adopted, adapted, used, reacted to, and even ignored them). In Chapter Six, I show that it was the intersection of educators' principled sensemaking of the policies and the degree of agency they had over whether and how those policies were adopted that shaped policy implementation. I have labeled this process "principled implementation." Chapter Six elaborates on what this process looked like for different working teams of teachers and at different schools.

By way of background for my discussion of principled sensemaking and principled implementation, here in Chapter Four, I introduce the schools, their teams, and the educators involved. My analysis reveals that most of the educators in this study took an inquiry stance on teaching, learning and schooling. Taking an inquiry stance enabled these educators to make sense of and respond to the CCSS and SBAC in principled ways based on their educational beliefs and values. To unpack these beliefs and values, I use the lens of inquiry as stance (Cochran-Smith & Lytle, 2009).

In the pilot study I conducted for this dissertation, the inquiry as stance framework proved useful to understanding the kind of critical sensemaking that the educators at Grove Middle School demonstrated in response to NCLB and the CCSS. I found that the inquiry as stance framework, however, could be used not only to understand and characterize *particular* types of educator responses to educational policy, such as the responses at Grove, but could also be used *generatively* to describe the ways educators and groups of educators conceptualize knowledge, practice, communities, and the purposes of education—the four components of the inquiry as stance framework.

Cochran-Smith and Lytle (2009) use the inquiry as stance framework to raise issues about the nature of teaching, learning and schooling, and to suggest that educators who take an inquiry stance hold particular views of knowledge, practice, the role of communities, and the purposes of education. Specifically, in this chapter, after I describe each school's history, location, and students, I describe how teams of educators at Rocky Coast and Mountain Top viewed knowledge, practice, the role of communities, and the purposes of education, in order to illustrate their beliefs and values about these components of education. Then, I use the inquiry as stance framework to unpack the perspectives of the educators at each school in relation to the ideas that Cochran-Smith and Lytle (2009) argue are centrally related to taking an inquiry stance. In other words, in the first use of the framework I describe the beliefs and values of participants using the general categories of inquiry as stance. In the second use of the framework, I consider the degree to which educators' beliefs and values were in alignment with Cochran-Smith and Lytle's conceptions of taking an inquiry stance.

As noted in Chapter Three, over the course of this study, I conducted 40 interviews and more than 60 hours of observations across two schools. I learned more about the schools, teachers, students, and school communities than I have the space to write about. In this section, I focus primarily on the administrators and teachers in each school with much less attention to the students or the school communities. My decisions about what to include—and, therefore, what to leave out—were made based on the information I needed to show how I arrived at answers to this study's research questions and to provide the evidence that supports the overarching arguments I make (Erickson, 1986; Yin, 2014). Yin (2014) calls these decisions about what to include and exclude to ensure a complete case study the "boundaries of the case" (p. 202). In emphasizing the work of the educators, I am *not* suggesting that the schools' students and their larger communities were unimportant. To the contrary, the educators' understandings of their students and communities drove the vast majority of the educational decisions they made. However, given that the purpose of this study is to uncover and analyze the perceptions and responses of educators to the Common Core and the SBAC, the focus is teachers and administrators.

School One: Rocky Coast Middle School

Rocky Coast Middle School is located in a small coastal town on the East Coast.

Rocky Coast was a new charter school in its second year of operation during the course of this study.

History and Location

One of only a handful of charter schools in the state, Rocky Coast was initially conceived by local community members who were "concerned that many of the town's

young people were increasingly disengaged from school," and wanted to create a school in which the town's history and traditions were woven into the curriculum while simultaneously "preparing students to live and work in the rapidly changing coastal economy" (Rocky Coast Charter Application). After community members began discussing the possibility of a local charter school, the group contacted Jay Williams, a local educator who had participated in various school reform efforts both locally and nationally. Funded by the donation of \$50,000 for start-up costs from a local townsperson, Williams organized the founding group and spearheaded the writing of a lengthy charter application to the state. The school's curriculum and pedagogy were based on what Williams considered the best practices of the previous 20 years of school reform, including standards-based teaching and learning, place-based education, fieldwork and internship opportunities, and a focus on character building. These practices were attributed to organizations such as the Coalition of Essential Schools and Expeditionary Learning, for whom Williams had previously worked as a consultant. The school was designed to serve 6-12th grade students, with a maximum of 80 students per grade.

Once the school's charter was approved by the state, the school's board asked Williams to remain as the principal. Williams agreed and began hiring staff in the spring of 2013. In the fall of 2013, the school opened with 6 teachers, 35 6th grade students, and 27 9th grade students. During the year of this study, the school had expanded to one additional grade level at both the middle and high school levels, thus serving a total of 62 6th and 7th graders and 44 9th and 10th graders. In the year after the study, grades 8 and 11

were added, with the intention of adding grade 12 the following year. The school serves students from 11 nearby towns.

At Rocky Coast, students are separated into three "divisions." Division One serves students who would traditionally be in grades 6-8, Division 2 serves students who would traditionally be in grades 9 and 10, and Division 3 serves students who would traditionally be in grades 11 and 12. As described in Chapter Three, the Division One team participated in this study because they were teaching middle-school age students, the same age as the students in the pilot study school and the other school in this current study. During the year of this study, there were three teachers in Division One: a math teacher, a science teacher, and a Humanities teacher, and all three participated in this study. In addition, the principal and assistant principal were also study participants.

The Rocky Coast building is located on a large field at the end of a peninsula that stretches into the Atlantic Ocean. The building is a former elementary school that had been closed for a number of years due to consolidation in the district. The physical location of the school is considered an advantage of Rocky Coast because teachers are able to use the surrounding area, including the ocean, to support their place-based curriculum. As one teacher I interviewed for this study stated, "We really want to emphasize our kids learning through the lens of a place that's relevant to them" (Hughes, interview 1). For example, one ELA teacher leveraged the location of the school by designing a literary nature study that used the surrounding environment as the foundation for student-created writing. The unit culminated in "a portrait in words. I took kids outside and we did a lot of work on journaling and nature writing and we read journals and read different nature texts. Then we went out to several different local places and we

would just sit and write and sit and take pictures" (Powell, interview 1). The unit both developed students' writing and reflection abilities and deepened their understanding of the school's natural environment. Others at Rocky Coast valued the location as well, such as the assistant principal who stated,

There is so much value in being able to walk down to the ocean and having the land trust area that is right up there with the huge field and the forest and the community garden and Willow Field. I think it fits the middle school curriculum and I just love this spot. It's a pretty lovely place to work. (Barnes-Fisher interview 1)

In contrast to their positive perceptions of the location of the school, faculty did not positively regard the actual building. Arranged all on one level, classrooms occupied the west wing of the school, the main office and principal's office were in the middle of the building, and a few small offices, a library, and the multipurpose room, which served as both a gym and the cafeteria, extended to the east side of the main office. The physical space of the school, which had been designed for smaller sized children, often felt stuffy and untidy, much to the chagrin of the assistant principal who periodically organized the teachers and students into work teams to clean up the school. Along the hallway, student work was displayed in multiple locations, and chairs and desks haphazardly lined the walls for use by students who were overwhelmed by the larger groups in the classrooms. Special education teachers were also often in the halls with their students, working 1-1 or with a small group. Students walked the hallways by themselves during class time, either to or from the office to meet with the counselor, to find one of the special education teachers who was in a different part of the building, or to "take a break." According to

some teachers, as a result of all of this activity, the hall was a busy, but not unproductive or unpleasant, place to be. However, the math teacher felt "there are a lot of freedoms at the school, and [when] students are supposed to be in class they find multiple ways to avoid going to class," and end up in the hallway (Robertson, interview 1).

Rocky Coast's school day lasted from 8-4, with a two-hour late start one day a week so teachers could meet as a whole staff. The topic of the meetings alternated every other week between logistical, practical issues such as organizing community members' visits to the school and determining the summer school schedule, on one hand, and professional development sessions such as discussing current research that connected to the school's mission and vision and a new teacher evaluation plan on the other. I attended the professional development sessions, which were run by the principal, every other week.

During these meetings, the entire staff met in one of the classrooms. Each meeting started with an Appreciative Inquiry. Appreciative Inquiry is an approach developed in the field of organizational behavior based on the belief that individuals in organizations become more engaged when focusing on their own positive experiences. This heightened engagement leads to positive organizational change (Orr & Cleveland-Innes, 2015). The practice of Appreciative Inquiry is used across a number of fields, including education, business, and medicine (Coghlan, Preskill, & Catsambas, 2003). During the Appreciative Inquiry portion of Rocky Coast's faculty meetings, which generally lasted between 5 and 10 minutes, staff members appreciated various things about their co-workers or about the students or about themselves, as instructed by Williams. For example, at one staff meeting faculty were asked to share an appreciation of another faculty member or of a

student. Two of the many comments include the Division One science teacher appreciating a special education teacher for having "a bottomless well of compassion for our students," and the Division One Humanities teacher appreciating "a student for having read her 5th book of the semester" (Observation notes, 6/3/15).

The effects of the Appreciative Inquiry practice filtered into the general culture of the school, and according to the assistant principal, reshaped many interactions and conversations from problems to solve to opportunities from which to learn. For example, the assistant principal reflected,

And I think that we really do push the Appreciative Inquiry philosophy and you will hear Jay say that in our faculty meetings, we start with some sort of an appreciation. That is pervasive. If you talk about that enough and you really try to use it, it kind of keeps out some of that biting anger stuff. It's like, right, I don't have to complain about that parent who just pissed me off. I can think about -- oh, you know what, I really appreciate that. That kid has taken that step. Even though it was a small step, I am going to think about that rather than this other piece. (Barnes-Fisher, interview 1)

The assistant principal's perspective illustrates the positive, enthusiastic attitude with which most faculty at the school faced the challenges of being a start-up school.

Appreciative Inquiry as a general framework that influenced school culture sheds light on many of the schools' practices and principles. For example, there was a high percentage (40%) of students who had been identified as having special needs and another sizeable group of students who teachers felt could benefit from Individualized

Education Plans but did not yet have one. Certainly, these characteristics of the student body placed constraints on the school budget, the curriculum, and the amount of time teachers spent with their students; having many students with special needs required hiring more special education staff, modifying and differentiating the curriculum in multiple ways, and an increase in the amount of individualized attention needed by many students. However, the participants in this study were not only eager to support these students but proud of the skewed demographic, seeing the unique learning styles and needs as assets that benefited the school culture and the curriculum teachers planned. As the principal stated, "A strength [of Rocky Coast] is our amazing and almost militant insistence on being a public school and serving special ed kids well" (Williams, interview 1). Reframing what others might perceive as a negative challenge led to a sense of hope and enthusiasm among faculty, even when they were exhausted from the work of starting a new school.

The class schedule for Division One of the school changed on an almost daily basis, with the three classroom teachers deciding what each group of students needed on any given day. Students were "flexibly grouped" depending on the topic of instruction—that is, the group of students that travelled together throughout the school day changed depending on the unit, and based on student need. Because there were three divisions of students and three teachers, teachers had virtually no planning time between the hours of 8-4. This caused stress for teachers, especially because curriculum was intended to be interdisciplinary, which required time for the team to meet together. Most teachers, however, approached the scheduling and other challenges of being a new start-up school with positive attitudes.

Rocky Coast Participants

Five educators from Rocky Coast participated in this study: Jay Williams, the principal; Nicole Barnes-Fisher, the assistant principal; Holly Powell, the Humanities teacher; Dale Robertson, the math teacher; and Fraser Hughes, the science teacher (see table 5). The three teachers, Powell, Robertson, and Hughes, taught the same 62 6th and 7th graders. Hughes was new to teaching. After receiving a master's degree in education and his teaching certification, Hughes's first teaching position had been at Rocky Coast the previous school year. At the time of the study, Powell was in her first year at Rocky Coast and did not have teaching certification, but had spent the previous 6 years teaching abroad in a private school. Robertson had the most teaching experience. Although the study year was his first year teaching at Rocky Coast, he had spent the previous 9 years working in public high schools and in Adult Education around the state.

Table 5

Rocky Coast Middle School Participants

Name	Role (division, subject)	Previous Experience	Years Working
			at Rocky Coast
Jay Williams	Principal, Rocky Coast	Teacher (5 years),	2
		administrator (3 years)	
		school reform consultant	
		(10 years)	
Nicole Barnes-	Assistant Principal,	Special education teacher	2
Fisher	Rocky Coast	(4 years), administrative	
		assistant (6 years)	
Holly Powell	Division One	Teacher and administrator	1
	Humanities Teacher	in the Bahamas (6 years)	
Fraser Hughes	Division One Science	Farmer (2 years), student	2
	Teacher	teacher (1 year)	
Dale Robertson	Division 2 Math	Math Teacher, Adult	1
	Teacher	Education Teacher (7	
		years), Restaurateur (7	
		years)	

After he graduated from college, Williams, the principal, spent the years of his early twenties doing a variety of manual labor jobs such as landscaping and truck driving before returning to school and earning his MAT. He then taught high school English for five years before becoming the founding administrator of a new public high school in the state. Williams then spent the 10 years prior to starting Rocky Coast as a school reform consultant both for the National School Reform Faculty and for Expeditionary Learning, two organizations that profoundly shaped Wilson's perspectives on teaching and learning. Barnes-Fisher, the assistant principal, never intended to work in education, but had ended up teaching for four years in a private school for special needs students following three years of living in China. She then became the assistant to the head of a U.S. private school, which she left after 6 years to join Rocky Coast during its first year. Previously Barnes-Fisher and Wilson had met professionally when Wilson was trying to

start a network of rural schools, an initiative in which Barnes-Fisher had participated as a community member.

As described at the beginning of this chapter, the next four sections of this description of Rocky Coast use the inquiry as stance framework (Cochran-Smith & Lytle, 2009) to describe the school, including its curriculum, instruction, and educators' beliefs and values. The four sections below each take up one of the inquiry as stance framework components—knowledge, practice, communities, and purposes of education—and each highlights different salient information about Rocky Coast's practices and approach. Each section begins with a description of the framework component, and then describes how educators at Rocky Coast conceptualized that component—not whether or not they took an inquiry stance on "knowledge," for example, but how knowledge was understood and thought about by Rocky Coast teachers. Then, after describing how Rocky Coast educators understood the component generatively, I use the framework to look at Rocky Coast educators' perspectives in relation to what Cochran-Smith and Lytle (2009) say is the perspective related to inquiry as stance. That is, I analyze the extent to which and in what ways educators at Rocky Coast took an inquiry stance on each component of the framework. I begin with knowledge.

Views of Knowledge at Rocky Coast

The first component of Cochran-Smith and Lytle's (2009) inquiry as stance framework is knowledge. Knowledge, in the inquiry as stance framework, considers the types of knowledge teachers need to know to teach well. Cochran-Smith and Lytle suggest that one consideration here is the distinction commonly made between formal knowledge—that generated by external researchers—and practical knowledge—that

generated by practitioners (Fenstermacher, 1994). Traditionally, formal knowledge is considered to be generalizable across contexts, while practical knowledge is considered to be bounded by the situation and more instrumentally focused on "how, when, and where to do things" (Cochran-Smith & Lytle, 2011, p. 21). Generally speaking, formal knowledge has been privileged over practical knowledge by researchers and often implicitly by policymakers who tend to devalue the perspectives of local educators in schools (Cochran-Smith & Lytle, 2009). Cochran-Smith and Lytle reject both the dichotomy between formal and practical knowledge and the assumption that these two types of knowledge encompass the universe of knowledge types, as I discuss below. The knowledge component in their framework introduces many questions about how educators think about their work and their assumptions about what teachers need to know to teach well, who are legitimate producers of knowledge, and the relationships of knowledge and practice. The inquiry as stance framework also raises questions about power: not only where knowledge comes from, but whether and how it can be challenged, connected, built upon, and used.

At Rocky Coast, the knowledge produced by others informed educators' work, but not in the sense of a direct outside-inside transmission process. For example, Principal Williams often drew on findings from educational research to guide, inspire, or inform his teachers, and was very committed to sharing new ideas about teaching and learning from educational researchers through staff meetings or short articles that he emailed to teachers. But even though knowledge produced outside of schools was read and respected by Rocky Coast educators, it did not determine how teachers worked. Rather their interpretation and use of "formal" knowledge was mediated by the

educators' critique, connections, questions and experiences, which had an important impact on the school's culture, curriculum, and instruction. At Rocky Coast, teachers' knowledge was understood to mean more than the practical steps they took to move students through the curriculum and school day, although scheduling was the responsibility of the teachers, not the administrators. Rather, educators understood their own knowledge as having both practical and theoretical aspects, and they saw this as absolutely necessary for the functioning and success of the school in part because the teachers wrote the curriculum.

Rocky Coast teachers created the entire school's curriculum based on their continually deepening understanding of the school's mission and their students' needs.

Understanding their own interpretations and uses of knowledge as necessary to the successful functioning of the school, Rocky Coast teachers felt empowered and engaged.

For example, Hughes the science teacher stated,

I think [writing our own curriculum] puts the intellectual rigor back into teaching, to feel like we aren't just given a curriculum that we need to present to students and assess. We really get to challenge our own ideas and test the limits and go, how do we integrate this? (Hughes, interview 2)

Educators' beliefs that their abilities to theorize and construct curriculum was clearly a key component of how curriculum and school practices were developed and implemented.

The view of knowledge held by Rocky Coast teachers was generally aligned with Cochran-Smith and Lytle's view that from an inquiry stance, the distinction between practical and formal knowledge is not appropriate. They cite McEwen (1991), who states,

To make such a division between theory and practice is to misunderstand the nature of practice. . . By making the twin assumptions that all theory is non-practical and all practice is non-theoretical, this approach always underestimates the extent to which those engaged in educational practices have to reflect upon, and hence theorize, what, in general, they are trying to do. (pp. 13-14)

Cochran-Smith and Lytle suggest instead the idea of local and public knowledge, which is *not* a version of the formal-practical knowledge distinction. From the perspective of inquiry as stance, "the local knowledge generated by practitioner researchers is considered a key to educational transformation" (Cochran-Smith & Lytle, 2011, p. 21). Indeed, at Rocky Coast, the two were not seen as two separate or the only types of knowledge, but as recursive partners that helped move Rocky Coast towards its goals. For example, this more expansive view of knowledge was reflected on the Rocky Coast website, which stated, "Rocky Coast Middle School is where conventional wisdom is tested and re-tested – some of it lasting, and some of it going by the wayside, depending on whether it helps us get where we need to go, or gets in the way" (Rocky Coast website). To support this expansive and evolving understanding of knowledge, or "wisdom," educators drew on traditional academic research but openly questioned, critiqued, and applied it to their own local contexts and they also theorized their own practices in order to refine and deepen their teaching.

Thus educators at Rocky Coast were strongly aligned with an understanding of knowledge as it is framed in the inquiry as stance framework. Instead of existing separately in the realms of "practical" and "theoretical" knowledge, knowledge was

believed to be locally and publically generated by the educators, informed by research, and understood to be not just knowledge of what and how to educate students, but also as an interactive, interpretive, and evolving way of deepening teaching and learning based on students, context, and new learning.

Views of Practice at Rocky Coast

The second component of the inquiry as stance framework is practice. As with the previous component, there are many ways to think about and enact practice. Traditionally, practice has been understood as what practitioners do and say; what Cochran-Smith and Lytle (2009) call instrumental practice, or "the technical transmission model of practice" (p. 133). Juxtaposed to this instrumental view of practice is an expanded and transformative view of practice that encapsulates both critical reflection and action. While instrumental practice may be understood as linear, reductionist, and to some extent, "simply (or mostly) practical" (Cochran-Smith & Lytle, 2009, p. 134), the more transformative view of practice takes up the integration of and reflection on theory as it relates to practice—what Freire (1970) called "praxis," or "a synthesis of critical reflection and action" (Cochran-Smith & Lytle, 2009, p. 133). As Cochran-Smith and Lytle (2009) state, "The key idea here is that practitioners theorize all the time, negotiating between the immediacy of daily decisions and particular events and larger questions of equity and social change" (p. 135). Practice, in this sense, is not just behavior—it is the ongoing process of teaching and learning while simultaneously theorizing about the teaching and learning process.

For various views of practice, questions about what counts as practice, and what it means to be accountable for one's practice, are taken up in different ways. According to

Cochran-Smith and Lytle (2009), when practice is understood as instrumental, there is a focus on information transmission, and accountability is often external and test-based. From this perspective, practice is generally limited to a focus on academics, with standardized test scores compared to others at the state, national, or international level as the main measure of success. From the perspective of transformative practice, however, practice includes theorizing, reflection, and struggling with uncertainty. Accountability becomes an internal *and* external moral imperative, based on the individual needs of students, their local communities, and the mission and vision of the school. Practice encapsulates academic activities as well as social-emotional ones.

At Rocky Coast, two main factors drove practice: the school's mission, and the student population. The mission states,

Rocky Coast Middle School offers 6th through 12th graders in the region a rigorous, interdisciplinary, project-based education. Our classrooms include [the] shorelines, working waterfronts, forests, and farms. We actively partner with local organizations and businesses, entrepreneurs, and community members who are committed to our goal of preparing caring, creative, resilient citizen-scholars who will flourish in a rapidly changing economy.

From this mission statement it is clear that Rocky Coast valued practices that were rather atypical: students were often out "in the field" or meeting with community members about their topics of study. Units of study were interdisciplinary and hands-on, and as mentioned in the previous section, created by the teachers. Powell, the humanities teacher, described Rocky Coast as

on the cutting edge of education because it's simultaneously trying to put into practice about six to eight theories of what best practice education is . . . including flexible grouping and regrouping, standards based education rather than grades and all of that, with a high, high emphasis on social and emotional growth through restorative justice, a powerful professional learning community, [and] a tight knit community culture. (Powell, interview 1)

Practice was seen, therefore, as the interplay of theory and practice that included both academic and social-emotional practices, both of which were developed in response to student need and informed by educational research.

The implementation of "best practices," as Powell called them, was viewed as context dependent, not as rigidly following a fixed or "correct" approach as determined by outsiders. For example, although the school was "standards-based," Rocky Coast had done away with individual grade levels and formed three multi-aged groups of students called "divisions." The learning standards students needed to demonstrate mastery of in each division were the standards for the final grade level in that division: so, for example, in Division One, students needed to eventually meet the 8th grade standards over the course of 6th, 7th, and 8th grade. If the student met those standards in the first year of being a Division One student, he or she moved to Division Two. Alternatively, it may take a student longer than three years, in which case the student remained in Division One until he or she met the "passage," or end-of-division, standards. Grouping the grade levels into divisions, and choosing to focus on only one set of standards per division (instead of one set of standards for each grade level), was what the principal considered one of the

school's "greatest innovations" (Wilson, interview 1). Teachers agreed, and considered this approach more developmentally appropriate and "more flexible for your multi-aged learning environment" (Hughes, interview 1). Curriculum flexibility, and developmentally appropriate curriculum and pedagogy, were two of Rocky Coast educators' shared values, and key aspects of how they viewed and enacted practice.

The location of the school also drove many of the curricular practices at Rocky Coast. Because the school was located on the waterfront, boat building, fishing, and coastal ecosystems had all been topics of study, and students spent a lot of time at the ocean front observing and collecting data. The mission of the school ensured that teaching practice was not just instrumentally practical, but connected to the school's location and community in order to deepen student learning and connection through place-based teaching and learning. As the science teacher stated, as a result of the location, "If you want to do an investigation on the health of the clam flats, well, you can hit research skills, you can hit ecology standards, you can hit chemistry standards through water testing" (Hughes, interview 1). Connecting curriculum to place was a central value at Rocky Coast.

As mentioned previously, many students at Rocky Coast had special needs. Many practices at the school, including a strong emphasis on school culture and the dedication of many financial resources to having multiple special education teachers, reflected Rocky Coast educators' beliefs that a school could and should be responsive to all of its students. Powell described the school culture as

nurturing and inclusive. . .we really value the transparency of conversation and building relationships and not having cliques and the cool kids and

that kind of thing. We value all skills, all talents, all interests. We are not trying to fit anyone into a box. (Powell, interview 1)

Chosen practices, such as having a culture of Appreciative Inquiry, incorporating elements of the Restorative Justice program (which substitutes understanding the causes of misbehavior for "punishment" of misbehavior), and having daily, whole-school community meetings that included poetry or inspirational quotes and 5 minutes of school-wide reflective silence, all spoke to the conception of practice at Rocky Coast as context-influenced and in service of developing a learning environment that was responsive to all students.

According to Cochran-Smith and Lytle (2009), taking an inquiry stance on practice means taking up an expanded, transformative view of practice as described earlier in which practice is not conceptualized simply as "practical" but rather is "centrally about inventing and re-inventing frameworks for imagining, enacting, and assessing daily work in educational settings" (Cochran-Smith & Lytle, 2011, p. 21). The multiple frameworks from which Rocky Coast educators drew fueled constant reflection on how to best support all of Rocky Coast's students to become, as their mission called for, "caring, creative, resilient citizen-scholars." This interplay between theory and practice—praxis—was a central feature of Rocky Coast educators' approach to teaching and learning. Indeed, Rocky Coast educators continually made practice decisions based on a wide variety of factors, including but not limited to their students' demographics and academic and social-emotional needs, the vision, history, traditions, and institutions of the community, the mission of the school, and their content knowledge. This approach to

practice can be understood as taking an inquiry stance on practice. As Cochran-Smith and Lytle posit,

What practitioners choose to do at any given moment is understood to be informed by their more comprehensive and nuanced sense-making about a whole host of things—learners, languages, culture, race, class, gender, literacies, disciplinary content, social issues, power, institutions, neighborhoods, histories, communities, materials, texts, technologies, and pedagogies. Thus in all educational settings, practice, which is deeply contextual, relational, and interdisciplinary, is also and always theoretical and interpretive. (Cochran-Smith & Lytle, 2009, p. 134)

At Rocky Coast, practice was not just practical, but theoretical, interpretive, and clearly tied to the school's beliefs and values about integrated, place-based, student centered teaching and learning. It is clear that Rocky Coast educators believed they had "important emic perspectives and highly relevant and consequential ideas about what needs to happen in particular schools and classrooms to enhance students' education" (Cochran-Smith & Lytle, 2009, p. 139); and these ideas informed practice at Rocky Coast.

Views of Community at Rocky Coast

Whether termed "small learning communities," "professional learning communities," "teams," or "critical friends groups," the idea of communities in educational settings has become increasingly popular over the last 25 years (Dufour, Dufour, Eaker, & Many, 2010). Cochran-Smith and Lytle (2009) emphasize a range of types of educator learning communities, from what Diane Wood (2007) calls "infrastructure for the status quo" to "catalysts for change." Communities convened by

"highly directive, top-down initiatives" tasked with examining assessment data in service of determining "what works" to increase test scores represent a point toward one end of this range (Cochran-Smith & Lytle, 2009, p. 141). Toward the other end of this continuum are communities that "uncover, articulate and question their own assumptions about teaching, learning and schooling. In the process, practitioners pose problems of practice that require studying their own students classrooms, schools, programs, colleges, universities, and communities" (Cochran-Smith & Lytle, 2009, p. 141).

In varying degrees and in different ways, communities of educators work together to take up issues of teaching, learning and schooling. One issue related to communities is the underlying assumptions about where expertise lies. In highly-directed communities that focus on "what works," information often comes from an outside "expert" and is delivered to practitioners to be used. Other inquiry communities that focus more on uncovering biases and assumptions and problematizing practices often attempt to alter what Cochran-Smith and Lytle call the "expert-novice distinction" (p. 144) by positioning all community members—including but not limited to teachers, parents, students, university researchers, and community members— as knowers and valuable knowledge contributors. This serves to democratize these learning communities and reposition all members as lifelong learners who develop, change and grow over their professional careers.

Numerous small learning communities operated at Rocky Coast. Shorter-term communities were formed to take up large initiatives, such as the new teacher evaluation plan team that met for approximately six months. In addition, there were also permanent small learning communities, such the divisional groups for curriculum planning purposes

and the "learning triads" that were cross-divisional groups of teachers who observed each other and gave each other feedback on issues of teaching and learning. In addition, because of the small size of the teaching staff, all teachers met together for professional development on a biweekly basis in a learning community that was experienced by teachers as a true "catalyst for change."

In addition to meetings including approximately 10 minutes for Appreciative Inquiry, as described above, meetings at Rocky Coast included time for teachers to read new and foundational educational research, create and refine school practices and policies, and give and receive feedback on their questions and practices. For example, at one meeting I observed, teachers discussed what mental tools students need to, as the principal phrased it, "negotiate the world." Teachers brainstormed ideas such as valuing the process (not the outcome) of learning, the ability to identify, articulate, and justify opinions, and having a growth mindset. This conversation was connected to Rocky Coast students' needs, educational research, and educational values, and demonstrates their beliefs in deep, constructivist-style learning.

Not all of the teachers participated equally in these meetings. For example, in the six months I observed the meetings, Robertson the math teacher spoke rarely except for the required appreciations. Nevertheless, the meetings had a distinct feeling of camaraderie and inclusion, as was evidenced by the laughter, focused listening, and engagement of the teachers. These meetings were not a time of administrative "stand and deliver," although the principal ran all of them. Instead, there were dialogue and interaction between the principal and teachers as well as from teacher to teacher.

Discussion about big ideas about teaching and learning, such as Vygotsky's Zone of

Proximal Development, and investigations of other progressive schools' practices, show that Rocky Coast's work in community was directed towards shared growth and learning in service of school improvement and growth, not shared time for the transmission of information from principal to teachers or for conversation in order to improve test scores.

Shared time as a school community also fueled Rocky Coast's development as a new, start-up school, and deepened educators' understanding of shared values. For example, Hughes stated at one staff meeting,

Everything we've done has been based on the principles we believe in, and we haven't run away from them if we haven't yet gotten the results we want. We have changed our structures, but not our principles. We can't lower the bar. (Observation notes, 5/20/15)

At another meeting, a Division Two teacher stated, "We have trust and a collegial vibe, which enable us to give and receive feedback." Statements such as these demonstrate the willingness of Rocky Coast educators to be open to change, dialogue, and being a work in progress. Understanding that growth and improvement take time, Rocky Coast educators were open to learning, conversation, feedback, and admitting when things weren't perfect.

For the Division One team, working together was vital to their enjoyment of and feelings of success at teaching. All three had great respect for the other teachers on their team. Hughes the science teacher stated, "Working in a teaching team—oh my gosh, it's the most satisfying professional experience" (Hughes, interview 2). Similarly, Robertson felt that "Division One has a super star team. I mean, Holly and Fraser and special ed.: they are all amazing" (Robertson, interview 1). In addition to their enjoyment of and

respect for each other, Division One teachers planned together to create interdisciplinary curriculum, beginning by identifying the learning standards they were working towards, and then working backwards to design hands-on learning experiences that would help the students meet those objectives. They used student work and assessment data—both local and standardized—to make decisions about curriculum and pedagogy. Because time to meet and plan was virtually nonexistent for Divisions, much of this work took place online through shared documents in Google Drive or outside of school hours. In spite of the lack of common planning time, the Division One community of teachers appreciated their colleagues and the ways they pushed each other to create meaningful, engaging curriculum.

Communities at Rocky Coast were a fundamental part of the school culture, and their purposes, leadership, and focus on problems of practice identified by their participants demonstrates that these communities were aligned with what Wood (2007) described as "catalysts for change." Communities met for a variety of reasons, but they all functioned to further the mission of the school, not to increase the students' test scores. Leadership in communities was shared across roles; for example, in the community tasked with revising the teacher evaluation plan, the voice of the school board member (who was also a university-based teacher educator) was valued as equally as the voice of the teachers on the committee. Indeed, one unique aspect of the school was the amount of shared leadership across roles and even pay grades. Finally, communities at Rocky Coast focused on the improvement of teaching and learning through exploration of assumptions, beliefs, and values. This stance—of being open to learning and improvement—typifies learning communities that are aligned with Cochran-Smith and

Lytle's vision of inquiry communities that work from an inquiry stance, and ultimately served to "create access for all learners to equitable and stimulating learning opportunities [and] identify levers for needed change in people [and] institutions" (Cochran-Smith & Lytle, 2009, p. 142).

The Purposes of Education: Rocky Coast

Cochran-Smith and Lytle's fourth dimension of the inquiry as stance framework is democratic purposes and social justice ends. This has to do with the type of overarching vision that educators hold. As discussed in Chapter Three, in the years since *A Nation at Risk* (1987) was published, shared understanding of the purpose of education has shifted away from preparing students to participate in a democratic society to preparing students to compete in a global economy (Mehta, 2013). The catch phrase "college and career ready" has become the standard by which educational programs, curriculum, and standards are now evaluated. In fact, 70% of parents polled in a Gallup survey in 2013 believed that getting a college education was "very important," versus 23% of parents polled in 1978 (Gallup Inc, 2015). Although popular opinion has shifted to elevate college and economic achievement as measures of educational success, Cochran-Smith and Lytle (2009), along with many others, suggest that other ends—namely "a more just and democratic society" (p. 151) are also important educational outcomes.

In addition to considering the vision educators hold about the purposes of education, this fourth dimension also takes up ideas about what it means to educate.

Widely varied understandings of "educated" exist, from holding basic skills and knowledge to critical questioning and having the skills to analyze, critique, and debate.

Below, I describe the purposes of education that Rocky Coast educators supported, paying attention to both their beliefs about the purposes of education and what it means to educate, and then I evaluate those beliefs through the lens of inquiry as stance.

The mission of Rocky Coast states "our goal [is] preparing caring, creative, resilient citizen-scholars who will flourish in a rapidly changing economy" (Rocky Coast Mission Statement, 2015). While the first part of that goal—preparing caring, creative, and resilient citizen-scholars—was repeated in a variety of ways by the participants in this study, only the math teacher mentioned the desire to prepare students to "flourish in the rapidly changing economy." Others talked about school being the place where students developed "authentic community connections" (Williams, interview 1) and where educators "value all skills, all talents, all interests. We are not trying to fit anyone into a box" (Powell, interview 1). Hughes, the science teacher, stated,

[Rocky Coast is] a radically inclusive community-centered safe space that engages students' bodies in exploring their local communities, and engages their minds in analyzing how they learn and what they care about, and puts a lot of emphasis on character development and justice and purpose. (Hughes, interview 1)

These values about how the school should be structured represent what Rocky

Coast educators believed about the purposes of education: that is, that education
should develop students' unique characters, prepare students to work in

community, and develop a sense of justice and purpose in the world.

Rocky Coast educators' beliefs about the purposes of education aligned strongly with their beliefs about what it means to educate. Rocky Coast educators felt strongly that

education was about critical thinking, discovery, skill development, and analysis, and not primarily about learning content or taking standardized tests. The three teachers in Division One also felt strongly that education should help students grow as community members and critical thinkers, and give them the opportunity, as Hughes stated,

to be patient and flexible . . . We are teaching our kids from [age] eleven on, which is going to make them successful with pretty much anything they would want to do, because they know how to learn, they know how to access what they want to learn. They don't need all the content—you forget content. Even people with extraordinary cognitive gifts forget content so fast. (Hughes, interview 1)

To Rocky Coast educators, to be educated meant to be reflective and analytical and to have mastered basic skills that were represented in their standards documents. In addition, as will be discussed in great detail in Chapters Five and Six, Rocky Coast educators believed that developing students' abilities to learn was much more important than doing well on standardized tests or other currently mandated accountability checks on student achievement.

From the lens of inquiry as stance, engaging in conversation about the purpose of education is vital to continued growth and change when working within and against the educational system. From the lens of inquiry as stance, the purpose of education is not simply to boost test scores so that students perhaps become more competitive in the global economy. Rather, as this dimension states, the purpose of education is to foster democratic habits and practices and work towards social justice in society. This does not mean that skills and content are unimportant, but rather, that education "also includes

teaching students to critique that knowledge [and] to challenge the universality of the traditional knowledge base in the first place" (Cochran-Smith & Lytle, 2009, p. 148).

These particular purposes and ends of education rang true in various ways for Rocky Coast educators. Cochran-Smith and Lytle (2009) posit that "inquiry pedagogy engenders inquiry learning" (p. 147). At Rocky Coast, this most certainly was the case. Curriculum was designed around large essential questions, and assessment was often based on individualized demonstrations of knowledge. The democratic structures of teachers learning communities were reflected in the democratic practices enacted across the whole school, such as students taking on a variety of leadership roles and having voice in curricular decision-making.

Although Rocky Coast educators' beliefs about purposes of education aligned strongly with Cochran-Smith and Lytle's conceptions of the purpose of education when one takes an inquiry stance, I was not aware of any staff discussions explicitly about issues of social justice. Certainly, Rocky Coast educators were opposed to market-based testing mandates and believed deeply in the equality of all people, but I did not observe any specific social justice conversations about issues of race or class. This may have been due to the relative lack of racial diversity at the school, the lack of wide-spread poverty issues facing students, or perhaps because the most pressing demographic issue was that of special education. However, despite the lack of shared focus on issues of structural inequities, teachers individually and collectively strongly felt that the purpose of education was not to raise students' test scores, but to develop and deepen their love of learning, ability to think critically, and capacity to work with others to improve their community. I do not believe that this lack of observed conversation meant that social

justice issues were not important to Rocky Coast educators, but rather that they were dealing with the particular issues facing their students—specifically, issues of special education and school belonging—and, when discussing special education issues, Rocky Coast educators worked from an inquiry stance by focusing on issues of access, students' rights, and appropriate, student-centered accommodations. By focusing on their students' needs, Rocky Coast educators demonstrated an inquiry stance on the purposes and ends of education for their students within their community, focusing locally instead of nationally or globally.

Conclusion: Rocky Coast Middle School

Rocky Coast was a relatively new, small charter school whose identity was in the process of being shaped by progressive, constructivist theories and practices. It was clear that the educators at Rocky Coast cared deeply about creating a school that taught students to think critically, engage socially, and participate locally. Although Rocky Coast educators acknowledged the frustration and difficulty of many of the issues they were facing as a start-up school, such as lack of planning time and demographics skewed heavily toward students with special learning needs, they remained overall positive about the direction in which the school was moving. Throughout the year of this study, it became clear that these educators took what Cochran-Smith and Lytle would call an inquiry stance on teaching and learning, as demonstrated by their particular approaches to curriculum, the values they held about teaching and learning, and shared beliefs about teacher autonomy, control, and professionalism. These values and beliefs were similar to those held by educators at the other school in this study, Mountain Top Middle School, which is the focus of the second half of this chapter.

School Two: Mountain Top Middle School

Mountain Top Middle School is located in a consolidated school district that serves one small town and three rural towns, and is the only middle school in the district. The four towns cumulatively have a population of just under 20,000 people and are located approximately 30 miles inland from Rocky Coast Middle School.

History and Location

Walking into Mountain Top Middle School, a three story, modern school building, visitors generally first notice the enormous staircase that ascends from the first to third floors—wide, purple and straight up, it looked like (and was) a challenge for even the most athletic of the 617 middle schoolers who climb it day in and day out. The large lobby, in which the staircase is located, is bright from the natural light shining in from the skylights. To the left of the main door is the office: to the right, the cafeteria. Floors Two and Three house all of the academic classrooms. Mountain Top looked and felt like a middle class, modern middle school: motivational posters and student work lined the walls, and glass cases held hundreds of trophies from sports and extracurricular activities. There was an upbeat atmosphere in the school: the halls were generally empty during classes, but when teachers and students did pass, they generally smiled and said hello to each other. Laughter was often heard when walking by classrooms, and teachers greeted most students by name despite the large number of students.

Although significantly older than Rocky Coast, Mountain Top was actually a relatively new school at the time of this study. The school district itself was just created in 1973 and encompassed four towns. For 20 years, the junior high school and high school shared a building. When that building became too crowded, the district built the

current school, which officially opened its doors in 2001. Baudin, a participant in this study and the most senior teacher in the entire district, began teaching in 1973 when the district was formed due to consolidation of neighboring towns. According to Baudin, the district was committed to standards-based education from its inception, and over time had chosen various educational models to support its evolving mission. For example, teachers worked in cross-disciplinary teams from the beginning and for a while, followed a design model called The Modern Red Schoolhouse, a program designed by the conservative policy group The Hudson Institute. Many of the teachers at Mountain Top spoke of a sense of reforms coming and going at the school, and were frustrated by what one called "the revolving door of reforms." The current mission of the school states, "[At] Mountain Top, students work their way through a well defined continuum of learning using their passions to create a path and choose how they will demonstrate their understandings of learning." This student-centered approach to teaching and learning shaped many of the practices at Mountain Top.

The principal of Mountain Top during the time of this study, Stewart Miller, introduced a number of reform ideas when he became principal in 2011. When he first arrived, Miller led the staff through a variety of visioning exercises, which many teachers felt helped them reimagine what the school could be like after working for a more traditional administrator prior to Miller. The main result of the visioning exercises was that the school decided to shift towards a more hands-on way of teaching and learning they decided to call "applied learning." Applied learning, while not universally understood by all teachers at the school, was similar to Expeditionary Learning in that it centered on interdisciplinary, standards-based teaching. Miller stated, "It's the same

theories of Expeditionary Learning. We just can't afford the PD through Expeditionary Learning" (Miller, interview 2). Like Expeditionary Learning, applied learning units were based on learning standards from all four content areas, were based on provocative essential questions, and were student-centered. One difference, though, which perhaps was the result of this "homegrown" version of Expeditionary Learning, is that unlike Expeditionary Learning, the result of each applied learning unit was each student "applying" what he or she learned to new, novel content of his or her choice to demonstrate individual understanding of the learning standards. For example, when studying the science of change, including both physical change such as erosion and societal change such as cultural shifts, Miller described how students chose to apply their new knowledge of the science of change to a wide variety of topics, including learning theories, religious intolerance, and the way societies respond to natural disasters. In this unit, students presented their individual projects at a "trade show," and observers walked around, discussing students' work with them at a level that the principal reported was "like a college level symposium . . . it was that awesome" (Miller, interview 1). Student choice and engagement were two of the major values that emerged from the school's visioning exercises, and applied learning was developed based on the principles of Expeditionary Learning to address those two ideas.

Mountain Top faculty and students were divided into seven teams: two for each grade level, and one team that looped from 6-8th grades. Teams were named after mountain ranges, and each team had four content area teachers—math, science, English/Language Arts (ELA), and social studies—as well as special educators. Each team had between 70 and 80 students divided into four groups. After the school

developed the idea of applied learning, teams chose when they wanted to begin trying out the approach. The year of this study was the first year in which one team attempted to fully implement the approach, while the other teams decided to delay implementation until the following year. The team that participated in this study was a 7th grade group, called the Andes Team, which was implementing applied learning. In addition, an 8th grade team, called the Cascades Team, which was not implementing applied learning during the year of the study, also participated, although to a lesser extent. That is, the Cascades Team teachers participated in fewer interviews than the teachers on the Andes Team and Division One Team, and I observed only one of their team planning meetings. The Andes Team met weekly for 45 minutes to create and plan curriculum and discuss student issues. The Cascades Team had the opportunity to meet weekly, but did not always do so, and when they did they discussed student issues but did not discuss curriculum or instruction. The following section describes the administrators, as well as the teachers from both the Andes and Cascades Teams, that participated in this study.

Mountain Top Participants

The principal, two curriculum leaders, and eight teachers from Mountain Top participated in this study (see Table 6). Stewart Miller, Mountain Top's principal at the time of this study, had spent the first half of his career as an engineer, first designing trains and then as a designer of Animal Kingdom in Florida. After Animal Kingdom opened, Miller decided to try his hand at teaching science, but the impact of working at Disney World would never be far from his beliefs or practices as a teacher. According to the teachers, Miller was the main driver of the shift to applied learning, in part because he had been encouraged at Disney World to dream big—to imagine, to create, to conceive of

new ideas. Miller felt that traditional schooling, which centered on memorization of facts, was an outdated and ineffective model; instead he thought that school should be focused on students' learning habits of mind and skills that apply across content. Miller was also very committed to student choice being central in curriculum so that students felt personally invested in and excited by their learning. As he stated, "The system needs to get out of the way and let kids explore" (Miller, interview 1). A huge believer in standards-based teaching and learning, Miller viewed learning standards as the basis for applied learning, stating, "[Standards] should be the guides for what we want . . . then you let [students] explore and you teach them how to connect and construct their own learning experiences" (Miller, interview 1). Mountain Top teachers regarded Miller as an effective, dedicated, and knowledgeable leader.

Table 6

Mountain Top Middle School Participants

Mountain Top Middle School Participants			
<u>Name</u>	Role (grade, subject,	<u>Previous Experience</u>	Years Working
	<u>team)</u>		at Mountain Top
Stewart Miller	Principal, Mountain	Engineer at Animal	3 years
	Тор	Kingdom/Disney World,	
		science teacher, assistant	
		principal	
Hillary Tupper	Curriculum	Environmental educator,	11 years
	Coordinator, ELA	ELA teacher	
Sandy West	Curriculum	ELL teacher (7 years),	28 years
	Coordinator, Math	Math and ELA teacher	
		(10 years)	
Jessica Wilson	7 th grade science	n/a	10 years
	teacher, Andes Team		-
Margaret	7 th grade ELA teacher,	Science teacher	20 years
Anderson	Andes Team		-
Joseph Moore	7 th grade social studies	n/a	14 years
-	teacher, Andes Team		•
Denise Harris	7 th grade math teacher,	Elementary school	1 year
	Andes Team	teacher, 7 years	•
		Math teacher, different	
		district, 2 years	
Theresa Baudin	8 th grade ELA teacher,	n/a	42 years
	Cascades Team		•
Kate Ross	8 th grade math teacher,	n/a	14 years
	Cascades Team		•
Neil Peterson	8 th grade social studies	Environmental and	16 years
	teacher, Cascades	wilderness educator	·
	Team		
Martin	8 th grade science	Elementary teacher, 5	30 years
Hamilton	teacher, Cascades	years	•
	Team	-	

Two other educators at Mountain Top, the math and ELA curriculum coordinators, were considered "administrators" for the purposes of this study. Both were former teachers who had left the classroom to oversee the curriculum in their content areas. Sandy West was the curriculum leader for the math department, and Hillary Tupper was the curriculum leader for the ELA department. In these positions, West and

Tupper led professional development sessions with teachers, provided curricular resources, facilitated and coordinated curriculum team meetings, and managed the curriculum across grade levels for the school. The math teachers felt West did "an amazing job with the math curriculum—organizing it and kind of staying one step ahead of us" (Ross, interview 1). They appreciated her role as a coordinator and support provider. ELA teachers were mixed, however, in their perception of Tupper's role as department coordinator. While some appreciated her support and guidance, others felt she made top-down decisions that were not in line with the needs of students and teachers. This tension is explored in greater detail in Chapters Five and Six.

As I noted above, the two teams of teachers participated to different degrees in this study. Four teachers participated from the Andes Team, the primary team in this study. These four teachers shared classrooms, planning periods, and students, and were enthusiastic about being the first team to try applied learning. According to Harris, the math teacher,

Our team took [applied learning] on, then it's hopefully being filtered out throughout the school... we have kind of made it our own as far as sharing classrooms and making it what can we share across content and what can we have kids really kind of take a hold of the choice over what they are learning and what their projects are.

(Harris, interview 1).

Indeed, according to Curriculum Coordinator Tupper, the Andes Team's shared vision and enthusiasm for applied learning made them one of the most effective teams in the building.

The English/Language Arts teacher, Anderson, had taught for 17 years, although for most of them she had taught science. She switched to English/Language Arts four years prior because of staffing changes at the school. Unlike the other teachers on her team, Anderson was required to follow a curriculum for ELA that was not teacher-created. The curriculum, titled *Units of Writing* and often referred to as "Teachers College" or "The Lucy Calkins curriculum" because it was developed and written by Lucy Calkins, a faculty member at Teachers College whose work related to writing has been widely disseminated in the schools. Calkins' curriculum had been in place in the district at the elementary level for many years, and at the middle school for three years. Anderson experienced some tension between the *Units of Writing* program and applied learning, stating that she felt her "hands were tied" by the structured units, and didn't allow for as much creativity and individuation as she felt applied learning should have (Anderson, interview 1). In addition to teaching ELA, Anderson's son was also a student in the Andes Team.

Anderson shared classroom space with Moore, the social studies teacher. Their classrooms, which were technically two separate rooms, had a wall between them that collapsed, and was never closed whenever I observed. Moore had taught social studies for 14 years, all at Mountain Top. In addition to teaching social studies, Moore was active in the teachers' union, and the father of four children, one of whom was in his class that year. All of his children were students in the district.

Wilson, the Andes science teacher, shared a double classroom with Harris, the Andes math teacher. Wilson was new to Mountain Top the year of this study, and was thrilled to be there. She had previously taught elementary school for seven years in

another state that was very test-driven, and then had moved to this state and taught in a nearby school for two years before applying to teach at Mountain Top. Wilson was particularly happy to be working with Harris, who was in her 10th year of teaching math at Mountain Top. Harris and Wilson collaborated very closely on their content, even in addition to the work they did with the entire Andes Team, and developed many systems and structures that helped their classroom run smoothly and peacefully.

The second team that participated in this study, the Cascades Team, had two of the most veteran teachers at the school. Baudin, the ELA teacher mentioned previously, was in her 42nd year of teaching. Peterson, the social studies teacher, had taught for a total of 37 years, some at the elementary level, but most at Mountain Top. He was also the coach of the high school girls' basketball team. The math teacher, Ross, had taught for 14 years at Mountain Top, and the science teacher, Hamilton, had taught for 16. These four teachers had been together as a team for over five years. The Cascades Team did not take on applied learning as a whole team during the year of this study because of scheduling challenges and, Hamilton surmised, the ELA and social studies teachers did not want to do it for "part philosophical and part stylistic" reasons (Hamilton, email correspondence, 3.1.16). However, Hamilton and Ross, the math teacher, "did a little Applied Learning last year in calculating Carbon Footprints and it worked well" (Hamilton, email correspondence, 3.1.16). As an entire team, although they did not yet feel ready to take on applied learning, they did believe that they worked well together to support their students.

In the remainder of this section about Mountain Top, I describe the school through the lens of inquiry as stance, highlighting particularly the beliefs and values of

Mountain Top educators. Because I provided detailed information about each of the four components of inquiry as stance when describing Rocky Coast Middle School, I will not repeat that information here. However, I will briefly summarize each component as I am using it generatively, before describing Mountain Top educators' views of the components, and finally describing whether and how those views are consistent with Cochran-Smith and Lytle's (2009) inquiry as stance framework. As in the previous section, I begin with Cochran-Smith and Lytle's concept of knowledge.

Views of Knowledge at Mountain Top

As discussed previously, Cochran-Smith and Lytle's conception of knowledge in the generative sense considers the types of knowledge teachers need to know to teach well, and raises questions about how educators think about their work, who are legitimate producers of knowledge, and the relationships of knowledge and practice. For teachers who were part of the Andes Team, knowledge for teaching was understood as contextdependent, flexible, nuanced, and complex. Similarly to the Rocky Coast teachers, Andes Team teachers wrote interdisciplinary curriculum for their applied learning units. At planning meetings, each content area teacher suggested and critiqued ideas based on their content knowledge, prior teaching experience, and beliefs about the role of assessment to inform instruction. For example, when planning an upcoming unit on health care, disease, and immunity, teachers discussed how they would capture all of the critical thinking the students would be doing throughout the unit. The math teacher, Harris, posited that the exact nature of the math thread of the unit would need to be decided "after giving students the pretest, because I'll know better what kids need to learn for the math targets" (Harris, Observation notes, 3/10/15). Choosing to include targets (Mountain Top's word

for "standards") based on what students do not yet know, instead of based on a predetermined or assumed scope and sequence, demonstrates the view of Andes teachers that knowledge for teaching was context-dependent and flexible, and teachers were legitimate decision makers about what knowledge students should learn.

For Andes teachers, this conception of knowledge extended beyond their own knowledge as educators to helping their students wrestle with this same type of complex knowledge. For example, when deciding what the essential question for their upcoming health care unit should be, Harris and Moore discussed,

Harris: Aren't essential questions not answerable?

Moore: Yes: they have different answers for different people.

Anderson: Well, we need to make sure the students are able to back up their choices for how they answer the essential question.

Moore: Right. Because if there is a concrete answer, then this isn't an essential question. (Andes Team Meeting, 3/3/15)

In the unit that the Andes teachers were planning, students were confronted with issues of health care, immunity, disease, and body systems, and although the unit was based on Common Core and state standards, the final products that students made to demonstrate their understanding (board games) demonstrated a wide variety of both content knowledge and personal opinion on the topics, all supported by research they had conducted on their topics. For Andes Team teachers and their students, knowledge was understood as both global (We researched it and learned what others think about our topics) and local (My opinion, informed by my research and based on empirical evidence, matters and is useful to help generate new knowledge).

Three of the four Cascades teachers held similar conceptions of knowledge as Andes teachers and Mountain Top administrators. However, Peterson, the Cascades social studies teacher, did not conceptualize knowledge as context-dependent, flexible, and informed globally and locally. In particular, Peterson mourned the loss of teaching "[chronologically-based] history, because that is what I like and I think it's important . . . [now] it's a splintered history" (Peterson, interview 1). This shift to teaching towards learning standards, around themes such as power and change instead of time-based chunks of history, was embraced by other social studies teachers in the school as well as by administration, but was not supported by Peterson who felt that facts such as dates and places should be the basis of social studies, regardless of changes in pedagogy or student needs. This approach to knowledge was not aligned with how Cochran-Smith and Lytle (2009) conceptualize knowledge from the viewpoint of inquiry as stance.

Peterson aside, the approach by the vast majority of educators at Mountain Top did align with how knowledge is conceptualized when one takes an inquiry stance. As Cochran-Smith and Lytle (2009) suggest, taking an inquiry stance means educators wrestle with "problems for which solutions do not already exist and questions for which answers are not already known" (p. 197). On the Andes Team, educators purposefully designed applied learning units so that students could choose their own areas of interest to study and demonstrate their learning in unique and novel ways. Applied learning empowered Andes Team teachers to make decisions about what knowledge looked like, how it was expressed through assessment, and how to teach it. For the math and science teachers on the Cascades Team who did create some cross-content curriculum, the focus was still generally on creating student-centered, project-based curriculum, and real-world

knowledge about science in society and the environment were connected to students' lives through their curriculum.

Of course, the major exception to this understanding of knowledge as context-dependent and managed by teachers was the ELA curriculum, where teachers did not have much say over how what, how, or when writing units were taught. This exception raises the issue Cochran-Smith and Lytle describe as the false formal/practical knowledge divide. While this false dichotomy generally was not present at Mountain Top (indeed, the understandings teachers held of local, public knowledge were strong), the ELA curriculum stood out because it was the only content area where outside, "expert" knowledge was privileged over teachers' knowledge, beliefs, and experience. As noted previously, this tension is discussed at length in Chapter Six. Outside of this, though, views of knowledge at Mountain Top were consistent with Cochran-Smith and Lytle's (2009) conception of knowledge when viewed from an inquiry stance.

Views of Practice at Mountain Top

Understanding practice, when viewed in a general sense, includes questioning whether practice is viewed as primarily instrumental, theoretical, or as the praxis between the two, as well as questioning what counts as practice, and what it means to be accountable for one's practice. At Mountain Top, beliefs and values about how students learn always drove decisions about teaching practice. Teachers saw themselves as practitioners who were deeply engaged in their classrooms as well as in relationships with families, communities, and other practitioners outside of their immediate school context. Educators on the Andes team in particular embodied this notion of practice both through their innovative approaches to instructional practices and through their

engagement with their students' families, educational communities (such as the state's Historical Society and other education-related non-profit organizations), and the leadership the team members showed as the early adopters of applied learning.

For Andes teachers and school administrators, beliefs about student engagement, which were partially grounded in the research-based learning theories of Wormeli (2006), Marzano (2008), Wiggins and McTighe (2011; 2005), and others. In addition, these beliefs were also based on personal and professional experience with student-centered instruction. For these educators, the standard for instructional practices was whether or not students were authentically interested in and engaged in learning. For example, at one planning meeting, Anderson asked her team, "Are students engaged? I mean, are they learning what they want to learn in this unit?" (Observation notes 3/3/15). In addition, teachers and administrators evaluated their teaching practices through the lenses of cognitive complexity and student autonomy; at one team meeting, which was led by the principal, Andes teachers plotted their teaching practices on a graph that had cognitive complexity on the x-axis and student autonomy on the y-axis (Team Meeting 3/24/15). This exercise led to a rich discussion about which students needed more and different supports, and what additional classroom activities could be developed to deepen student engagement. Practice, for Andes team teachers, was not standardized or scripted, but about "inventing and reinventing frameworks for imagining, enacting, and assessing daily work" (Cochran-Smith & Lytle, 2009, p. 134).

As previously mentioned, the entire Cascades team did not do applied learning during the year of this study, but notions of practice as the interplay between instrumental practice and the theorizing and consequential action based on that theorizing were still

similar for Andes and most Cascades teachers. For Cascades teachers, practice was also very student-centered and based on choice, even for Peterson, who did not support the theme-based social studies curriculum at Mountain Top. For example, although he was reluctant to do so, Peterson taught a unit on "conflict," which began by teaching about the Revolutionary and Civil wars as examples of conflict. Following these two examples, "the kids could pick any war and kind of do the same thing and show me that they understand the process and how a society was changed" (Peterson, interview 1). However, Peterson indicated that giving students choices in the curriculum was required by administration—not a practice that he chose to use because he valued or believed in it.

Other Cascades teachers used student-centered practices in their classrooms because they believed in student autonomy, choice, and engagement; however, the curriculum was not connected across their classrooms. Therefore, although Cascades teachers enacted practice more individually in their classrooms (as opposed to the integrated, shared curriculum of the Andes teachers), ideas of practice for three of the four Cascades teachers were still based on the belief that practice is not simply steps toward a prescribed end, but an interactive negotiation of activity based on theory, student interest, prior knowledge, and context.

From the perspective of inquiry as stance, practice is the interplay of teaching, learning, and leading. At Mountain Top, views of practice were consistent with this understanding of practice. Most educators at Mountain Top worked from an inquiry stance when creating curriculum, working with families and communities, and making decisions about what, when, and how to teach. Practice was informed by research but not dictated by it, with the exception of the *Units of Writing* curriculum. Based on their work

with students, curriculum, and instruction, teachers theorized cross-cutting principles related to student engagement, personalized learning, and interdisciplinary curriculum, and in turn, these principles drove their practice. Viewing practice from an inquiry stance generally drove student-centered, engaging curriculum and instruction at Mountain Top.

Views of Community at Mountain Top

As previously described, communities of educators work together to take up issues of teaching, learning and schooling in a wide variety of ways. Some are more directed towards specific goals, while others raise and interrogate notions of and assumptions about curriculum, instruction and assessment, paying particular attention to the principles that guide that work. In the following section, I describe how the Andes and Cascades teams approached their work in community, and then analyze both teams through the lens of inquiry as stance.

Perhaps the biggest difference between the Cascades and Andes teams was how the two teams used their weekly shared meeting time. For Andes teachers, addressing issues of teaching, learning and schooling took place in part during Andes weekly team meetings. Andes teachers used their weekly meeting time to plan curriculum, evaluate their student supports, and assess student work. All members of the team enjoyed these meetings, partially because, as Harris put it, "We do have this planning down pretty solid. We do work well together!" (Observation notes 5/19/15). Teachers pushed each other to question their ideas, the purpose of what they were teaching, and the ways that their curriculum plans did (or did not) support students well. Teachers were also aware that their collaboration had a positive effect on their students' learning, as Wilson

acknowledged when she stated, "By structuring the unit in this way, we are using each other [the teachers] to get the students to push themselves" (Observation notes 3/24/15).

There was always a lot of laughter at the Andes team meetings, and the teachers regularly mentioned how important their planning time was to the success of applied learning. They also articulated how glad they were to be doing applied learning as a team, both because they appreciated the autonomy and creative license they had over curriculum planning, and because the approach aligned so well with their beliefs about how students learn. These shared beliefs, including "all students should learn at their own pace" (Harris, interview 1), school should "engage children and make them problem solvers and critical thinkers" (Wilson, interview 2), and "we can customize and personalize so that kids can be more engaged" (Stewart, interview 2), drove how teachers planned curriculum and instruction and were often used to guide decisions about teaching and learning.

When the four teachers on the Cascades team met together, on the other hand, they did not plan curriculum, or even discuss teaching and learning. Only the math and science teacher met separately to discuss curriculum on occasion. The entire Cascades team did meet occasionally to discuss student support issues, including one meeting I observed during which they made recommendations for high school placement (Observation notes, 3/23/15). And although Cascades teachers felt they collaborated very well in service of students (by discussing student needs and informing each other of family or other out of school news that might affect students' experiences in school), they did not want to take on applied learning as a teaching approach as an entire group. Their community time, therefore, was instrumental to supporting student needs, but not a

generative collaborative space that fostered critical reflection on the teaching and learning taking place for Cascades students.

In addition to team planning time, another important community structure at Mountain Top was the use of "focus groups," which were essentially content area groups headed by the curriculum coordinators. It was in these groups, which met monthly, that school-wide decisions about curriculum were made. Interestingly, the ELA and social studies teachers in this study felt decisions in these meetings were driven by administrative views of what the curriculum should be, while the math and science teachers felt decisions at the meetings were driven by teachers' opinions and beliefs.

The difference between these two groups was the curriculum coordinator in charge: Tupper organized the ELA and social studies groups, and West organized the math and science groups. For example, Peterson, the Cascades social studies teacher, believed that the focus group choice to transition from teaching chronological history to teaching centered on learning targets was the result of "somebody's resume building" (Peterson, interview 1). Similarly, Anderson, the ELA teacher on the Andes team, felt that teachers were forced to use the *Units of Writing* program in a prescribed way, stating, "For these six units [of writing], I have been told that this is how you are getting at them" (Anderson, interview 1). Conversely, Ross and Harris, both math teachers, felt the meetings were very teacher-driven, and they lauded the creation and use of an online repository of math teaching materials by teachers. Tupper's role at the school, and the tension between teacher and administrator decision making, was particularly significant for English teachers, and is discussed at length in Chapters Five and Six.

Cochran-Smith and Lytle (2009) describe communities that work from an inquiry stance as important vehicles "to improve the cultures of practice, enhance students' learning and life chances, and ultimately to help bring about educational and social change" (p. 140). This description fits the Andes Team, which worked tirelessly to create meaningful curriculum and instruction based on students' needs and interests.

Community time drove the progressive, student-centered work of the Andes Team and was essential to the enactment of meaningful applied learning. Without the applied learning focus, however, the Cascades Team used their planning time to focus on individual students but not shift the fundamental approach they took as a team to teaching and learning. Although the Cascades Team did not exist to improve test scores, and was not directed by outside "experts," the team did function in rather instrumental ways to provide support to students, and therefore did not collectively operate from what Cochran-Smith and Lytle would consider an inquiry stance.

The Purposes of Education: Mountain Top

As discussed previously, the fourth dimension of the inquiry as stance framework, Democratic Purposes and Social Justice Ends, takes up the vision the educators hold about the purposes and role of education in society. In contrast to many of the popular messages embodied in educational policy about college and career readiness, Mountain Top teachers were more concerned with school preparing students to live productive, engaged lives that may or may not include college. Parts of this vision centered on career skills teachers believed students would need. For example Baudin, Cascades Team ELA teacher, stated,

We are a public school and our charge is to provide good basic life-long skills—in my case, reading, writing, speaking, listening. Can your child read? Can your child write clearly and express him or herself? Can your child speak in front of a group or declare something in a class, even in discussion, to share ideas? Because I think the workforce still requires some reading, somewhere." (Baudin, interview 2)

Hamilton, the Cascades Team science teacher, was openly skeptical of college as the vehicle to leading a productive and engaged life, stating,

Then there is this whole other high-minded notion of like, well, college education makes you more worldly and you know, you can talk about ethics and philosophy and lead a principled life or whatever, but I think you can get all those lessons elsewhere for a lot less money. (Hamilton, interview 2)

It is clear in these two statements that the purpose of education was both to engage students in the process of learning, and to leave school ready to individually pursue next steps, whether it be college or a career. There were no preconceived notions of what students "should" do with their lives; rather, teachers' beliefs about student choice and voice extended beyond the curriculum they planned to beliefs about the purpose of education writ large.

Thus, while democracy and equity were occasionally part of the conversation about schooling at Mountain Top, what was more common was the overarching notion that schooling was a vehicle to individual, not societal, improvement. The major exception to this conceptualization was Stewart, Mountain Top's principal, who clearly

regarded education as a vehicle to transform societal inequity. Other teachers were very insightful and articulate about the limits of the educational system to create societal equity, especially when the current mechanism to do so is standardized testing. For example Moore, the Andes Team social studies teacher, stated,

Sometimes decisions and pressures coming from government and academia to raise these scores or those scores, but we are always—we always have that reserved skepticism, which says, hey, you are trying to measure something that isn't—you are not asking the right questions. It's not that the questions on the test are wrong, it's do these tests really tell you anything worth knowing about kids, about communities, about society in general, that are really more important than this outcome on this standardized test today? (Moore, interview 3)

When viewed through the lens of inquiry as stance, it seems that while teachers on both teams at Mountain Top did not accept the prevailing assumption that the major purpose of education is to prepare students to compete in a global economy (Mehta, 2013), they also did not fully embrace an inquiry stance on the purpose of education as a vehicle for societal transformation through a focus on democracy and social justice. As with Rocky Coast, I was not privy to conversations about issues of racial and class inequity, although a few teachers individually mentioned the effects of poverty on some of their students. Nevertheless, educators at Mountain Top did care deeply about the purpose of education for their students, but did not share with me how those purposes extend to education writ large.

Conclusion: Mountain Top Middle School

At Mountain Top, the Andes Team teachers and most Cascades Team teachers in this study approached teaching and learning from an inquiry stance; they questioned what, for whom, and how curriculum should be taught, they valued both traditional educational research and their own experiences as teachers and the interplay between the two, and they operated with values of student engagement and choice as the drivers of their work. Shared beliefs about teacher autonomy and professionalism—evidenced through conceptions of knowledge and practice, as well as through the collegial and mission-driven team meetings—created a productive, engaged working environment that teachers truly appreciated and enjoyed.

For the Andes Team, working from an inquiry stance deepened their work with applied learning. Working together to create interdisciplinary applied learning units helped build the Andes Team community and created space for deep reflections on knowledge, practice, teaching, and learning. For the science and math Cascades Team teachers, working from an inquiry stance meant they collaborated occasionally on cross-curricular units, and, for both of these teachers, had strong critiques about the role of high-stakes accountability measures in education, which will be discussed in the following chapters. The Cascades Team ELA teacher, Baudin, questioned the role of standardized curriculum and critiqued it for narrowing creativity in the classroom, demonstrating that she raised questions about the underlying goals of reform efforts. However, she stated that she chose to "be a team player" on most occasions, and did not often publically voice her concerns, demonstrating that she was not publically comfortable working from an inquiry stance.

Overall, Mountain Top teachers and administrators were proud of their school and how it served students. They believed in their capacity to have a positive effect on students. Collectively, Mountain Top educators took an inquiry stance on practice, and this stance impacted their sensemaking of and responses to the Common Core and SBAC, as will be discussed in the next two chapters.

Looking Across: Similarities and Differences between Mountain Top and Rocky Coast

There were a number of striking similarities between Mountain Top and Rocky Coast: namely, both had a charismatic leader who supported teacher agency, leadership, knowledge, and professionalism, and both had some curriculum models in place that were based on progressive, student-centered philosophies about choice, engagement, and critical thinking. While educators at Rocky Coast had more latitude to pick and choose how to create curriculum and instruction because of their charter status, many differences between the two schools were the result of school size, not the result of the values and beliefs that drove teaching and learning at each school. These similarities—in leadership, values and beliefs, and curriculum models—as well as differences—in size, amount of planning time, and student population—largely shaped the ways that educators at Rocky Coast and Mountain Top made sense of and responded to the Common Core and SBAC, the issue that is central to this study.

The purpose of the extended description of these two schools and the values and beliefs of the educators I studied at each school was two fold. The first purpose was to draw on multiple data sources to paint a rich picture of the two schools that were my research sites. According to Stake's (1995) analysis of case studies, researchers must

"treat the uniqueness of individual cases and contexts as important to understanding.

Particularization is an important aim, coming to know the particularity of the case" (p. 39). Describing the school settings, histories, and participants in detail captures "the particular" of each school in ways that develop and support understanding of this study's findings.

The second and perhaps more important purpose of the descriptions in this chapter was to make the case that the majority of educators at both Mountain Top and Rocky Coast worked from an inquiry stance on teaching and learning. As part of this stance, the educators in this study viewed themselves as knowledge generators (not just consumers) and professional practitioners. They interrogated not only their own beliefs and values as they were enacted in their teaching, but also the beliefs and values of the educational policies they were expected to implement. What I am suggesting here is that working from an inquiry stance enabled most of the educators in this study to make sense of and respond to the Common Core and SBAC based on their beliefs and values.

Because educators at Mountain Top and Rocky Coast worked from an inquiry stance on teaching, learning, and schooling, they made sense of the Common Core and the SBAC in particular ways that privileged their knowledge as professionals, their practice working in communities, and their shared educational beliefs and values. Educators' sensemaking of the Common Core and SBAC is the topic of Chapter Five.

CHAPTER FIVE

Making Sense of the Common Core and the SBAC

In this chapter I take up the first major research question that guided this dissertation: "How did educators at two middle schools make sense of the Common Core and SBAC and what influenced their sensemaking?" Based on my analysis, I found that the educators in this study understood the Common Core and the SBAC by engaging in what I am calling "principled sensemaking." The idea of principled sensemaking, which I explain in detail below, builds on my analysis of the pilot study I conducted at Grove Middle School and helps capture and explain how educators make sense of educational policy when they take an inquiry stance on teaching, learning, and schooling, as the educators from Grove, Rocky Coast, and Mountain Top Middle Schools did.

Principled sensemaking is a concept that builds on and substantially expands the ideas of sensemaking theory (Spillane, Reiser, et al., 2002) by incorporating into it ideas related to the notion of inquiry as stance (Cochran-Smith & Lytle, 2009). As I point out in Chapter Two, usually, when sensemaking theory is used to analyze educators' responses to policy, the policies in question are presented as if it is self-evident that these policies represent positive change and are therefore worthy of implementation.

Underlying these studies is the idea that there is a more or less "correct" way of understanding policy that is necessary for its smooth or full implementation. The assumption here is that teachers who do not accept new curricular or instructional policies or who co-opt them or implement them in only superficial ways do so because they do not have good enough or deep enough understandings, often due to the lack of

adequate professional development related to the new policies (Langton, 2014; Quinn, 2009; Spillane, 2004). In many of these previous studies, educators' critiques of the policies themselves have often not been described or accounted for and when educators' critiques have been described, and they have been treated as stumbling blocks to the appropriate and full implementation of policies because the critiques are regarded as misunderstandings, cooptation, or resistance to change.

In my pilot study and in this study, however, I found that educators' critiques of educational policy were generally not due to a lack of understanding of policy, but instead represented a more thoughtful and critically-oriented type of sensemaking than previous studies using sensemaking included—sensemaking based on clear, studentcentered, educational principles. Specifically, the educators I studied supported or rejected the policies in question in terms of their perceptions of the degree to which they believed the policies promoted or undermined core educational values, including their key beliefs about teaching, learning, learners' opportunities and needs, and the purposes of schooling. The new lens of "principled sensemaking" helps to explain how the educators I studied approached the Common Core and SBAC from a critical, questioning point of view. Thus in this chapter I argue that how and why the educators at two different middle schools made sense of the Common Core and SBAC were based on how they critiqued, understood, and questioned the educational principles that they perceived were promoted or undermined by these policies, and whether and how those principles aligned with their own educational principles.

It is important to note again that the notion of principled sensemaking I am offering contrasts in a certain sense with previous studies that emphasize "accurate"

sensemaking. When researchers present policy as unquestionably positive, research about educators' implementation of policy often assumes a kind of deficit perspective about educators, especially about teachers, who are positioned as knowledge receivers and as implementers of others' policies, but not as knowledge generators with thoughtful and principled ideas of their own about teaching, learning and schooling developed through years of critical inquiry in and on practice. Principled sensemaking, as I am using it here, builds on previous ideas related to sensemaking by taking an asset-based rather than a deficit-based view of teachers as knowledge generators and critical questioners.

It is worth noting here that I am not rejecting the general idea of sensemaking as a useful framework for understanding the relationship between policy and practice nor am I turning away from research that has documented the important role that educators' prior beliefs and the educational contexts in which they work shape the ways they understand and respond to new policy initiatives (Datnow & Park, 2009; Spillane, Reiser, et al., 2002). To the contrary, what I am trying to do is add to and enrich the ideas of sensemaking by integrating an asset-based view of teachers. Additionally, I retain many of the key concepts, including Spillane et al's (2002) three components of sensemaking, which were described in some detail in Chapter Two: individual cognition, which is how an individual's prior experiences, knowledge, and beliefs impact sensemaking; situated cognition, which is how educators work together, collectively, to make sense of policy; and the role of representation, which is how the ways that policy is represented (by policy documents, the media, and one's supervisors) affects sensemaking. Coupled with perspectives from the framework of inquiry as stance (Cochran-Smith & Lytle, 2009) Spillane's three components of sensemaking work very well to unpack and describe how

the educators I studied critiqued and made sense of the Common Core and SBAC.

I merged the sensemaking and inquiry as stance frameworks by focusing on the aspects of three components of sensemaking that most clearly intersected with notions of inquiry as stance. I considered individual cognition in terms of the educational values and beliefs of the educators at the two schools and how they saw those values and beliefs represented (or not represented) in the Common Core and SBAC. The aspect of situated cognition is aligned with Cochran-Smith and Lytle's notion of inquiry communities that work from an inquiry stance. I considered situated cognition in terms of the collective, critical sensemaking that happened when teachers worked in teams. The third aspect of sensemaking—representation—was a very useful lens for unpacking how the administrators at each school characterized and emphasized (or deemphasized) the Common Core and SBAC and how this had an impact on teachers' principled sensemaking of the policies.

Integrating ideas related to inquiry as stance with the key ideas from sensemaking theory into the concept of principled sensemaking highlights reflective, critical, and professional aspects of sensemaking. This adds to and extends sensemaking theory in ways that are consistent with how the educators in this study made sense of the Common Core and SBAC. I return to the idea of principled sensemaking in the final chapter of this dissertation, further theorizing it as a concept that may be useful for studies of educators' perceptions of and reactions to new policies.

This chapter has three major sections. The first, which is about the Common Core, provides an analysis of how the educators at both schools engaged in "principled sensemaking" of the Common Core, including what they considered its positive and

negative aspects, and how school leaders' representation influenced their sensemaking. The second section, which focuses on the SBAC, provides an analysis of how educators at both schools engaged in principled sensemaking of the SBAC.

Making Sense of the Common Core at Rocky Coast Middle School

At Rocky Coast Middle School, the Common Core was the basis of the school's curriculum as described in their charter application. While state law required that charter schools follow the Common Core, it did not require how or to what extent they did so. However Rocky Coast founders, primarily the principal, Williams, emphasized the large role the Common Core played in the founding of this new school. My interviews and observations suggested that Rocky Coast educators were firmly committed to standards-based education, and they viewed the Common Core as a solid set of standards upon which to create a curriculum.

Principled Sensemaking of the Common Core at Rocky Coast

In this section on principled sensemaking of the Common Core at Rocky Coast, I first describe how Rocky Coast educators viewed, defined, and described the Common Core, particularly in relation to their educational values and the mission of the school. To deepen understanding of how these educators understood the Common Core, I discuss aspects they believed to be both positive and negative. Then I describe the factors that influenced their sensemaking.

At Rocky Coast, most educators viewed the Common Core as a set of what are currently called "21st century" skills, not a body of content knowledge. 21st century skills are commonly understood as skills that "prepare [students] for increasingly complex life and work environments in the 21st century, [and] focus on creativity, critical thinking,

communication and collaboration" (Partnership for 21st Century Learning, 2016). They described the Common Core as fitting well with Rocky Coast's mission of providing a "rigorous, interdisciplinary, project-based education" to their students (Rocky Coast website). Rocky Coast educators also described the Common Core as a set of standards that emphasized useful skills that aligned with their beliefs about how students learn best; specifically, that students need hands-on practice with skills in real-life situations to obtain deep understanding—not content-heavy lessons that require memorization. For example, Hughes, the science teacher, stated,

The Common Core is an effort to move away from content, memorization-based standards to skill, proficiency type standards, where there is less breadth and more depth . . . You are spiraling through a core set of skills every single year and deepening your proficiency of conventions and grammar and numeracy and algebra with the hope that people can leave that system able to tackle a variety of tasks. (Hughes, interview 1)

Powell, the Humanities teacher, concurred, stating, "I think that I would say that [the Common Core] is a structure that is in place to allow us to break down content areas within skill sets and targets within those skill sets" (Powell, interview 1). These statements, which show the compatibility Rocky Coast teachers perceived between the Common Core and their approach to curriculum, also show how they believed the Common Core could be used in support of their educational values related to teaching cross-disciplinarily while supporting students' skill development.

Rocky Coast educators also saw the skills in the Common Core as real-world, complex skills, not simple or discreet ones. Williams called them "soft skills, such as

problem solving or perseverance in the face of obstacles" (Williams, interview 1). This type of skill contrasts with the skills one might need to pass a standardized test, for example. Because the skills in the Common Core were viewed as complex, "21st century" skills, not narrow or simple, Rocky Coast educators also believed that the Common Core was useful to help students learn deeply about particular topics, instead of focusing on surface learning. They believed that the Common Core allowed them to teach depth over breadth. For example, Williams stated,

[The Common Core] reflects a preference for depth over breadth, whereas we have been in a mile wide, inch deep, system for a long time and now we are really trying to go to a system that is [different]—it may be that kids know fewer things in great detail, but those things that they do know, they will actually understand. (Williams, interview 1)

These shared understandings of the Common Core—that they were a set of real-world, complex skills that focused on depth of understanding—aligned with Rocky Coast educators' beliefs about the instruction that is most valuable for student learning, as discussed in Chapter Four. Because they believed that the Common Core was a set of standards that was structurally aligned to the curricular practices valued at Rocky Coast, Rocky Coast educators believed that the Common Core was a useful and appropriate—although not perfect—set of standards to use to guide curriculum and assessment.

The next two sections of this discussion on principled sensemaking of the Common Core at Rocky Coast address what Rocky Coast educators believed were positive and negative aspects of Common Core. Because sensemaking is not a simple or definitive process, but rather complex and situated (Datnow & Park, 2009), unpacking

the Common Core by analyzing both positive and negative perceptions of the standards deepens understanding of how Rocky Coast educators made sense of the Common Core based on their educational principles.

Positive Aspects of the Common Core. It was clear from observations and interviews that Rocky Coast educators believed the Common Core had many positive attributes—including a focus on depth over breadth and containing real-world, important skills, as previously described—because these positive attributes were generally those that they felt aligned with Rocky Coast's mission and values. In addition to perceived depth and authenticity, the three other most common positive attributes mentioned by Rocky Coast educators were the Common Core's capacity as a tool for individualizing education, the flexibility of implementation that Rocky Coast educators felt were built into the standards, and their national scope.

Many Rocky Coast educators believed that the Common Core was designed in ways that allowed them to personalize education for their students, which was part of the mission of Rocky Coast. For example, Powell stated, "The Common Core helps so that we can target—identify what is appropriate for students to know at that age and at that stage and customize and build our learning environment to meet those skills" (Powell, interview 1). The ability to "customize" curriculum based on student need was an important value at Rocky Coast. In addition, teachers also felt that the Common Core allowed for flexible differentiation for various students. Williams stated, "[With the Common Core], we are not spending most of our energy having ELA standards that come from forcing every kid to love *The Lord of the Flies* and instead are saying, nope, you have to read, but there are other ways to read" (Williams, interview 2). This belief that

the Common Core, a set of standards, was actually not intended to standardize teaching and learning—a view that is widely perceived to be true in many of the controversies surrounding the Common Core—was shared by almost all Rocky Coast educators. As Hughes, the Division One science teacher stated, "I'm not anti-standards at all. I think I'm anti-standardization of teaching, learning and assessment," and Hughes did not believe the Common Core required teachers to teach in a prescribed manner (Hughes, interview 2). Thus at Rocky Coast, educators believed that the Common Core was a support, not a hindrance, to their mission of personalizing and individualizing education for their students.

Another aspect of the Common Core that Rocky Coast educators perceived as positive was the Common Core's flexibility in terms of implementation. Implementation of the Common Core has been one of the major, if not the major, uphill battles of the entire initiative. As reviewed in Chapter Three, large-scale national surveys have repeatedly demonstrated that teachers do not feel they have received appropriate support for implementation. In the state where this study was conducted, a number of teachers testified to the state legislature that the Common Core had brought on a slew of prescriptive, scripted curricula that did not allow them to teach their students appropriately. In contrast, at Rocky Coast, educators had a different view. Most of them believed that the Common Core was purposefully not aligned to particular teaching practices or certain content, but was instead designed to be, as Powell put it, "very adaptable to a local environment" (Powell, interview 1). As Hughes stated, "The way it is written, the Common Core standards, as long as teachers have freedom in the way that they are able to teach those things, I think they can work for lots and lots of students"

(Hughes, interview 2). Clearly, Rocky Coast educators felt the Common Core afforded teachers autonomy over the implementation of the standards, and that with that autonomy came the opportunity to use them flexibly so that they would support all students in line with their principles and the mission of the school.

A third positive aspect about the Common Core articulated by Rocky Coast educators was the fact that the Common Core was national in scope. Educators at Rocky Coast appreciated that the Common Core was a national initiative for numerous reasons. Primarily, they felt that having national standards was good for students. For example, Robertson stated,

Well, I think that a lot of students probably are not going to stay in [our state] . . . If someone wants to go and work in California and have a job out there as a computer programmer or anything related to math or science, they should be at the same level to be competitive in the job market.

(Robertson, interview 1)

Barnes-Fisher, the assistant principal, concurred stating, "I do think I like the idea of a more standard across the country approach. I think it will benefit kids who move around" (Barnes-Fisher, interview 1). Rocky Coast educators also felt the national scope of the standards was beneficial for teachers. Hughes believed that national standards represented shared understanding among educators, and stated, "I still think there is value in agreeing on basic things that we need our students to learn" (Hughes, interview 1). Barnes-Fisher felt "[the Common Core] will benefit teachers, giving them flexibility to be able to move around and not be so constrained to specific state stuff" (Barnes-Fisher, interview 1).

Interestingly the Common Core has also been critiqued for being national in scope (Arana, 2014; Schneider, 2015; Strauss, 2013a)—one of the very aspects that Rocky Coast educators liked about it. Among other things, critics claim that because it is national in scope, the Common Core represents a federal (and therefore illegal) take-over of education which takes control away from parents (Strauss, 2013a), and that it is an attempt to create a national market for educational companies (Arana, 2014). Rocky Coast educators were aware of these critiques, but because they perceived that the Common Core afforded flexibility in implementation and was designed to personalize education, they did not feel national scope was a problem for their school. Indeed, Williams felt that the national scope meant that repetitive conversations about what standards should be taught would end. He stated,

"[The scope was] the appealing part for me. At the time [the Common Core were created], I was working with schools in Massachusetts, New Hampshire, New York and Maine and had in other parts of my career worked in Ohio and Washington State and Rhode Island and every single time I had been working with the staff, they would go through some sort of periodic scope and sequence conversation and have the same circular, unproductive conversations over what should we teach? And when? Over and over. And I was, at that point, saying, I don't give a shit what the standards actually say, if you can prevent people from circling around on that conversation, instead of saying "what are we going to teach," [saying] how are we going to teach what we already agree everyone should learn?

So at the time I was enamored of [the Common Core] mostly because it would eliminate that discussion. (Williams, interview 2)

This perception that time would be better spent discussing how to teach to some set of national standards, instead of engaging in endless debates about which standards to teach, was particularly salient at Rocky Coast, where, as discussed earlier, there was very little time in the school day for curriculum planning.

In addition to supporting the uniformity of the standards across state lines for students or teachers who might choose to work out of state, unlike the other teachers at Rocky Coast what math teacher Robertson appreciated most about the standards was that the testing of the standards would also be uniform across states. He stated, "So we know what is going on around the country and when assessment time comes—national assessments of whatever variety, we can actually see where we stand compared to the rest of the nation" (Robertson, interview 1). This quote shows that Robertson valued using the standards to compare schools, not just to improve achievement at Rocky Coast. All of the other educators at Rocky Coast were extremely critical of the national assessment aspect of the Common Core. This negative critique of the Common Core, and multiple other critiques, are the focus of the next section of this chapter.

Negative Aspects of the Common Core at Rocky Coast. From the perspective of Rocky Coast educators, there were multiple negative aspects of the Common Core although these aspects did not stop Rocky Coast educators from using them. But these negative aspects are important to understand because they give a complete picture of how these educators made sense of the Common Core based on their principles. These negative critiques also help highlight how Rocky Coast educators operated from an

inquiry stance because they based their negative critiques on aspects of the Common Core that did *not* align with their educational beliefs and values. The three main negative critiques Rocky Coast educators raised about the standards were the number of standards in the Common Core, the way the standards were organized, and their developmental appropriateness.

The critique that was voiced by all Rocky Coast educators was the sheer number of standards in the Common Core. Barnes-Fisher, the assistant principal, felt "we are not getting them all and we are not going to. It's going to take a long time to make our curriculum meet all of those standards" (Barnes-Fisher, interview 1). The humanities teacher agreed, stating, "We could so simplify this. It's like, why does this document have to be 100 pages?" (Powell, interview 1). This critique is based on Rocky Coast educators' beliefs about depth over breadth. As discussed in the previous section, they generally believed that the Common Core standards did allow them to "go deep." However, while individual standards may have aligned with in-depth teaching, the large number of standards gave Rocky Coast educators pause because in order to cover all of them, they would have had to stop teaching some of them deeply. They developed a partial solution to this problem by revamping how they assessed standards at each division level, which is discussed in Chapter Six.

In addition to being too numerous, Rocky Coast educators felt the standards were written poorly. Powell stated, "They are so redundant and cumbersome that [the Common Core] aren't necessarily accessible" (Powell, interview 2). She felt that multiple ideas and objectives were often packed into the same standard, making it difficult to tease out what she was actually supposed to be teaching and assessing. Robertson, the math teacher, felt

that the Common Core math standards were poorly written because they did not spiral through math concepts, but instead were organized by topic. He felt the standards assumed students had base knowledge that they did not necessarily have, stating, "You can't really teach all of a standard at once, so that's what I have to come up with when I teach, is how do I spiral this knowledge? (Robertson, interview 1). As this quote demonstrates, Robertson's beliefs about how students learn math were not reflected in the organization of the Common Core, and thus he critiqued the standards (and found ways to work around them) based on his educational principles of developmentally appropriate instruction in math.

The final critique of the standards was voiced only by Robertson, who felt that the math standards were developmentally inappropriate. He stated, "They keep pushing the material down grade levels. So algebra is now at the 7th grade level of the school systems, which is ridiculous. Some of the kids aren't mature enough to handle that type of material yet" (Robertson, interview 3). This critique is well-documented in both media reports about the Common Core and recent research (Miller & Carlsson-Paige, 2013; Strauss, 2014a). Because Robertson valued supporting students' individual needs, and Rocky Coast had a large percentage of students with special needs, this critique was especially relevant for math instruction for Rocky Coast's student population.

In spite of these critiques, Rocky Coast educators felt generally positive about the Common Core, and believed that the standards were in fact a "better set" of standards than others they had worked with in the past, or, in the words of Powell who had never worked with standards before, "At least it's a dart board to throw darts at" (Powell, interview 2). This study, however, takes up both how educators perceived and understood

the Common Core and *why* they perceived and understood the Common Core in those ways: the focus of the next section.

Influences on Principled Sensemaking of the Common Core at Rocky Coast

Why did Rocky Coast educators understand the Common Core as real-world, skill-based standards, that despite some flaws, were worthy of using as the basis of their curriculum? As I argued in the introduction to this chapter, this was based on their perception that the values promoted by the Common Core were in alignment with their own professional values and beliefs. I use Spillane et al.'s (2002) three components of sensemaking to elaborate in the sections that follow. I show that the Rocky Coast educators made sense of the Common Core in terms of individual cognition or professional beliefs, in terms of situated cognition or collective understandings built primarily within their working teams, and in terms of representations, made primarily by the principal, that the Common Core was aligned with the school's mission.

At Rocky Coast, some teachers had done in-depth analysis of the Common Core. Hughes, the science teacher who had joined Rocky Coast's faculty before the school opened, had worked extensively with Principal Williams to create a complete standards document for the school that covered all subject areas. He had read many different sets of standards and had compared them to the Common Core. His deep support of the Common Core and his sensemaking of the standards as high-quality, flexible standards, was based in part on his close reading of and about the standards, which led to the belief that the Common Core aligned to Rocky Coast's mission.

Similarly, Williams had been exposed to the Common Core when he worked with Expeditionary Learning. He made sense of it at that time by comparing it to the standards

he had worked with in many different states, through the lens of experiential education, which is a student-centered, hands-on approach to teaching and learning. Although Powell, the Humanities teacher, had not worked with the Common Core prior to this school year, she too used her close reading of the standards to determine which standards most supported the creative, flexible way she approached reading and writing instruction. And as described previously, Robertson the math teacher also made sense of the standards based on the ways he was able to "spiral" curriculum that deepened student understanding. Individually, therefore, principled sensemaking was based primarily on how individuals' believed the standards aligned with their student-centered, constructivist beliefs about teaching and learning.

In sensemaking theory (Spillane, 2004; Spillane, Reiser, et al., 2002), situated cognition has to do with the meaning educators make of policy within groups, such as school-based groups, or other larger groups such as social networks and professional affiliations. At Rocky Coast, a significant amount of professional development time was spent deepening shared understanding of the mission, vision, and values of the school, including educators' appreciation for the "strong emphasis we place on relationships, individualization, humor, and being student centered" (Powell, observation notes, 2/10/15). In staff meetings, these shared beliefs were often explicitly connected to the school's practice of standards-based teaching and learning. For example, when planning their "culminating" project for a unit, Division One teachers chose to have students present their final projects in six small spaces around the school during an open house. They chose to have students deliver a short presentation about their projects "to meet the speaking standards" in addition to meeting the other standards of the unit (Observation

notes, 2/25/15). However, small spaces were also chosen for presentations to support those students who were nervous or reserved in groups, which reflected the care with which Rocky Coast teachers approached structuring their curriculum and instruction based on students' needs.

Staff meetings did not generally include explicit conversation about the Common Core. When teachers did talk about the Common Core in staff meetings, however, conversations were positive and focused on the use of standards as a teaching and learning tool. For example, at one staff meeting, the Division 2 Humanities teacher stated,

Our curriculum is firmly rooted in the Common Core. Even now, as we have to cover sex ed, I use the Common Core to push students to answer, "What do I think? What is my opinion?" The Common Core ELA standards are a great place to ask students to identify an opinion and provide evidence. Actually all the Common Core tasks are so important for life navigation." (Observation notes 3/25/15)

Other teachers in the room nodded their agreement. Situated sensemaking of the Common Core, therefore, happened during staff meetings that were centered on discussions of how curriculum could best support student needs, the vision of the school, and the mission of being standards-based. Working collaboratively on curriculum development and school policy and procedures shaped how Rocky Coast educators made sense of the Common Core because the meanings of the standards—and the principles they promoted—were discussed and agreed upon in community. Through discussion, educators heard others' points of view and constructed knowledge together about what

the Common Core was (and was not) and how this fit with Rocky Coast's vision and curriculum.

How policy is represented to educators is the third component of sensemaking theory (Spillane, Reiser, et al., 2002), and, as with the other two components, was a very useful concept in unpacking and understanding how the educators in this study used their educational principles to make sense of the Common Core. The Common Core was represented to Rocky Coast educators by numerous people and groups in numerous ways, and all had varying degrees of impact on how Rocky Coast educators made sense of the standards. But the largest impact was how the Common Core was represented by Williams, the principal. For example, during the year of this study, the Common Core was regularly highlighted in the news media, and the state legislature was considering whether to remove the Common Core as the state's standards. Although the teachers at Rocky Coast were aware of these debates, they did not seem to shape how the teachers made sense of the standards. Instead Williams' representations and understandings of the Common Core during conversation, in staff meetings, and via curriculum feedback, had a much bigger impact on how Rocky Coast teachers made sense of the Common Core.

My observations indicated that Williams often proposed a topic or idea for discussion and then listened closely while teachers discussed with each other their opinions, ideas and questions about the topic. Then Williams weighed in with "thoughts that align with the mission, and with the big picture of the school" (Field notes, 3/25/15). For example, during a conversation about whether to provide intricate checklists for students to manage their final projects, Williams first listened to the variety of opinions offered by teachers about the logistics and the structures of the checklist system. He then

stated, "We can do this (the checklists) now because they trust us. We've built that trust." (Observation notes, 3/11/15). This demonstrates how even small instructional choices involving the Common Core, such as using a checklist to measure progress towards meeting the standards, were connected to larger school values, such as building trust that fosters learning.

Williams consistently represented the Common Core as a worthy target that was intended to guide—but not dictate—curriculum and instruction. In a curriculum planning meeting with Division One teachers, Williams told the team, "It's okay to go for depth over breadth. It's okay not to hit every single standard. If you can't realistically hit a standard, don't plan for it" (Observation notes, 5/18/15). Because Williams represented the Common Core as a tool to use to help students "go for depth," teachers at Rocky Coast approached them in this way, and thus saw them as standards that reflected their shared professional value of depth over breadth. Williams's values and beliefs were important influencers on how Rocky Coast teachers made sense of the Common Core as in line with the educational principles collectively held at the school. Because Williams believed the Common Core aligned with the school's mission, he talked about it in that way, which influenced how teachers thought about and used the standards.

At Rocky Coast, the educators compared the educational principles they believed were promoted by the Common Core with the mission and vision of the school and their own professional beliefs and values. Whether sensemaking took place during conversations about curriculum, or when discussing an article about the Common Core in relation to whole-child development (Thomsen & Ackermann, 2015), making sense of the Common Core at Rocky Coast consistently occurred in relation to shared principles

about teaching, learning, and schooling. It is very important to note that the Common Core was not discussed and unpacked in order to raise test scores or satisfy external demands that the school should be standards-based. Rather the Common Core was understood at Rocky Coast as standards that reflected the educational principles of the school and educators.

Making Sense of the Common Core at Mountain Top Middle School

Mountain Top educators understood and made sense of the Common Core in some similar ways to Rocky Coast educators, but in other ways their sensemaking was quite different. Below I describe how Mountain Top administrators, as well as teachers on the Andes Team and Cascades Team, talked about, defined and described the Common Core and its negative and positive aspects through the lens of principled sensemaking. Then I show *why* Mountain Top educators made sense of the Common Core in the ways they did, using sensemaking theory's three components of individual cognition, situated cognition, and representation (Spillane, Reiser, et al., 2002), coupled with the notion of inquiry as stance that focuses on values and beliefs.

Principled Sensemaking of the Common Core at Mountain Top

Like Rocky Coast educators, the majority of Mountain Top educators were also committed to standards-based education. However, while the administrators and most Andes Team Mountain Top educators believed the Common Core was an improved set of learning standards over the previous state standards, most Cascades Team members saw it as just a different—but not necessarily improved—set of standards. For example, the Cascades Team math teacher described the Common Core as "just a new set of guidelines" (Ross, interview 1), and the Cascades Team ELA teacher stated, 'The

Common Core [is] just another way of looking at objectives and planning targets" (Baudin, interview 1). Possibly because the teaching tenure of the Cascades Team educators was significantly longer than the other educators in this study, and because they had seen many educational reforms come and go during their careers, these educators generally viewed the Common Core as a repackaging of already existing learning expectations rather than as different and improved learning standards. However, it is important to note that the Cascades Team educators supported and believed in standards-based teaching and learning in general, and in fact they believed that these were key to improving educational experiences for students. In addition, they did not believe the Common Core was a *worse* set of standards than others that would detract from their goals.

In contrast to the interpretations of the Cascades team, Mountain Top administrators and most Andes Team teachers believed the Common Core was an improved set of standards over the previous state standards. For example, Principal Miller believed not only that the Common Core standards were better standards than previous standards, but also that the way they were organized allowed Mountain Top educators to teach more effectively. He stated,

The Common Core standards are good expectations of what we want kids to know and be able to do. By having that kind of progression of what we want kids to know and be able to do, you can then set up a learning progression and help kids to move through it . . . There is a much more stronger connection [than with previous standards] between what we are asking kids to do and that clarity is imperative. (Miller, interview 2)

Wilson, the Andes Team science teacher, described the Common Core in a similar way:

[It's] a set of standards. . . [but] it's a different way of thinking compared to the way that we learned when we were kids. It's really making sure that students understand what they are learning, instead of just memorizing a formula or memorizing facts. It's digging a little bit deeper to get understanding. (Wilson, interview 1)

This view of the standards as promoting critical thinking was also supported by Tupper, the ELA curriculum leader, who stated, "At the core of all of [the Common Core], even in math, is this idea of argument—like coming up with a claim or an idea and then backing it up with actual evidence from somewhere" (Tupper, interview 1).

Administrators and Andes Team teachers at Mountain Top also defined the Common Core by what they believed it was not. For example, Wilson, the Andes Team science teacher, stated, "Everybody is so afraid of like [the Common Core says] this is exactly what you are going have to teach and you are going to have a scripted—but it's not that. It's saying . . . this is what we are expecting" (Wilson, interview 3). Similarly, Tupper described the Common Core as "kind of like building codes. Construction codes. So it lays out kind of the bare minimum expectations for certain things" (Tupper, interview 1). This conception of the Common Core as providing helpful minimum expectations that did not dictate a scripted curriculum allowed most Andes Team teachers to feel a sense of autonomy over implementation of the standards, an essential point that I discuss at length in Chapter Six.

Administrators' and Andes Team teachers' understandings of the Common Core as a set of standards that promoted critical thinking over rote learning were similar to Rocky Coast's educators' understanding of the Common Core, but they stood in contrast to most Cascades Team educators who simply viewed the Common Core as a new but relatively generic set of expectations that were not much different from their previous state standards. This difference of opinion about the Common Core largely impacted how these two Mountain Top teams of teachers took up and used the Common Core in their curriculum and instruction, which is discussed in Chapter Six.

Regardless of how educators at Mountain Top understood the Common Core—either as an updated, but not radically different, set of standards from the previous state standards, or as an improved, clearer set of standards that supported critical thinking— all of the educators in this study had both positive and negative critiques of the standards.

These critiques demonstrate the ways these educators worked from an inquiry stance to make sense of the Common Core in nuanced and thoughtful ways. Below I describe what Mountain Top educators believed were the positive and negative aspects of the standards.

Positive Aspects of the Common Core at Mountain Top. Most of the educators at Mountain Top had at least some positive things to say about the Common Core. Across both teams and the administrators, most educators believed the Common Core promoted critical thinking, was appropriately national in scope, and allowed teachers to focus on depth over breadth. The most enthusiastic supporters were the principal, the curriculum coordinators, and the math and science teachers on the Andes Team. As mentioned previously, the stronger supporters of the Common Core viewed the standards as pushing kids to think critically, as Harris, the Andes Team math teacher described, "Before it was

just, get the right answer, but now it's like, defend your answer and analyze this error. So there are critical thinking components, like being able to communicate and justify and have a reasonable answer" (Harris, interview 1). Similarly, the Andes Team science teacher stated,

I think [the Common Core] goes in-depth and instead of just teaching kids facts, it's giving us the opportunity to have kids apply learning and have an understanding versus memorizing. And I feel like the Common Core is developing thinkers versus students that just know a bunch of things. We are teaching them to think. (Wilson, interview 1)

In addition to believing the Common Core focused on critical thinking, like educators at Rocky Coast, Mountain Top educators appreciated that the Common Core was national in scope, "So that if a kid moves, you suddenly don't have those holes" (Tupper, interview 1). Hamilton, the Cascades Team science teacher who professed not to have much familiarity with the standards at all, still knew enough to support its national reach, stating, "It is a nationally recognized set of standards that is going to try to level the playing field around the country, as opposed to having education being so fragmented state by state" (Hamilton, interview 1). National standards were particularly important to Mountain Top educators because there was an army base nearby, and a number of teachers mentioned how helpful the Common Core would be for students from transient military families because they would encounter similar expectations when they moved from state to state.

Finally some Mountain Top educators supported what they considered the clarity of the Common Core both in terms of its structure and its focus on depth over breadth.

Ross, the Cascades Team math teacher, believed the Common Core was "more positive than the [state] Learning Results because it is much more user friendly," and "more concise and clear" than the state standards" (Ross, interview 1). Principal Miller also appreciated the clarity of the Common Core because he viewed it as promoting depth over breadth. He stated, "They should be the guides for what we want. Right? I like the Common Core and because they are starting to remove a lot of the content out" (Miller, interview 1). As these excerpts suggest, Mountain Top educators' values about individualized, student-centered instruction that promotes choice and student autonomy over demonstration of their learning were viewed as compatible with the Common Core.

Clarity, depth over breadth, critical thinking, and the opportunity to demonstrate learning in unique, student-centered ways were the some of the key components of applied learning, which was Mountain Top's overall approach to curriculum and instruction. These were also the educational principles Mountain Top educators believed were reflected in the Common Core. Because of this perceived alignment between the values and beliefs inherent to applied learning, and the values and beliefs educators saw promoted by the Common Core, Mountain Top educators, especially administrators and the Andes Team teachers, were generally positive about the Common Core. However, similar to Rocky Coast educators, Mountain Top educators raised a number of critiques of the standards based on elements of the Common Core they found to be misaligned with their individual and shared educational beliefs and values.

Negative Aspects of the Common Core at Rocky Coast. The three main critiques voiced by Mountain Top educators were the belief that the standards discouraged creativity, the number of standards and their convoluted wording, and the

mismatch they perceived between how the Common Core was organized and how students learn. These critiques, as discussed below, reflect inconsistencies between educators' beliefs and values and those aspects of the Common Core they felt were out of alignment with those beliefs and values.

As discussed in Chapter Four, the ELA teachers at Mountain Top were required to use the Teachers College *Units of Writing* curriculum, a writing program that was offered by its developers as a "Common Core-aligned" program. The curriculum included lesson plans, a scope and sequence that indicated how long lessons should take, the order in which they should be taught, and assessments. Decisions about how to use the curriculum were generally made by Tupper, the ELA curriculum coordinator, and teachers were expected to follow these decisions. Because this program already identified which of its units were aligned with which Common Core standards, the ELA teachers did not consult the actual Common Core when lesson planning. The *Units of Writing* curriculum, therefore, epitomized the Common Core to both of the ELA teachers in this study, Anderson and Baudin. Because of the scripted nature of the lessons, both Anderson and Baudin believed that the way the *Units of Writing* program implemented the Common Core stifled creativity. For example, Baudin stated, "[With the *Units of Writing* curriculum,] the creative side of our work is depleted . . . Creative writing and poetry have really taken a hit" (Baudin, interview 1). She felt the *Units of Writing* program not only removed the more creative genres of writing from the curriculum, but also taught students to write in formulaic ways. Anderson felt similarly. She stated, "I feel like it's very, very strict and you lose a lot of the ability to be creative and I have a lot of kids who ask to free write and that is not really anywhere in there" (Anderson, interview 2).

However, teachers of subjects other than ELA at Mountain Top did not feel the Common Core limited creativity—indeed, most felt that the Common Core allowed students to show what they knew in novel, personalized ways. Therefore, the *Units of Writing* curriculum as it was required at Mountain Top largely influenced ELA teachers' sensemaking of the Common Core, as well as their responses to the Common Core, a point to which I return in Chapter Six. Those educators who were required to use the *Units of Writing* curriculum—the ELA teachers—believed the Common Core could promote creativity, one of their core educational values, but because of the ways the Common Core was used in the *Units of Writing* program, creativity was stifled. Although they generally believed the Common Core was in alignment with their educational principles, in this regard the ways the program required them to teach writing caused ELA teachers to perceive this aspect of the Common Core as out of alignment with their values.

The second critique of the Common Core by Mountain Top educators was that there were too many standards, and they were difficult to understand. As described in Chapter Four, two important values at Mountain Top were teaching for depth over breadth and clarity of instructional objectives. Many Mountain Top educators did not believe these two values were reflected in the standards. For example, Harris, the Andes Team math teacher, stated,

My hardest thing is interpreting what [the Common Core] mean. So that's where I struggle a lot. So I try to find examples. Because if I can see the math that means the standard, it makes way more sense than reading three or four sentences that are so convoluted that I'm like, what? What do they

want me to teach? And there is just so much that they expect the kids to do." (Harris, interview 1)

A number of other educators also felt there "were way too many standards" (Tupper, interview 1). Ross, the Cascades Team math teacher, believed there were too many standards, and even with so many, the standards still did not cover all she felt was important to teach. She stated, "If I were to make them, would everything we do be in there? No. There are too many of them [and some] are almost obsolete because we have technology" (Ross, interview 1). By making sense of the Common Core based on their educational principles, even teachers such as Harris and Ross, who believed the standards were an improvement over the previous state standards, perceived the Common Core as out of alignment in some ways with their values of in-depth teaching and clarity.

The third critique of the Common Core was that multiple Mountain Top educators believed the standards were not written and organized in ways that supported how students learned. Mountain Top educators valued student-centered teaching and learning, and they were concerned about the developmental appropriateness of the curriculum they taught. For example, Principal Miller disliked that the standards were divided by grade level, stating that he was "frustrated that we had now created again another document based on the false assumption that kids grow grade by grade" (Miller, interview 2). Wilson, the Andes Team science teacher, agreed that the grade level divisions were not supportive of a variety of learners, stating, "The Common Core is still broken down into grade levels and it's still on a K - 12 timeline. But you are going to have some kids that are just not there" (Wilson, interview 2). Anderson, the Andes Team ELA teacher, stated more sharply that "there are definitely kids [the Common Core] doesn't work well for,"

including students who are either above or below grade level or students who "have other needs that aren't really met" (Anderson, interview 2). Finally, similarly to the math teacher at Rocky Coast, Harris, the Andes Team math teacher, believed the content of the standards was sometimes developmentally inappropriate. She stated, "I get they want us to do more faster, but I don't know sometimes if their brains are ready for that . . . So it's like the rush of getting stuff done versus developmental priorities" (Harris, interview 1). These critiques about the mismatch between the standards and students' needs reflected Mountain Top educators' beliefs about student-centered education and shaped how they made sense of the Common Core.

Influences on Principled Sensemaking of the Common Core at Mountain Top

Like Rocky Coast teachers, most Mountain Top educators made sense of the Common Core based on the alignment they saw between their educational values and the values promoted by the Common Core. Mountain Top educators generally believed that these values—including student-centered, engaging, hands-on learning experiences and developmentally appropriate curriculum—were fostered by the Common Core. For most Mountain Top educators, individual cognition was shaped by how they critiqued the particular ways the Common Core aligned with their educational values. Situated cognition was largely based on the work they did in both grade-level and content-area teams. How the Common Core was represented to Mountain Top teachers—by school administrators, online resources, the media and, for ELA teachers, by the *Units of Writing* curriculum—also influenced how they made sense of the Common Core as in alignment with their professional educational beliefs. I now address each of these.

Individually, Andes Team teachers analyzed how the Common Core standards would promote and deepen the kinds of student-centered, individualized instruction they believed enhanced student learning. Moore, the Andes Team social studies teacher, believed that the kinds of thinking and ways of learning promoted by the Common Core aligned with previous Mountain Top teaching practices that were based on the school's mission. He stated, "Multiple step processes, asking questions and having kids write a response, having experience[s] . . . all that stuff that is involved now, they were part of our process all along. I think that we have been very fortunate to have stayed ahead of the curve" (Moore, interview 2). Moore continued, stating,

The practice behind [standards-based education] has helped us build a stronger curriculum, better institutional understanding of what our curriculum is and what we are supposed to teach. A set of outcomes and assessments that actually measure something that makes sense to us developmentally and that we can actually communicate with parents and community members and kids. (Moore, interview 2)

Moore saw the Common Core as a continuation of the kinds of teaching and learning practices valued at Mountain Top, including developmentally appropriate, clear standards that enhanced learning and communication. Because of this values alignment, Moore believed the Common Core was a useful set of standards that provided support and direction—but not standardization—for student-centered teaching and learning.

Similarly, Harris, the Andes Team math teacher, viewed the standards as supportive of her vision of teaching kids to be "focused, respectful and responsible and making sure that we are inspiring hope through learning." Harris viewed the Common

Core as in alignment with those values because she saw it as "a guideline of important stuff. . . not just math, but [also] problem solving or justifying your answer. It helps you focus your curriculum" (Harris, interview 1). Harris valued focus—both for students and for curriculum—and saw the Common Core as promoting that value as well as other values such as critical thinking.

Wilson, the Andes Team science teacher, taught math out of state for a number of years before moving to the state where this study took place. Before she moved, Wilson participated in extensive training about the Common Core that she believed influenced her understanding of how to use the Common Core in support of her educational principles, particularly in support of engaging students to think in novel, critical ways. For example, she stated,

I'm a fan because of the [Common Core because of the] work that I did out of state. We really took that year to like, break down—and it was only math 5th grade curriculum, but I feel like because we did that, it gave me the chance to realize like, hey, this is what this is . . . it's about critical thinking and applying knowledge. (Wilson, interview 1)

As with previous uses of sensemaking (Spillane et al. 2002), prior experience with educational policy still affects sensemaking when teachers work from an inquiry stance; however, because Wilson worked from an inquiry stance she analyzed her prior professional development experiences based on her educational values. Unlike previous uses of sensemaking which do not provide adequate opportunity for teachers to scrutinize policy, the lens of principled sensemaking in this case shows how Wilson used her principles in her sensemaking of the Common Core.

Unlike most Andes Team teachers, the social studies and science educators on the Cascades Team at Mountain Top stated that they did *not* have in-depth knowledge of the Common Core. Hamilton, the science teacher, was very familiar with the Next Generation Science Standards and worked to make sense of those standards through online learning and extensive reading. He was very committed to standards-based teaching and learning, and worked diligently to make sense of the standards that affected his content area. However, Peterson, the social studies teacher, indicated that he was not interested in learning about the Common Core. When asked in an interview to describe the Common Core, Peterson stated, "I teach targets" (Peterson, interview 1). When asked to describe what he meant by that, Peterson indicated that he did not know about the Common Core because he focused on teaching the learning targets provided to him by the social studies curriculum coordinator. Peterson did not know whether those targets were Common Core targets or not, nor was he interested in finding out. As discussed in Chapter Four, Peterson did not take an inquiry stance on teaching, learning, and schooling in the ways that most Mountain Top educators did, and perhaps this is reflected in his lack of engagement with the Common Core. Additionally, because Peterson was not on a team that planned curriculum together, he did not have the opportunity to engage with the Common Core as frequently as teachers on the Andes Team.

The idea of situated cognition illuminates the ways educators make sense of policy collectively. The data from this study demonstrate that the ways educators made sense of the Common Core was strongly influenced by the collective understandings they generated within the various groups of which they were part. There were two main groupings of teachers at Mountain Top. The first was content-area focus groups. When

discussing the history of the Common Core at Mountain Top, Principal Miller stated that it was in focus groups that "teachers originally really worked to understand the Common Core, where teachers got together and they looked at the Common Core . . . West and Tupper led the focus groups through the peeling apart and unpacking of the Common Core" (Miller, interview 2). The content-based focus groups were also the context wherein curriculum was discussed and chosen. For math, this meant the school-wide creation of a matrix that provided examples and suggestions for teaching the Common Core. For ELA, the focus group meeting time was when Tupper, the ELA curriculum coordinator, explained how the *Units of Writing* program would be used in ELA classrooms, and conducted professional development around how to use the program. Curriculum writing, and conversation in the Math focus group, led math teachers to view the Common Core as positive because it aligned with their beliefs and values about individualized curriculum. In ELA, the focus group's joint understandings reinforced the perception that the Common Core reduced creativity in the curriculum because for this group, the *Units of Writing* program was tightly linked with the Common Core.

The second organizational structure through which Mountain Top educators collectively made sense of the Common Core was in their grade-level teams, which, as described in Chapter Four, consisted of four classroom teachers (one for each content area) and the special educators who supported the group of 70 students on the team. For the Andes Team, weekly team time had a large impact on how they made sense of the Common Core. Together, the Andes Team members used the Common Core as the basis of their integrated, hands-on applied learning units. Team members generally felt that they used the Common Core in ways that supported their practice. For example, when

asked about whether or not the Common Core fit with the team's vision of applied learning, the social studies teacher, Moore, stated,

Sometimes it lends itself very well to it and sometimes not so much. We are project based, at least part of the time and so when we do those projects, it's not always the case that kids are going to address the specific targets that you set out to address. If you are going to give kids true choice and true voice in what they study and what they produce, then you don't want to force those square pegs into those round holes all the time.

(Moore, interview 2)

As this quote indicates, the Andes Team used the Common Core in service of applied learning—not the other way around. In other words, the Andes Team believed in student-centered, choice-based curriculum, and used the Common Core as their curriculum standards but only in ways that did not detract from their overall educational principles. They collectively agreed to focus first on applied learning, and then use the Common Core in service of the applied learning without forcing "those square pegs into those round holes all the time." In team meetings it was clear that the Andes teachers used the Common Core in service of deeper learning, not as fixed, rigid goals that every student needed to achieve in similar ways. Collectively, then, Andes teachers' situated cognition of the Common Core was that it was a tool to guide, but not dictate, their "integrated curriculum . . . which makes our projects richer and more diverse" (Moore, Observation notes 3/24/15). The Andes Team's collaborative work strengthened their shared beliefs about how students learn best, the types of teaching and learning experiences that support students, and ways to use the Common Core in service of those beliefs.

The Cascades Team, however, did not develop integrated, interdisciplinary units together, and as a result did not discuss the Common Core as a group of four. Although the Cascades Team math and science teachers occasionally collaborated on integrated math and science curriculum, the entire team did not plan curriculum together and therefore did not collectively make sense of the Common Core. This lack of collective sensemaking cannot be considered "principled" in the way I am using it in this analysis, because the decision not to use the Common Core as a team was not based on perceived misalignment between teachers' professional values and the values they believed were promoted by the Common Core. Individually, in fact, the Cascades Team teachers generally approved of the Common Core on the basis of the principles it promoted. But collectively, this team did not work together to take up and make sense of the Common Core for reasons that were not related to principles. These reasons, which are discussed in detail in Chapter Six, included time constraints, student schedules, and lack of enthusiasm on the part of some team members to develop an integrated curriculum. In short, although individually most Cascades Team teachers made sense of the Common Core based on their principles, their collective sensemaking could not be considered "principled."

The third component of sensemaking theory is the role of representation, which has to do with how policy is explained and represented to educators. The Common Core was represented to Mountain Top educators in four main ways. The first was through school administrators, both the principal and the curriculum coordinators. The second was through the *Units of Writing* program, which primarily affected only the ELA

teachers. The third was through online materials and other technological resources, and the fourth was through media commentaries about the standards.

The Common Core was consistently represented to Mountain Top teachers by their administrators as well-aligned with Mountain Top's mission and vision. Principal Miller was a major proponent of the Common Core, and he linked it to all of the other initiatives that were taking place at the school, such as work with Robert Marzano's "The Art and Science of Teaching" (Marzano et al., 2008) and with the general approach of applied learning. Miller's beliefs in clear targets, student-centered curriculum, and standards-based assessment were woven together with his representation of the Common Core to the faculty as the result of "expert thinking" (Miller, interview 2). This representation had a strong influence on how many Mountain Top teachers conceptualized the standards.

In addition, both of the curriculum coordinators at the school also supported the standards and represented them to teachers as rigorous and meaningful. In math, West coordinated creation of a matrix which provided access to hundreds of example lessons to teachers. In ELA, Tupper was a strong supporter of the *Units of Writing* program. Unlike the ELA teachers who had many reservations about *Units of Writing*, Tupper did not believe that the program reduced creativity, but rather, she believed it was an excellent program for increasing students' writing abilities. While math teachers were quite positive about the Common Core, in part because they appreciated the way West organized and managed the Common Core-aligned curriculum, ELA teachers were unhappy with *Units of Writing*, and therefore, with how the Common Core was implemented as a result.

For ELA teachers, grappling directly with the Common Core was limited. All Common Core standards were filtered through the *Units of Writing* program, and the version of the Common Core that both Anderson and Baudin saw in the *Units of Writing* program, as discussed previously, lacked creativity. In addition, the genres of writing in the *Units of Writing* program were heavily skewed toward non-fiction writing, leaving out units on poetry and creative writing that had previously been taught at Mountain Top. The methods of the *Units of Writing* program, which included pre- and post- assessments, mini-lessons, and an extensive, time-consuming rubric to grade each piece of writing, also prompted ELA teachers Anderson and Baudin to feel that the Common Core was less about developing students' ability to write and think critically and creatively, and more about producing standardized, technically proficient writing. Baudin considered this "very formulaic. And I don't know if that's Teachers College or Common Core. It's hard for me to separate out those two" (Baudin, interview 2). Indeed, Anderson felt so removed from the actual Common Core document that she was unsure whether the Common Core was divided up by grade level or by age group (elementary, middle, and high school). Thus, the Common Core as represented to Mountain Top ELA teachers through the *Units of Writing* program had a strong impact on their sensemaking of the Common Core as generally supporting critical thinking, but also as a somewhat rigid program that limited creativity.

A number of individual Mountain Top teachers made sense of the Common Core using technology. They were amazed by the amount of curriculum available online that was aligned with individual Common Core standards. Although they did not implement the curriculum they found online part and parcel, they did use it as a way to gauge the

rigor expected by the standards, and to help understand what type of student work they should expect. Sometimes, though, they found that online examples were inferior to the student work they saw in their classrooms, which influenced their perceptions of the Common Core. For example, Anderson noted,

When I looked at the Common Core writing samples that they had for level seven and it was surprising to see what they were saying was grade level with what was written for -- you know, when you go to read what they say kids need to do. And then the samples in there, I felt like they didn't really match. They were -- they seemed a lot lower than where we were trying to push kids. (Anderson, interview 2)

Similarly, Harris used a Common Core website to try to clarify confusion. She stated, "If I didn't know what a standard meant, I would go to that and kind of see if it explained it" (Harris, interview 1). Using online examples of Common Core curriculum helped teachers make sense of the standards and helped guide standards selection.

The last major influence on how the Common Core was represented to Mountain Top educators was through the media. Almost all the teachers I interviewed at Mountain Top mentioned something about how the Common Core was sometimes represented in the media as "a big government conspiracy, the federal government taking over the smaller states and crushing them to a pulp" (Miller, interview 1), and yet at other times was portrayed as the answer to a failing educational system. None of the Mountain Top teachers in this study believed that the Common Core was a governmental conspiracy. However, none of the teachers believed that the Common Core was the single answer to a failing educational system, either. In fact, Mountain Top educators did not view

education in their state as failing, although some allowed that perhaps in more urban areas, there was more of an educational crisis than in their area. But the Mountain Top teachers were clear that the Common Core was not the answer to educational inequality. For example, Moore stated,

I think if somebody can demonstrate positive outcomes against curriculum grounded in the Common Core, I think they should be ready [for college or career]. I mean, they are pretty rigorous, they are pretty comprehensive, they are not from nowhere, I know that. They are a fine set of standards. Does that mean that all kids are going to be college or career ready? There is a heck of a lot more to success in life than meeting standards. I'm skeptical about that piece. (Moore, interview 2).

Because most Mountain Top educators took an inquiry stance on teaching, learning, and schooling, they thought deeply about how the Common Core was represented as the key to preparing all students for college and career on the Common Core website (National Governors Association & Council of Chief State School Officers, 2013). They did not accept either extreme view of the standards, but analyzed both sides guided by their values related to teacher autonomy and professionalism, student-centered curriculum, and schooling as preparation for many possible life choices, including but not limited to college. How the standards were represented to Mountain Top educators informed, but did not drive, their sensemaking of the Common Core.

Common Core Sensemaking at Rocky Coast and Mountain Top

At both Rocky Coast and Mountain Top schools, most educators defined, praised, and critiqued the Common Core from an inquiry stance. Instead of accepting part and

parcel the ways the standards were represented either by their creators, the National Governors Association and the Council of Chief State School Officers, or by their detractors as a federal conspiracy, Rocky Coast and Mountain Top educators made sense individually and collectively based on their professional principles. At Rocky Coast, those principles centered on place-based, authentic, integrated curriculum that was extremely hands-on. At Mountain Top, those principles similarly centered on integrated, individualized, and authentic curriculum and student-centered pedagogical practices. When their understandings of the Common Core were aligned with those practices, educators supported the Common Core. When their understandings of the Common Core were in contrast with those practices, such as in the case of the *Units of Writing* program, teachers were more critical of the Common Core. What is important to note here is that sensemaking for both sets of educators was not straightforward process. Almost all of the educators in this study held nuanced views of the standards that reflected their particular beliefs and values interpreted the standards as complex, multi-faceted curricular supports that guided, but did not dictate, curriculum.

These same educational principles guided educators' perceptions of the SBAC exam, which was the Common Core-aligned exam chosen by the state to measure student achievement and rate school performance. However in the case of the SBAC, which educators perceived very differently from the way they perceived the Common Core, these same beliefs led them to very different conclusions about the appropriateness of the exam for their students. While the Common Core was generally supported, with important caveats and critiques that demonstrate the complex ways educators made sense of the Common Core, the SBAC was generally not supported by these same educators.

How the educators made sense of the SBAC, and influences on that sensemaking, are the topics of the next section of this chapter.

Making Sense of the SBAC

Unlike their perceptions of the Common Core, educators at both Rocky Coast and Mountain Top believed the SBAC was antithetical to their beliefs and values about teaching, learning, and schooling. However, the SBAC had a smaller impact on the day-to-day teaching and learning at both schools than the Common Core did and was mentioned less often in interviews or the various school contexts I observed for this study. Although the SBAC was mentioned less frequently, however, the concept of principled sensemaking was equally useful in unpacking the ways that educators at both schools made sense of the SBAC.

At both Rocky Coast and Mountain Top, assessment was viewed as an important valuable part of the standards-based learning cycle that was not limited to standardized tests, but also included the multiple, ongoing, large and small ways that students demonstrated what they knew and were able to do as well as what they did not yet know and were not yet able to do. At both schools, educators relied on in-class informal assessments and observations to measure student progress and assumed that they had the capacity to make accurate assessments of their students. For example, Baudin the Cascades Team ELA teacher, stated,

I still think that seeing daily work, watching kids work, seeing them produce work in front of you . . . The final arguments or persuasive pieces that you do, the information booklets that you do, giving information, tells

me much more about you, your learning, your reading, your writing, your use of words [than standardized tests]. (Baudin, interview 3)

Trusting their own assessments of students was one common way that teachers at both schools in this study determined student performance levels. Another way was the use of a standardized assessment developed by the Northwest Evaluation Association that the educators referred to as the "NWEA." In both schools, the NWEA, which measured math and reading skills and took approximately 30 minutes to administer, was given two to three times a year. Educators at both school used the results of the test in strikingly similar ways—to group students, to create individual instruction and homework plans for students, and to measure growth over time. The NWEA was not high-stakes in any way. At neither school was it used to make decisions about student advancement or teacher evaluation, nor was it used to make an overall assessment of school success. Rather, the NWEA, which took minimal time out of the school day and year to administer, was used in limited targeted ways to support individual student growth. The use of the NWEA at both schools as a low-stakes, internal assessment contrasts sharply with the intended use of high-stakes, externally imposed exams. Internal accountability through measures such as the NWEA proved very valuable for the work of teaching whereas external accountability measures, such as the SBAC, were perceived by educators at both schools as having multiple negative impacts on teaching and learning.

Given the central role that assessment played at both schools, it is very clear neither Rocky Coast nor Mountain Top educators were opposed to assessment writ large. They were, however, unilaterally opposed to the SBAC. In the 40 interviews and 60 hours of observation I conducted, there was only one positive comment made about the

SBAC by one educator—Tupper, the ELA curriculum coordinator at Mountain Top. She perceived that the SBAC was intellectually challenging to students in ways that were consistent with the school's overall approach to applied learning. She stated,

I thought it [the SBAC] was kind of cool. You really have to think a lot harder about what it was you were doing. It did not feel like a regular test. And it was hard, no doubt. I kind of liked it though. I felt like it was matched -- what they attempted to do matched to more of what we were attempting to do in our instruction and our goals as educators. (Tupper, interview 2)

Outside of that comment, which framed the SBAC as requiring students to think critically, every other mention of the SBAC was negative. These negative comments centered on two themes that were consistent across the two schools. First, educators believed the test itself was a flawed measure of student learning because of its formatting and its narrow academic focus. Second, educators believed that the use of the test as an accountability measure was inappropriate.

Principled Sensemaking of the SBAC at Rocky Coast

At Rocky Coast, educators valued student-centered assessment practices that attended to the individual developmental needs of their students. However, they viewed the SBAC as a flawed measure of student learning because of its format and because it focused only on the academic needs of students without attending to their individual developmental needs. Initially, Principal Williams had high hopes for the SBAC because he was led to believe by state Department of Education officials that it would help teachers support their students appropriately and individually because the test would be

adaptive. This means that the test questions were adjusted in difficulty throughout the assessment based on student performance; if the student got questions right, the questions got harder, but if the student got questions wrong, they would get easier. According to the SBAC website, this results in a more accurate assessment of what a student knows and is able to do (Smarter Balanced Assessment Consortium, 2015a). Unfortunately, when the state actually purchased the SBAC, it decided to save money by leaving out the adaptive function of the exam, which was the feature Williams believed would have actually made the SBAC beneficial. Instead Williams said that the state "just went for the sort of 'grade your schools' function, which makes the test no longer useful" (Williams, interview 3). This perspective—that the SBAC exam did not support the school's mission of supporting students individually but was instead intended as an external accountability measure—was shared by all Rocky Coast teachers.

Teachers at Rocky Coast also believed the SBAC was a flawed measure of student achievement that did not allow students to demonstrate their knowledge in valid ways. Multiple teachers critiqued the length of the test and believed the questions were too difficult. According to Hughes, the Rocky Coast science teacher, the items

tested on the SBAC were questions students wouldn't be able to answer, even in a supported capacity. So if that is true, then the data you get from it is completely invalid. If the student can't take the test, then there is no information you can get out of it. Yeah, it was way too hard. Way too long . . . Just because you are aligning it to the Common Core, which is theoretically more difficult to teach, doesn't mean you need to make the

instrument more difficult. Really, the Smarter Balance is a colossal travesty." (Hughes, interview 3)

At Rocky Coast, teachers created student-centered, personalized curriculum and instruction that focused on students' social and emotional well-being in addition to their academic growth. Their locally-created assessments also were intended to support the social and emotional well-being of their students in addition to deepening their academic knowledge and skill. In contrast, the SBAC was seen as completely dismissing the goal of supporting social/emotional learning. As Powell the Humanities teacher stated,

One of the things I do appreciate about Rocky Coast is that we put a lot stock and weight in the social and emotional growth of a student . . . And so I think [the SBAC is] not a fair assessment of a school or a teacher, because it doesn't also take into account that social and emotional growth, which I would argue is far more important than the academic. (Powell, interview 3)

Principal Williams also believed that the SBAC promoted a vision about student outcomes that was not consistent with the vision of the school, stating, "If we create standardized tests, we create standardized kids and that doesn't seem to be what we really want" (Williams, interview 3). Because of perception that the SBAC not only ignored students' individual needs but also promoted standardization of curriculum and instruction, Rocky Coast educators viewed the SBAC as misaligned with their educational beliefs and values, and they were universally opposed to it as a measure of student achievement.

In addition to their perception that the SBAC was a flawed measure of achievement, Rocky Coast educators held mixed opinions about its use as an accountability measure. As discussed previously, Rocky Coast teachers supported accountability when the measures were internally controlled and served to improve teaching and learning, such as the NWEA and teacher-created assessments. However, while external accountability measures of student achievement were not aligned with Rocky Coast educators' beliefs about student learning, some Rocky Coast teachers did support the use of external accountability measures to evaluate students, teachers, or schools. These perspectives on the role and uses of external accountability measures align with the beliefs Rocky Coast educators held about the purposes of education, as discussed below.

Williams believed that the SBAC—absent its capacity to be used for diagnostic purposes—was simply the most recent item in a long line of standardized tests that have stemmed from "a large motivation [to] make the U.S. more competitive internationally. My own opinion is that the overreliance on standardized testing and on teaching methodologies that produce higher test scores has contributed to our continued decline" (Williams, interview 3). However, Williams also felt that accountability in and of itself was not problematic—in fact, he felt that "for a school that is willing or eager to be held accountable, they ought to be able to implement and use those measures themselves without having this outside authority certifying it" (Williams, interview 3). Williams concluded that the use of standardized tests, including the SBAC, as external measures of accountability actually weakened teaching. This was what he found problematic. External

accountability measures did not, in Williams's opinion, help Rocky Coast work in authentic ways toward their mission.

Similarly, Hughes, the science teacher, who was inspired by the movie "Superman" to dislike teachers unions (despite the fact that he described himself as "definitely a pro labor, pretty dyed in the wool socialist kind of person"), also disagreed with testing that encouraged "drill and kill skill building kind of stuff," but, unlike Williams, did not completely disagree with the idea that there should be some high stakes in education for teachers. For example, he stated,

One thing that is coming up right now is that we are figuring that student AYP on standardized tests is going to be probably 25% of our teacher evaluation. Then the rest has to do with a rubric that evaluates a teaching practice and our professionalism and our work with community partners and all of this other stuff. I think that is a pretty good balance. I mean, if I had my druthers, I would just throw out the standardized tests, but given that we have them, I think that is a fair balance. (Hughes, interview 3)

This somewhat reluctant belief that the SBAC had an appropriate role to play in the way teachers are evaluated, as mandated by state policy, demonstrates Hughes's belief that, in education, some market-based solutions (such as getting rid of teachers' unions and the use of the SBAC in teacher evaluation) were potentially appropriate accountability measures to improve education. Robertson, the math teacher, also was not completely against the use of the SBAC as part of teacher evaluations. He stated,

I think [tests] can be used for teacher evaluation but not in a direct way because there are other factors that go on in a kid's life other than school

that affect their testing. Maybe the kid didn't have breakfast that morning; he could test lower. (Robertson, interview 3)

It is clear, then, that at Rocky Coast, there was agreement that the SBAC was inappropriate for student accountability, but that there was some disagreement about whether or not the SBAC or other external tests might have a role in high stakes accountability arrangements for teachers.

These two conceptions of the SBAC—as a flawed measure of student achievement, and a generally flawed accountability measure—aligned with Rocky Coast educators' beliefs and values about assessment. It was clear to educators at Rocky Coast that the SBAC did not support their vision of progressive, student-centered assessment that empowered teachers and students alike, and, although they were not completely opposed to the use of standardized tests as high-stakes accountability measures, Rocky Coast educators generally considered the SBAC an inappropriate assessment for that purpose. The lens of principled sensemaking highlights how Rocky Coast educators' educational principles shaped their analysis of the SBAC, which was not believed to support or promote those principles.

Influences on Principled Sensemaking of the SBAC at Rocky Coast

Why did Rocky Coast educators make sense of the SBAC in the ways they did?

As with the Common Core, their principled sensemaking—which largely involved their critique of the values promoted by the SBAC—occurred individually, collectively, and as a result of the ways the SBAC was represented to Rocky Coast educators through the media and school leaders.

Considering the ways that Rocky Coast educators made sense of the SBAC individually it is clear that the relative youth of the classroom teachers had a large impact on how they reflected on and conceptualized the SBAC. Hughes, the science teacher, spoke passionately about his own educational experiences as a teenager in public school during the NCLB era, including his drive to get all "As" and succeed on the standardized tests required by federal law under NCLB. However, in college he realized that his approach to education had left him without joy and passion for learning. He stated,

I was great at bubble tests, I killed 'em. And I remember almost nothing that I learned in high school. And almost no memorable experiences. And I haven't really encountered a single situation in my adult life that that skill, test taking, which I practiced more than any other skill in my public education, was useful. (Hughes, interview 1)

Hughes' personal experiences with standardized testing caused him to regard standardized tests with disdain, because they did not prepare him for the world of work or provide any sense of meaningful engagement, two of Hughes's core values.

Powell, who was also in high school during the time of NCLB, similarly reflected on the role of standardized tests in her childhood, but because she had reading difficulties as a child, she did not test well. She stated,

I know that being a reluctant reader and knowing how humiliating school can be and how challenging it can be, has—it influences my teaching and my approach a lot . . . It's really important to me that I make it a safe space for taking risks and that every opportunity is a learning opportunity and that there is no humiliating. (Powell, interview 1)

As students themselves who had experienced the negative effects of standardized tests personally, Powell and Hughes personal histories impacted how they made sense of the SBAC as yet another exam that had the potential to narrow and dull instruction, and create anxiety and humiliation for students.

Interestingly, Rocky Coast educators did not seem to engage in collective meaning making regarding the SBAC in their staff meetings or Division meetings. Although I spent many hours at Rocky Coast during staff meetings, the SBAC was not once the topic of conversation during those times. Teachers confirmed this lack of shared discussion about the SBAC in their interviews, stating that the few conversations they had ever had about the SBAC were logistical, not evaluative. As Powell, the ELA teacher, stated, "No, I mean, there was some mention about [the SBAC], but it was kind of with a sigh and a rolled eye and it's just what we have to do. Most people thought it was pretty ridiculous and over the top" (Powell, interview 3). While collectively Rocky Coast educators did not explicitly work together to make sense of the SBAC, they did share common feelings about the assessment, its role, and its effect on teaching, learning, and students based on their beliefs and values, as described previously.

The third lens of sensemaking is the role of representation, or how a policy is depicted to educators by the media and leaders, and how the policy is written, including its purpose and rationale (Spillane, Reiser, et al., 2002). As the previous comment about the "sigh and a rolled eye" suggests, Principal Williams downplayed the role of the SBAC to his teachers by simply ignoring it as a topic of conversation at staff meetings and telling teachers individually that the test should not be used to guide instruction. He also sent an article to teachers titled, "How should learning be assessed?" that

documented an interview with Professor Yong Zhao from the University of Oregon. The article states, "High-stakes tests concern Zhao the most, because he says they represent more than misspent time and money. He faults them for suppressing creativity and innovation, and creating narrowed educational experiences" (Vangelova, 2015). This article supported the idea that the kind of educational experiences that were valued at Rocky Coast, including creativity and innovation, were not compatible with a system focused on high-stakes standardized tests. Williams represented the SBAC to his teachers in these ways in part because he believed that the SBAC was not a useful tool to diagnosis student learning issues and in part because he was opposed to high-stakes standardized tests driving instruction in general because of the deleterious effects he felt they could have on teaching and learning.

In addition to publically critiquing the SBAC as a high-stakes standardized test, Williams also promoted a very different view of what was valued as assessment—student-centered, authentic assessment that supported the development of the whole child. For example, in the article that documented the interview with Zhao, a large section was dedicated to describing the types of assessment that Zhao felt were useful: low-stakes, locally-created, and personalized (Vangelova, 2015). Williams also emailed another article to the staff titled "Whole child development is undervalued," in which project-based learning and new technologies such as social media were recommended "pedagogical tool[s] to receive feedback from peers and encourage critical thinking" (Thomsen & Ackermann, 2015). Williams encouraged his staff to think about assessment in broader ways than just the SBAC, a viewpoint based in part on his long tenure at

organizations such as the Coalition of Essential Schools and Expeditionary Learning that focused deeply on authentic, performance-based assessment.

As I have shown, principled sensemaking of the SBAC at Rocky Coast was primarily shaped by educators' beliefs that had been informed by individual experiences with testing and the way that the SBAC and other assessments were represented to Rocky Coast faculty by Williams. These influences differed somewhat from the factors that influenced sensemaking of the SBAC at Mountain Top, which are discussed below. Despite differences, at both Rocky Coast and Mountain Top beliefs and values about the role of high-stakes testing in teaching and learning shaped educators' views of the SBAC.

Principled Sensemaking of the SBAC at Mountain Top

During the year of this study, the SBAC was administered at Mountain Top for the second time because Mountain Top had piloted the exam for the state the previous year. However a second year with the test did not make Mountain Top educators feel more favorable towards the SBAC. Making a joke about the SBAC's full name, Hamilton the science teacher declared the exam was "not a smarter nor balanced approach to testing at all" (Hamilton, interview 2). Like the educators at Rocky Coast, Mountain Top educators disliked the SBAC because they believed the test itself was a flawed measure of student learning and because they believed that the test should not be used as an accountability measure.

Educators at Mountain Top believed the SBAC was a flawed measure of student achievement for a number of reasons. First, the test was administered in March and April, which teachers criticized because it therefore could not measure many of the topics students learn in the spring and caused students stress. For example, the math teacher on

the Andes Team, Harris, stated, "One of the pieces that I didn't care for about the SBAC was that it wasn't at the end of the year. Because of that, kids are like, "I haven't learned this yet!" And they panic." (Harris, interview 3). Additionally, because the SBAC was given at only one point in time, it did not show student growth or capture the way students learned over time when they had multiple experiences to improve. For example, Hamilton stated, "I absolutely think [the SBAC] contradicts everything that we stand for as an institution. I think it goes against standards based grading. Our standards-based grading is doing it till you get it right. Not one and done" (Hamilton, interview 2). This quote emphasizes how Mountain Top educators analyzed the SBAC by comparing it to the school's mission and vision. For both timing issues and moral reasons—including the fact that the SBAC had caused great anxiety in students and was a poor fit with standards-based grading—the Mountain Top educators rejected the SBAC. Supported in their viewpoint by problems with SBAC administration, Mountain Top teachers made sense of the test as a flawed measure of student achievement that was antithetical to their educational values.

In addition to testing material that students had not yet learned, teachers disliked the fact that the SBAC test results were not available for use in a timely manner, if the results even became available at all. Hamilton stated,

But I will say that from what little information we have about the SBACs, its not going to be used in that way [to inform instruction]. I won't get that information [their scores]. Maybe parents and administrators will, but I don't see that information coming back to us. (Hamilton, interview 2)

In contrast, the NWEA—which teachers universally supported—gave immediate results that were aligned to the standards upon which Mountain Top based their teaching.

Mountain Top educators valued using assessment results to inform instruction, but with the SBAC, that would not be possible.

Teachers' third critique about the SBAC as a flawed measure of achievement centered on the extensive amount of time the SBAC took to administer and the many ways the test disrupted their regular instructional schedule. In interviews many teachers told me the exact number of days they were unable to teach because of the SBAC, and they were extremely frustrated by the loss of instructional time. Instead of time spent engaging students in applied learning or other student-centered, project-based activities, time was spent on an assessment that did not measure student growth over time and would not be useful to help students improve. The lens of principled sensemaking makes it clear that their critiques were rooted in Mountain Top educators' beliefs that the SBAC was a high-stakes, time consuming, useless assessment that ran counter to their values related to student-centered, timely, short assessment that could be used to inform instruction.

A second way the teachers at Mountain Top made sense of the SBAC based on their principles was in relation to its use as a high-stakes accountability measure. Because educators at Mountain Top took their students' social and emotional development into account in their curriculum and instruction, as described in Chapter Four, the use of a test to make decisions about staffing, school closure, and even student advancement based on the performance of 12 and 13-year olds seemed absurd. For example, Anderson stated, "It doesn't make any sense that it would be that high stakes, you are depending on a child to

perform to the best of their ability at a specific moment in time" (Anderson, interview 3). In addition, Mountain Top educators were opposed to the use of the SBAC as a high stakes assessment because of all the many variables that affect students' scores. Hamilton stated,

I think there are things that we can't control. I can't control attention span. I can't control the investment by parents or the ability of parents to set limits for the kids. To sit down every night and to read a book. I can't control the impact that technology has on a student's patience. (Hamilton, interview 2)

Believing that it was extremely unlikely that all students could perform at "their best" at a prescribed time and that the SBAC did not take into account out of school influences on student achievement, teachers at Mountain Top opposed the SBAC as a rigid, fixed, and high-stakes exam.

In addition, Mountain Top educators were opposed to relying on a high-stakes accountability measure that defined achievement in one narrow way—success on a standardized test. As Principal Miller reflected, "There are so many different ways to be smart and I think we marginalize kids because they are not this exact way [as measured on the SBAC] of being smart" (Miller interview 3). Again it is important to note that Mountain Top educators were not opposed to measures of accountability that were internal, low-stakes, and improved teaching and learning, but they were opposed to narrow, test-based accountability that relied on one type of student performance at one particular moment in time.

Influences on Principled Sensemaking of the SBAC at Mountain Top

Individual Mountain Top teachers made sense of the SBAC based largely on their personal experiences as professional educators with standardized tests—not in terms of their experiences with as students, as the younger Rocky Coast teachers did. Individually, every teacher at Mountain Top commented on the cyclical nature of educational reforms and a sense of "reform fatigue" (Gokmenoglu & Clark, 2015) caused by constantly changing measures was palpable. For example, Hamilton, the Cascades Team science teacher, considered the SBAC to be the "initiative du jour. But whether or not the government sticks with that long enough for there to be consequences, I don't know. I mean, there are so many initiatives that come along" (Hamilton, interview 2). When reflecting on the decision to switch to the SBAC from the previous state exam, Moore, the Andes Team social studies teacher, stated, "So when you have been around for a while and I have been in this position for 15 years now, you have seen the tail wag the dog a lot of times. Maybe I'm a cynic, but I'm thinking the tail is going to wag the dog again" (Moore, interview 3). Clearly, individual experiences with multiple high stakes exams soured Mountain Top teachers' views of the SBAC and prompted them to be wary of the SBAC as a meaningful exam that supported the mission of Mountain Top.

Collectively, Mountain Top teachers worked together to iron out SBAC logistics and also relieve the stress of the SBAC by laughing about what they considered its absurdity together. For example, when one student on the Cascades Team finished the math portion of the exam in seven minutes, which should have taken much longer, Peterson emailed the other Cascades teachers "because I thought that was pretty good, so I sent out an email to all my colleagues and said, hey, beat this! They know the student.

Well, somebody in another class finished in four" (Peterson, interview 1). This quote demonstrates that Mountain Top teachers did not take the exam very seriously—in fact, they were almost competing to see which student finished the most quickly, a sure sign of not diligently completing the test. By sharing these "war stories" with each other, Mountain Top teachers were publically acknowledging and supporting their collective dislike of the SBAC.

Finally, how the SBAC was represented by leaders at the school and district level influenced how Mountain Top educators made sense of the exam. Moore, the Andes Team social studies teacher, felt district administrators put pressure on Principal Miller to take the test seriously. Moore stated,

the pressure on them [administrators] I think is probably even greater than it is on us after 15 years of playing the game, if you want to call it that. Teachers have a certain compartmental approach to it . . . I don't know that they can do that quite the same, like maybe their jobs depend on it more than mine does. Administrators don't have a union to back 'em up. So I think they probably feel it more deeply or maybe have more pressure put on them. (Moore, interview 3)

However, Hamilton did not feel that the pressure on school leaders translated into Principal Miller putting pressure on teachers to take the test overly seriously. He stated, "I don't think anybody has said to us, "Here is how the SBAC test is going to be useful. Here are the benefits of the SBAC." I mean, I can go through my paperwork. Really, it's just been all procedural" (Hamilton, interview 2). This quote shows that Hamilton understood the ostensibly absent lack of communication about the utility of the exam—

and the ways it could further Mountain Top's mission—as indicative of Miller's belief that the exam was not in fact useful or helpful to further the school's mission. Because the test was not represented by administrators as important for teaching, learning or students, teachers like Hamilton were in a sense allowed to, even encouraged to, devalue the exam.

Finally, some teachers at Mountain Top felt that the SBAC was represented by policy makers as a way to discredit, or minimize, teacher assessment of students. Ross, the Cascades Team math teacher, felt strongly that she was able to identify and address student needs through in-class assessment. However, she stated, "But then the policy makers will come back and say, the teachers are partial and we can't let teachers [assess], because then they won't be honest -- it's really the computer that tells us what kids know and are able to do" (Ross, interview 2). This statement reveals Ross's belief that the SBAC was a mechanism to control the "partiality" of teachers who had the potential of being dishonest. Mountain Top educators believed strongly in internal accountability measures, but not high-stake external accountability measures. Thus the SBAC was perceived as out of alignment with their educational principles.

At Mountain Top educators made sense of the SBAC as a flawed, useless exam because of their long experience with test-based accountability, their collective irreverence toward the exam, and the ways the SBAC was represented by administration and policy documents. These ways of understanding and critiquing the SBAC all relate back to the values Mountain Top educators held about assessment—that it should be used to inform instruction, that it should measure growth, and that it should be developed by teachers. They believed that assessment should neither be used as an accountability

measure for students and teachers, nor should it be used to rank or grade schools. These educational principles shaped school-wide sensemaking of the SBAC, and, as I discuss in Chapter Six, school-wide responses to the SBAC as well.

Principled Sensemaking

Throughout this chapter, I have demonstrated that the educators in this study analyzed and interpreted the Common Core and SBAC by identifying the educational principles they believed were supported or undermined by these initiatives and comparing these with their own educational principles. When the educators believed that the principles promoted by the initiative were generally in alignment with their own professional principles—as was the case with the Common Core—educators saw the initiative as positive and generally took up the initiative in their teaching. When the educators believed that the principles promoted by the initiative were antithetical to their own professional principles, they saw the initiative as negative and did not change their teaching practices to accommodate the initiative. Chapter Six explores implementation of the Common Core and SBAC in relation to principled sensemaking.

It is important to note that educators' sensemaking was not simply a case of their "liking" or "disliking" a particular educational policy. Instead, their perceptions of each initiative were rooted in deep, sustained analyses of how the initiatives would affect students' learning. Would the initiative support—or enhance/diminish—student-centered, hands-on, creative teaching and learning? Would the use of the initiative promote critical thinking and deep inquiry into topics of students' choosing? Or would the initiative standardize student learning and take time away from integrated, meaningful instruction that was either place-based (at Rocky Coast) or intended to allow students to apply their

learning in novel ways (at Mountain Top)? These were the questions that drove the educators' sensemaking of the Common Core and SBAC at both schools. Because these educators generally worked from an inquiry stance on teaching, learning, and schooling, they made sense of the Common Core and SBAC based on their educational values, beliefs, and principles.

Throughout this chapter, I have argued that educators at Rocky Coast and Mountain Top made sense of the Common Core and SBAC based on how they critiqued, understood, and questioned the educational principles they perceived were promoted or undermined by these initiatives. Viewing this study's data through the lens of principled sensemaking also sets up the argument I build in the next chapter: when educators made sense of policy based on their professional principles, their responses to and implementation of policies were also connected to their principles.

CHAPTER SIX

Responding to the Common Core and the SBAC

In Chapter Five, I offered the notion of "principled sensemaking" as a way of theorizing how educators at two middle schools thought about and interpreted the Common Core and the SBAC exam in terms of their educational beliefs and values. Building on this analysis, Chapter Six shifts from educators' interpretations of these standards-based reforms to their practices—that is, their actions and reactions to the reforms. Chapter Six addresses the second major research question of this dissertation— "How do educators at two middle schools respond to the Common Core and SBAC, and why?" To do so, the chapter analyzes whether, how and why the educators in the two schools used, adopted, adapted, and/or rejected the Common Core and the SBAC in their curricular, instructional, and assessment practices. As I discussed in Chapter Two, in the literature about standards based-reforms, the term "response" is used in a broad way to capture the variety of ways educators react to and act on standards-based policies. In this chapter, however, in order to clearly delineate between educators' interpretations and understandings of standards-based reform policies, on one hand, and their actions and reactions to the policies, on the other hand, I use the term "implementation" to describe the latter.

Based on my analysis of interview and observational data, I found that although educators at the two middle schools had individual interpretations of the Common Core and the SBAC, their actual implementation of these standard-based reforms occurred on the group level, either in working teams or as schools. Thus in the previous chapter,

although my discussion is organized by school teams in order to enhance clarity for the reader and to include the role of situated cognition in sensemaking, the unit of analysis is individual educators. In this chapter on implementation, however, the unit of analysis is groups of educators—either teams or schools. With the Common Core, implementation occurred at the team level, and different teams implemented the Common Core in different ways. With SBAC implementation, however, the unit of analysis is the school because the SBAC was a school-wide and cross-team initiative that did not vary by team.

Although research on school-based educators' policy implementation describes many different responses to policy from resistance to full implementation, in this study, I found two overall types of policy implementation, the first much more common in the schools I studied than the second: *principled implementation*, which is implementation (or lack of implementation) of a standards-based policy, such as the Common Core and the SBAC assessment, based on consistency/inconsistency with educators' own educational values and principles, and *non-principled implementation*, which is implementation (or lack of implementation) of standards-based policy based on other factors not based on educational principles. With one exception, the teams of educators I studied at two different schools worked from an inquiry stance on teaching, learning, and schooling, and they collectively implemented the Common Core and the SBAC based on their principles.

As I demonstrated in Chapter Five, most educators at Rocky Coast and Mountain Top worked from an inquiry stance, and made sense of the Common Core and SBAC based in large part on their educational principles. Based on data analysis, I also found that most of the ways they implemented these policies were also principled. However,

educators' perceptions of the alignment of their own and the policies' educational principles did not fully explain educators' actual implementation of the Common Core and response to the SBAC². Implementation was also based on the degree of agency the educators had over implementation. Sense of agency, which is described in detail below, influenced how teachers implemented the Common Core and SBAC in ways that fit with their educational principles. As I show in the remainder of this chapter, with *principled implementation*, which is the focus on most of my analysis in this chapter, responses to the Common Core and the SBAC were animated by the intersection of two major factors: first, a team's (or school's) perceptions about the degree to which the Common Core and the SBAC aligned with the team's (or school's) educational values and beliefs, and second, a team's or (school's) degree of agency as educators and professionals to make decisions regarding implementation of the two policies.

Figure 8 is a graphic representation of the interaction of these two drivers of implementation. The *x-axis* of the figure represents perceived alignment between the educators' and the policies' underlying values and beliefs (from weaker to stronger); the *y-axis* of the figure represents the extent of agency over curriculum and instruction decisions (from lesser to greater) on the other hand. Understanding these two influences as important drivers of educators' implementation of standards-based policy creates four

² In the pilot study for this dissertation, I did not consider how agency impacted educators' responses, although I did consider the role that beliefs about professionalism influenced sensemaking. In this study and with the addition of more schools and teams of teachers, I was able to build on the ideas from the pilot study and develop a more complex interpretation of how the educators at Rocky Coast and Mountain Top responded to educational policy based on their values and beliefs. Consequently, in addition to again finding that educators who took an inquiry stance made sense of policy based on their beliefs and values, I also found that this principled sensemaking interacted with their sense of agency to shape how the educators enacted policy.

broad variations of policy implementation, which are represented as quadrants on the diagram. Within each quadrant, there are numerous variations of each type of implementation, with extreme responses located in the outer corners of each quadrant.

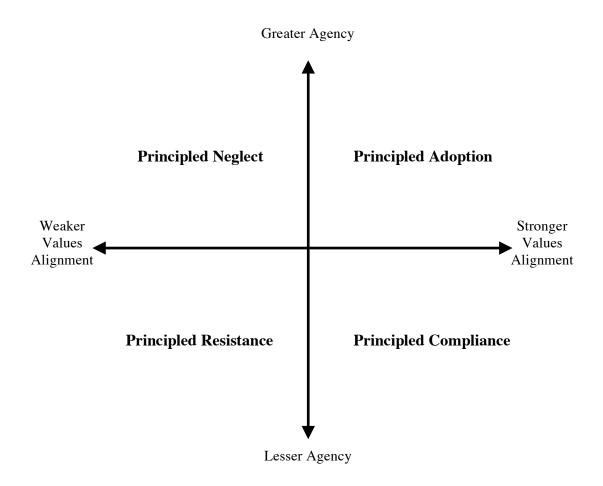


Figure 8. Principled implementation of standards-based policy

Understanding principled implementation of the Common Core and the SBAC in terms of these two drivers of reform creates four quadrants of possible responses: principled adoption, principled compliance, principled neglect, and principled resistance. These are defined and elaborated in Table 7 below. Each type of implementation is defined in terms of the way principled sensemaking and agency intersect.

Table 7

Principled Policy Implementation: Four variations

Type of Implementation	Definition	Degree of Agency	Alignment with Principles
Principled Adoption	Educators are authorized and have the opportunity to conduct full, yet critical and tailored, implementation of policy in ways that align with and represent educators' beliefs about teaching, learning, and schooling.	High	Strong
Principled Compliance	Authorities require implementation of policy that is generally aligned with educators' principles; educators change teaching practice to align with policy but without the agency to make modifications that are fully inline with educators' beliefs about teaching, learning, and schooling	Low	Strong
Principled Neglect	Educators choose to comply only with technical requirements of policy, but are authorized and have the opportunity <i>not</i> to change teaching practice in response to policy; have the authority and opportunity to ignore policy because it is understood as out of alignment with educators' principles	High	Weak
Principled Resistance	Authorities require implementation of policy that does not align with educators' principles; Educators attempt to demonstrate reluctance or refusal to change curriculum, instruction, and assessment practices, either overtly or covertly, to comply with policy, including modifying scripted application of policy, often with negative consequences	Low	Weak

It is important to note that these types of principled implementation represent the collective responses of teams, not individual educators, because the educators in this study adopted, adapted, ignored, or otherwise implemented the Common Core through the vehicle of teams and responded to the SBAC at the school level. Of course individual sensemaking and interpretation played a role, but at these two schools implementation was generally a group activity. Thus the teams' implementation of the Common Core and the schools' responses to the SBAC are the focus of this chapter.

In the schools I studied, I identified three of the four variations of principled implementation by the teams and schools: *principled adoption*, *principled compliance*, and principled neglect, which I describe in detail below. In my study, there was not a team or school that implemented the Common Core or SBAC in terms of principled resistance, the fourth quadrant in the figure. However, this variation of implementation of school-based policy or curriculum requirements is hypothetically possible and there are, in fact, examples of it in the literature (Bauml, 2015; Crocco & Costigan, 2007; Smagorinsky, Lakly, & Johnson, 2002). Of particular note is the work of Achinstein and Ogawa (2006), who themselves actually used the "principled resistance" term to describe beginning teachers who did not fully implement a scripted reading program that was required in their schools and ultimately lost or left their jobs. Other studies have used somewhat similar terms for this form of principled resistance to policy implementation, such as "pedagogical responsibility" (Santoro, in press) and "a subculture of democratic inquiry and practice" (Friedman et al., 2009).

Before describing these four types of principled policy implementation in more detail, it is important to clarify how I am using the term "agency," one of the two drivers of response to the Common Core and SBAC. Drawing on previous research that has examined the relationship between agency and how educators respond to educational reforms (Butler, Schnellert, & MacNeil, 2015; Pyhältö, Pietarinen, & Soini, 2014), in this chapter I use the term "agency" to mean the capacity and opportunities that teams of teachers or whole schools had to make choices about and exert power over their teaching practices, including whether and how they implemented the Common Core and the SBAC high-stakes examination. How much agency educators actually had to make and act on decisions about curriculum, instruction, and assessment depended on multiple factors, including: school and district administrators; local, state and federal policies; and educators' own individual and collective sense of control over their practice. For example, grade-level teams of teachers at Mountain Top had a great deal of agency over Common Core implementation. In their grade level teams, administrators supported teachers' decisions about how and to what degree the Common Core would be implemented in their teaching. In particular, Mountain Top's principal also very supportive of grade level teams' agency over curriculum and instruction, and was quite explicit about his expectations that grade-level teams should make decisions about the teaching and learning that took place for their group of students. In addition, although the state had adopted the Common Core and had mandated that schools implement it, there were no state or federal laws dictating what Common Core implementation should look like, nor were there immediate consequences for failure to implement the Common Core in particular ways. The Mountain Top teachers also felt strongly that, as professionals, it

was their responsibility to create curriculum based on students' needs. Agency over Common Core implementation for grade level teams at Mountain Top was high.

The situation with the SBAC was somewhat different. State and federal laws required Mountain Top educators to administer the SBAC exam at least once a year. However, beyond the mandate to administer the exam, teams of teachers at Mountain Top had a considerable amount of agency over how, whether, and to what extent they changed their curriculum, teaching, and informal assessment practices to align with the SBAC. This type of agency over implementation of policy—wherein teachers, with the support of their administrators, make decisions about the teaching practices that they use—stands in contrast to other examples, which have been documented in the literature, wherein educators in research simply do *not* have the opportunity or the authority to make these types of decisions, often *because* of their administrators (Achinstein & Ogawa, 2006; Au, 2011; Crocco & Costigan, 2007). Examples of this lack of agency are discussed in both the principled resistance and principled adoption sections of this chapter.

As Figure 8 shows, the intersection of agency and alignment of values and beliefs led to four types of implementation of the Common Core and SBAC. The upper right quadrant, which denotes higher agency and stronger alignment of values and beliefs between educators and policy, represents a type of implementation I call "principled adoption." The teams I have located in this quadrant responded to policy by enthusiastically adopting the policy and using it in ways that supported their educational principles, including co-planning interdisciplinary curriculum, revising student

assessments to become based on the Common Core, and creating team-wide standards documents to guide curriculum planning.

In the upper left quadrant, I have located the responses of teams of educators who had higher levels of agency over policy implementation but saw weaker alignment between their educational values and the values implicit in the Common Core and the SBAC. I term this kind of response "principled neglect," a term I first developed in the pilot study for this dissertation. Principled neglect denotes a response to policy wherein educators did *not* change their curricular and instructional practices because the policies in question did not strongly align with their professional beliefs and values and because they had sufficient agency to essentially "ignore" the policy. In this study, educators demonstrated "principled neglect" in response to the SBAC because they did not change their teaching practices in an attempt to improve their students' scores on the exam. This response is not consistent with the way that many other schools have responded highstakes standardized tests by narrowing the topics taught to those on the exams, spending significant amounts of time preparing students to take the exams, and reverting to teacher-centered, lecture-based classrooms (Au, 2007, 2012; Booher-Jennings, 2005; Wills & Sandholtz, 2009).

In the lower right quadrant of Figure 8 is "principled compliance," which describes the manner and degree to which teams of educators who did not have agency over policy implementation responded to policy they generally believed aligned with their principles. The concept of "principled compliance" appears to be the ideal policy implementation situation; educators are required to implement policy, and they agree with the values they believe are promoted by the policy, leading to theoretically

harmonious policy adoption. However, in this study, lack of agency over implementation limited the ways teachers were able to tailor implementation based on their students' needs and their particular teaching styles and philosophies. That is, educators generally agreed with the policy but, because of lack of agency, they were directed to implement policy in specific, scripted ways, which caused some tension for teachers in this category. Unlike principled adoption, where educators have the agency to implement policy in ways that are fully inline with their educational values (including student needs and their own teaching styles and philosophies), principled compliance occurs when teachers do not have the agency to modify policy to be fully inline with their beliefs about teaching, learning, and schooling. Therefore "principled adoption" describes active and principled choice to implement policy, and "principled compliance" describes the response of educators who were required, because they had lower amounts of agency, to implement policy in scripted ways. However, because both types of response occurred because educators believed that the policy was generally in alignment with their values, both adoption and compliance were "principled."

The lower left quadrant of Figure 8 represents what I am calling "principled resistance³," which denotes educators' response to policy when authorities—such as school or district administrators—require implementation of policies that do not align with educators' principles. "Principled resistance" includes educators' overt or covert reluctance or resistance to change curriculum, instruction, and assessment practices, evidenced by their modifying, adapting, or otherwise deviating from directives to

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³ This term was first used by Achinstein and Ogawa (2006) in similar ways to the way I define "principled resistance" in this study; I elaborate further on of their use of the term in a subsequent section of this chapter.

implement policy in scripted or other way and/or continuing to teach in ways that align with educational values and beliefs *in defiance of policy mandates*. Although resisting, modifying, and refusing to enact policy are strong responses that seem to reflect educators' desire to have agency and control over their own teaching practices, they are not consistent with the way I am using agency in this analysis, which refers to situations wherein educators are authorized to make decisions and choices about their practice. Unfortunately the result of principled resistance to local or larger policy is often teachers choosing to leave their schools or being fired for refusal to comply with policy (Achinstein & Ogawa, 2006; Crocco & Costigan, 2007).

In this dissertation, all of the teams of teachers I studied, with the exception of the ELA team to which I return below, had a substantial sense of agency over curriculum and instruction in their classrooms. As a result, there is no example of principled resistance as a form of policy implementation in this study, although this would hypothetically be possible, given the two dimensions I have identified. In addition, and perhaps more importantly, as I have already shown, the vast majority of educators in this study believed that the Common Core was well-aligned with their principles. This positive perception of the Common Core stands in contrast to many media portrayals and some research documenting educators' disapproval of the Common Core (Henderson et al., 2015; Schlikerman, 2014; Schneider, 2015). In the two schools that I studied for this dissertation and the school I used for the pilot, most educators worked from an inquiry stance, and although their viewpoints were thoughtfully nuanced, most supported the Common Core, as I have shown in Chapter Five, and implemented it in a variety of ways, which I discuss throughout this chapter. For this reason, there were no examples of

"principled resistance" to the Common Core in this study. I discuss other examples from research to clarify and describe "principled resistance" as a potential response to policy when teams of teachers who work from an inquiry stance are required to implement policy that does not align with their values and beliefs.

In this study, I also identified a type of implementation (or lack of implementation) of standards-based policy that was not based on principles in the way I have elaborated this notion in Chapter Five. I call this lack of principled implementation *skeptical neglect* to signal that in this case, educators essentially ignore policy and do not revise their practice for reasons other than inconsistency with a team's educational principles and values. This lack of implementation depends on educators having a certain degree of agency over curriculum and instruction, but is not based on principled reasoning.

In this study, one team did not respond to the Common Core based on shared educational principles. This team, the Cascades Team at Mountain Top, chose not to implement the Common Core as a team. That is, the Cascades Team decided not to co-construct curricula and assessments as a team based on the Common Core—in essence, they chose to collectively ignore the Common Core. Had this choice been based on shared understanding that the Common Core was out of alignment with their educational principles—that it was a negative policy that would require teaching in ways that were antithetical to their student-centered, project based curriculum—this response would have been called "principled neglect." However, this choice was not based on their values and beliefs, nor was it based on their perceptions of the way the Common Core aligned with those beliefs. In fact, the team was generally supportive of the Common Core. Instead,

the Cascades Team chose collectively not to use the Common Core as the basis of shared instruction partially because of what I referred to as "reform fatigue" in Chapter Five (Gokmenoglu & Clark, 2015). Reform fatigue is a term that denotes educators' sense that new initiatives frequently emerge, and then expectations are changed, altered, or reversed, so the reforms feel tiring and cyclical. In addition to reform fatigue, the Cascades Team did not collectively take up the Common Core for logistical reasons and because of differences in teaching styles among team members. These reasons are explored in depth in the "skeptical neglect" section of this chapter.

Because the Common Core and the SBAC were very different in terms of how they were implemented and at what organizational levels, this chapter considers the implementation of the Common Core by looking at the actions of five working teams at the two schools. In contrast, the chapter considers implementation of the SBAC at the school level because decisions about test preparation, test administration, provision of opt-out information for families, and uses of testing data were made at the school rather than the team level, making the appropriate unit of analysis for implementation of the SBAC the school, rather than teacher teams. The five school teams, which have already been introduced in Chapter Five, were the Division One team at Rocky Coast and four teams at Mountain Top—the Cascades Team, the Andes Team, the Math Team, and the ELA Team. At Rocky Coast, the Division One team included all three middle school teachers, who planned cross-disciplinary curriculum together. At Mountain Top there were cross-organizational teams whose members overlapped: grade-level teams (in this study, two grade-level teams participated in this study—the Cascades Team of grade eight teachers and the Andes Teams of grade seven teachers) as well as content-area

teams (study participants were members of the Math and ELA teams). That is, the teachers on the Cascades and Andes Teams who were math or ELA teaches were also members of the Math and ELA content area teams, respectively. Two participants in this study were members of the Math Team: Harris, the Andes math teacher, and Ross, the Cascades math teacher. Two other participants in this study were members of the ELA Team: Anderson, the Andes ELA teacher, and Baudin, the Cascades ELA teacher. As members of the Andes and Cascades teams, these teachers taught the same groups of students as the other Andes and Cascades teachers and met weekly either to plan curriculum and instruction or to discuss student issues. As members of the Math or ELA Teams, however, these teachers also met with other Math or ELA teachers specifically to plan Math or ELA curriculum. Because this study focuses on response to the Common Core at the level of the team and because different teams implemented the Common Core in different ways, I consider both the grade-level teams and the content-area teams that included study participants at Mountain Top School.

Across the two schools, I found that teams of educators implemented the Common Core in four ways, three of which were what I have termed "principled"—
principled neglect, principled adoption, and principled compliance, and one which was "not-principled"—skeptical neglect. In contrast, I found that both schools implemented the SBAC in terms of principled neglect. Figure 9 shows the three principled ways in which teams and schools implemented the Common Core and the SBAC. The bulk of this chapter is dedicated to describing and analyzing principled implementation of the Common Core as well as principled implementation of the SBAC. I also briefly describe

and analyze the one non-principled form of implementation of the Common Core—skeptical neglect.

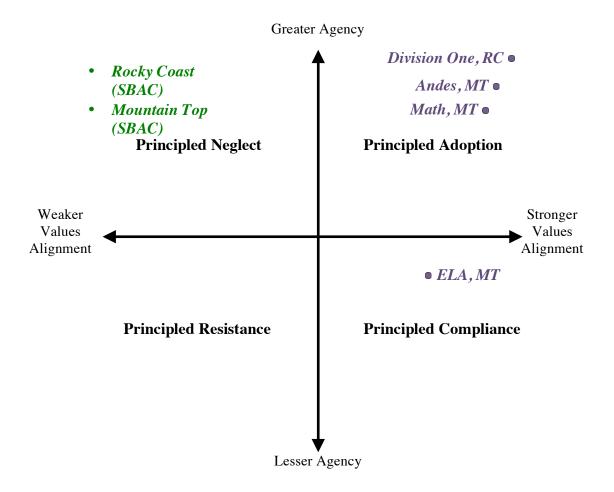


Figure 9. Principled Implementation of the Common Core by Team and SBAC by School. Implementation of the Common Core is indicated by purple dots that locate a particular team along the two axes of the figure; implementation of the SBAC is indicated by green dots.

Principled Implementation of Educational Policy

As noted above, I found that five teams of teachers and two schools implemented the Common Core and the SBAC in three different, yet principled ways: principled adoption, principled compliance, and principled neglect. All of these forms of

implementation were influenced by the intersection of perceived alignment of a team's or school's own values and beliefs and those underlying the Common Core, on one hand, and the teams' degree of agency over policy implementation, on the other. As Figure 9 shows, three of the five teams engaged in principled adoption of the Common Core, while one team engaged in principled compliance. Both schools engaged in principled neglect of the SBAC. None of the teams or schools engaged in principled resistance to the Common Core or SBAC. However, I use examples from the literature to illustrate proof of possibility of this perspective. Not included in Figures 8 or 9 is what I have termed "skeptical neglect," one team's way of implementing the Common Core, which was not based on principles. Below I discuss the three principled responses to the Common Core and SBAC, which occurred in this study, followed by a discussion of "skeptical neglect."

Principled Adoption

Principled adoption was full, yet critical and locally-tailored implementation of policy in ways that aligned with and represented educators' beliefs, values and principles related to teaching, learning, and schooling. Principled adoption occurred when two things were in place: (1) a team's or school's values were perceived to be strongly aligned with the values and principles implicit in, or promoted by a policy, and (2) a team or school had agency, including the opportunity and responsibility to implement a policy in ways that aligned with their educational principles and fit the local needs of their school and community. Principled adoption occurred when teachers worked together to make sense of and understand the Common Core; planned, implemented, and reflected upon cross-disciplinary curriculum and instruction based on the Common Core; and

revised assessment standards to be more consistent with the Common Core. Three teams exhibited "principled adoption" as a way of implementing the Common Core: the Division One grade-level team at Rocky Coast, the Andes Team grade-level team at Mountain Top, and the content-specific Math Team at Mountain Top. For each of these teams, I describe the team's agency over policy implementation, give a brief recap of the team's principled sensemaking based on Chapter Five, and then show how their implementation of the Common Core demonstrated "principled adoption" as a result of the intersection of their agency and principled sensemaking.

Principled Adoption of the Common Core in Division One, Rocky Coast. For Division One teachers at Rocky Coast, agency was high in part because of the sheer number of responsibilities teachers had as well as the ways Principal Williams supported the teachers as responsible professionals. Division One teachers at Rocky Coast had many professional responsibilities. Like the teachers in the other divisions, they were in charge of creating the curriculum for Division One students. There were no prepackaged, scripted curricula, nor were there any textbooks for 6th and 7th grade students, nor for any grade levels. When describing the history of the school's curriculum, Principal Williams stated, "We didn't put into our charter application a scope and sequence curriculum from 6th through 12th. What we said was, this is our approach and we will develop a repeating menu of what we call investigations" (Williams, interview 2). Developing those "investigations" for 6th and 7th grade students based on the Common Core standards was the job of the Division One team at Rocky Coast. In addition to having autonomy over the curriculum, Rocky Coast teacher teams were in charge of student schedules, summer programing, participating in creating school-wide policies

(such as the teacher evaluation policy), and running daily school-wide meetings. All of these responsibilities show that Rocky Coast teachers were decision makers at Rocky Coast.

Rocky Coast teachers not only took their responsibilities as decision makers seriously, but they also believed that Principal Williams was a major supporter of teachers as active agents in generating knowledge regarding curriculum design, instruction, assessment, and many other school-wide responsibilities. For example, Powell, the Division One Humanities teacher, stated, "I'm confident that Williams has the utmost respect for the teaching profession and teachers and values what we do" (Powell, interview 2). Hughes, the science teacher, believed that at Rocky Coast, teachers were "empowered to develop pedagogy that they th[ought] suit[ed] their student's needs best, rather than pedagogy that suit[ed] a particular type of assessment" (Hughes, interview 2). Hughes also believed that Rocky Coast teachers were treated "absolutely" as professionals by school leadership, and perhaps even "given too many responsibilities. But it's great" (Hughes, interview 2). These quotes demonstrate Division One teachers felt strongly that Rocky Coast was a school where teachers had a substantial amount of responsibility and agency.

Principal Williams was also clear through his communications with faculty that he believed teachers were professionals whose judgment and choices should be the drivers of teaching and learning. For example, Williams sent an email to faculty that included a link to an *Atlantic Magazine* article about the huge number of technology-based teaching tools available to teachers. The article, titled, "The Deconstruction of the K-12 Teacher" questioned, "When kids can get their lessons from the Internet, what's left

for classroom instructors to do?" (Godsey, 2015). In the email Williams wrote, "Worth clicking through to the *Atlantic* article – [the author is] probably more right than wrong about what teaching will look like, and the questions it raises are troubling...will our crack team be the one that creates a model where we're not tools of the tools, so to speak? (Williams, email to faculty, 3/29/15). This shows Williams viewed his teachers as creators, decision makers, and authoritative about content knowledge and the use of technology—and other teaching techniques—in their classrooms. These two factors: responsibility over curriculum, instruction, and school policy and operations, and school leaders who treated teachers as professionals, gave Division One teachers a strong degree of agency over the implementation of the Common Core.

As I showed in Chapter Five, the Division One team at Rocky Coast believed the Common Core was clearly aligned with their educational principles of student-centered, place-based, project-based curriculum and instruction. Because of the strong alignment they perceived between their values and the Common Core and their large amounts of agency, the ways the Division One team implemented the Common Core were in terms of "principled adoption." In this case, principled adoption played out in two main forms of implementation: making decisions about new school-wide assessment plan based on the Common Core, and implementing integrated, cross-disciplinary curriculum based on the Common Core.

Decisions about which standards to assess at each grade level (including the Common Core for ELA and math, and some state standards for other content areas), were outlined by Principal Williams and the science teacher Hughes before the school even

opened. However, over the course of the first year of the school, teams of teachers decided that assessing standards by grade level was too

Granular . . . we agreed it was too many [standards]. So we did some work to sort of figure out, can we make this more flexible for your multiaged learning environment where some kids come to us as 8th graders and have 6th grade skills and some kids are 12 years old and are ready to learn high school material?" (Hughes, interview 2)

The Division One team decided that it would make more sense to have what they called "passage standards," which is one set of standards that the students in Division One would have to meet before going on to high school, instead of assessing different standards for grades 6, 7, and 8. This decision was a major way that the Division One team chose to implement the Common Core. Hughes called the passage standards " a great innovation in our school" (Hughes, interview 1). He described their process of choosing passage standards as "winnowing," stating,

The Common Core has everything split up, 6th, 7th, 8th . . . We did a lot of work to winnow down that list to assess for the 8th grade proficiencies. And we call those Passage Standards. So our kids are now aware that they need to meet all of the 8th grade Passage Standards within their time in middle school to pass on to high school. It reduces the list to a third, to a quarter of the number of learning targets that our kids need to keep track of and they are able to see that, this is an 8th grade learning target, you did great work and we are giving you an approaching on this because you are

a 6th grader and you are approaching the 8th grade standard right now. (Micah, interview 2)

As described in Chapter Five, the sheer number of standards in the Common Core was one of the major critiques Division One Rocky Coast educators had about the Common Core. Their response to that concern—narrowing the standards down to a manageable list that corresponded to the grade levels that spanned the Division rather than to each individual grade—is an excellent example of principled adoption of the Common Core. Clearly, the Division One team had the agency—the power necessary to act—to address a problem they were confronting in the implementation of the Common Core. They used that agency to implement the Common Core in ways that fit their educational principles. The Division One Rocky Coast educators believed that students developed and learned at different rates and in different ways and that this was especially true for their special needs students. They were committed to supporting each learner's growth in student-centered ways. Eliminating what they believed were false divisions between grade levels in the Common Core allowed them to support each student wherever he or she was within the range of skills in Division One. In addition, Division One Rocky Coast educators believed in teaching for depth over breadth, and because they reduced the number of standards by eliminating grade-level subdivisions of the Common Core, they were able to implement the Common Core in a way that focused deeply on fewer standards over time instead of trying to address all of the standards every year.

The second major aspect of the Division One team's implementation of the Common Core that demonstrated principled adoption was using the Common Core as the basis of their integrated, place-based curriculum—a core value at Rocky Coast. Given

that the Common Core was written into the charter application of Rocky Coast, it is no surprise that it was the basis of the curriculum. However, the way Division One teachers implemented the Common Core when planning their interdisciplinary units reflected principled adoption because they used their professional judgment—one component of agency—and their values about constructivist, student-centered curriculum and instruction to decide what units to teach, which Common Core standards those units would include, and how the Common Core would be used across disciplines. For example, one such unit involved students conducting research about their town's history, geography, and government, including topics such as population, population density, demographics of the town, and how the government worked. They were also required to research another city in a different country that was also coastal and had other similarities to their school's town. Then, ultimately, as Robertson, the Division One math teacher said, "The goal [was] for them to compare their two cities, our city and whatever foreign city they ha[d] chosen, through an infographic" (Robertson, interview 2). The infographic—a "data rich visualization of a story or thesis, to educate and inform" (Division One Trimester Three Curriculum Planning Document)—would demonstrate students' understanding of all of the Common Core targets they were working on, including research skills from the ELA Common Core and statistics and graphing skills from the Math Common Core. Robertson described the process of using the standards for this place-based unit in this way:

I looked at all the standards. I went through them first [instead of Powell, the Humanities teacher going through them first] because I have been doing all this work with Fraser (the science teacher) so I had the standards

readily available. So I went through and I started highlighting all the ones that might be mapped through the infographic and then I gave that to Holly (Powell) and then she narrowed down the list of ones she probably could hit. So we looked at the standards and then we came up with data points that we felt would hit some of the standards or we could create a graph or something and it would meet some of the standards. . . I am requiring one type of graph, so it has to be bar, line graph or pie chart and that meets one of the Common Core targets. [Powell] is meeting some other targets . . . We are trying to incorporate more than one content area. (Robertson, interview 2)

This extended description shows that Division One teachers implemented the Common Core to support the place-based curricular units they were creating. To be sure, standards from the Common Core's ELA and math standards were chosen as the basis of the curriculum, but the curriculum remained consistent with the educational beliefs and values of the educators: it was interdisciplinary, involved a lot of student choice, encouraged critical thinking, and was place-based. This way of implementing the Common Core stands in sharp contrast to reports of schools where in the name of implementing the Common Core, teachers are required to follow scripts that require all students to participate in "the same things at the same times and in the same ways" (Singer, 2015; see also Goering, 2012; Strauss, 2013). Instead, Rocky Coast Division One teachers had the autonomy to implement the Common Core in ways that aligned with their shared educational principles.

Principled Adoption of the Common Core by the Andes Team. The second team of teachers in this study to implement the Common Core through principled adoption was the grade-level Andes Team at Mountain Top School. Andes Team members perceived their agency as teachers in ways that were very similar to the perceptions of Division One teachers at Rocky Coast. Teachers on the Andes Team had control over their curricular and instructional practices. For example, Harris, the Andes Team math teacher stated, "I'm allowed to teach how I believe, and I'm supported in that" (Harris, interview 1). Similarly, Wilson, the Andes Team science teacher stated, "I think just the fact that we have the ability to make decisions in our classrooms . . . I feel like we are trusted as professionals" (Wilson, interview 2). Feelings of trust and support reinforced their perceptions that they were the decision makers in their classrooms. In addition, as described previously, the Andes Team had chosen to take up "applied learning" as a team initiative for creating interdisciplinary, project-based curriculum during the year of this study. In and of itself, the choice to take up applied learning demonstrates the agency that Andes Team teachers had over their curriculum and instruction.

Messages from Principal Miller also reinforced the notion that Andes Team teachers had opportunities and responsibilities to make decisions as a team. For example, Anderson, the Andes Team ELA teacher, stated that when the team decided to implement applied learning, the principal expected that the Andes Team would create original, interdisciplinary curriculum based on their content area knowledge and knowledge of their students. She stated, "We are told, we want you to use your professional judgment and do what you see is best for kids" (Anderson, interview 2). Principal Miller was very

clear in my interviews with him that he believed teachers should have autonomy over curriculum and instruction decisions. When I asked him about the role of grade-level teams at Mountain Top, he stated,

So [teams] develop how they are going to instruct the "what." So we start with the "why." The "why" is so that we can customize and personalize for kids so that they can be more engaged at their readiness level. Then the "what" is (how?) we do that using the learning targets of the Common Core. "How" is completely up to them. Like, I don't care if you stand on your head and sing a song, but you better get those kids moving. That's how they leave it. Teachers can't argue with that. Teachers don't want to argue with that. They want to be accountable—they love talking about teaching and learning and that is why we got in the profession. Just get out of their damn way and let them do it. (Miller, interview 2)

As this quote demonstrates, Principal Miller strongly believed that teachers should be supported in using their professional knowledge and skills to create meaningful learning experiences for students. In addition, this quotation shows how agency and educational principles worked hand in hand for Andes Team teachers: they had professional autonomy and the support of the principal to create customized, student-centered curriculum and instruction for students that reflected the mission and vision of Mountain Top.

The clearest example of the Andes Team's principled adoption of the Common Core can be seen in the way the team took up the notion of applied learning as a general approach to teaching and learning. Applied learning, as discussed previously, was the

approach to curriculum and instruction Mountain Top educators had created based on the school's mission. Applied learning was grounded in project-based, integrated, cross-curricular learning experiences that resulted in students "applying their learning" to new and novel content of their choice. The Andes Team was the first and the only team out of seven teams at Mountain Top that had decided to implement applied learning during the year of this study. As the groundbreaking team, the Andes Team experimented with how best to implement applied learning. Agency over implementation allowed the teachers to learn as they went through the school year, and this process of developing what applied learning could and should be was invigorating for the Andes Team. For example, Anderson, the Andes Team ELA teacher, stated,

I think that teams are given the freedom to try things without being ridiculed if it doesn't work. Which, I have had other administration that say that they do that, but then when you try, they are like, what were you thinking? So I feel like it's a pretty safe place to be able to do that.

(Anderson, interview 1)

Similarly, Wilson, the Andes Team science teacher, believed that because of the latitude the team had over how to implement applied learning, they were able to customize their practices to support their students. She stated,

I think our team kind of took it (applied learning) on as something and then it's hopefully kind of being filtered out throughout the school. . . We have kind of made it our own as far as sharing classrooms and making it what can we share across content and what can we have kids really kind of

take a hold of the choice of what they are learning and what their projects are. (Wilson, interview 1)

As these quotes demonstrate, grade-level teams, such as the Andes Team, were given space and autonomy to develop teaching practices that aligned with their beliefs and values about how students learn best.

The Andes Team implemented the Common Core as the basis of their curriculum in similar ways to the Division One Team at Rocky Coast. That is, the applied learning units that the Andes Team developed were all based on the Common Core, and the Common Core standards were used in those units in ways that reflected the Andes Team's beliefs about student-centered, constructivist curriculum. Andes Team teachers believed that the process the team used to plan their applied learning units was very positive. For example, when Harris, the Andes Team Math teacher, was asked how the Common Core was taken up by the Andes Team, she replied,

It's been really great. We have been able to dissect standards and make sure we can divide and conquer. We have also started to, this year, really intertwine them and start creating multi-disciplinary units where we are having kids do, like, "the best day ever." Doing a big project. Then they are doing a little bit of math, a little bit of language arts, a little bit of science, a little bit of social studies and they are tying them all in. (Harris, interview 2)

Because the Andes Team chose to do applied learning, they worked together to make sense of the Common Core standards and then use them to create their curriculum. They used them in ways that supported their educational beliefs and

values—by "intertwining" standards across the disciplines, and as Wilson, the Andes Team science teacher described, to help students "be thinkers. I know our team, we're pushing them to be ready for when they have to think for a job or think for college, to think out in the real world" (Wilson, interview 2). Similarly Wilson also believed that the Common Core helped the Andes Team support critical thinking in their applied learning units. She stated,

I think if we are using the Common Core to teach depth—like, I think if that is happening at each grade level and we are truly using it, then it's only going to facilitate the thinking because kids are going to be able to draw on their knowledge and truly understand something instead of just—oh, what was that fact? (Wilson, interview 2).

For the Andes Team, implementing the Common Core through principled adoption meant that they used the Common Core as the basis of their applied learning units in ways that reflected their educational principles. They worked together to understand the Common Core standards, found connections across content areas, and then created interdisciplinary, project-based units that they then taught together. The ways they used the Common Core demonstrated the Andes Team's beliefs that the Common Core was a "set of guidelines that really allows us to make [students'] education worthwhile," as well as a flexible document that could be used to deepen critical thinking (Harris, interview 2). Principled adoption of the Common Core ensured that the educational values and beliefs of the Andes Team teachers were embodied in their curriculum and instruction.

Principled Adoption of the Common Core by Mountain Top's Math Team.

The third team to demonstrate principled adoption of the Common Core was Mountain Top's cross-grade level math team. This team, which was comprised of the math teachers at all grade levels and the math Curriculum Coordinator, Sandy West, met monthly to discuss curriculum and instruction decisions for math classes. Prior to the introduction of the Common Core, Mountain Top math teachers had used *Mathscapes*, a packaged, scripted math curriculum as the basis of their instruction. When the Common Core was adopted, the Math Team got rid of the *Mathscapes* program and decided to create their own unique curriculum. Ross, the Cascades team math teacher, described this shift towards autonomy over the prior math curriculum very positively, stating,

"[Before, we were] caught in this, "oh, now we are just going to do this book [*Mathscapes*] and that will fix everything." So instead we are [now] creating the units and creating the activities and we pull from [many] resources. But we don't do a boxed kit anymore. (Ross, interview 1)

Instead of *Mathscapes*, the "boxed kit," West, the math curriculum coordinator, worked with the teachers to create a digital repository of lesson plans, activities, assessments, and lesson ideas. The repository was organized by a matrix that aligned these curriculum ideas with the Common Core math standards. The Math Team teachers referred to this repository simply as "the matrix," which is described in greater detail below.

Agency for the math team was high; their matrix was organized and updated regularly by Curriculum Coordinator West, but the ideas for the activities and ideas that made up the curriculum were generated and shared by teachers on the team. Additionally, teachers worked together to create common assessments that were used across grade

levels. As Harris, the Andes team math teacher stated, "We make all our assessments together, they are all common assessments and we have always done that. Do we have to rewrite them [based on the Common Core]? Yes" (Harris, interview 1). Creating curriculum and assessments together, based on the Common Core, demonstrates both that the Math Team teachers had agency over how the Common Core was implemented in their school and classrooms, and that they chose to take up the Common Core as the basis of their curriculum and assessment because, as discussed in Chapter Five, they believed it aligned with their educational principles.

Principled adoption of the Common Core by Math Team teachers had two major components. The first was the math matrix previously mentioned. The matrix was an online document that all math teachers used to plan their lessons, their assessments, and the homework they gave students. Ross, the Cascades Team math teacher, described the initial creation of the matrix and how it had evolved over time, stating

The year before last is when we started, towards the end of the year, putting the matrices together. The Common Core targets were there and then the targets were broken down into steps A, B, C and D and we were filling in the matrices as we went, as a common document. So West [the math curriculum coordinator] really kind of reworded or word-smithed the targets into kid friendly language and then we would dump stuff into the matrices as we were doing it. Now West is really good about asking, "Oh, did you use that resource? Can you send it to me so I can put it on the matrix?" And the matrix is really for that customized learning kind of piece. (Ross, interview 1).

As Ross stated, the matrix enabled math teachers to support students individually in their math development. Math team teachers also used the NWEA—the short standardized test that gave teachers immediate feedback on students' skill levels—and common assessments to determine which math concepts and skills students had not yet mastered, and then planned both whole-class and individual instruction based on those assessments.

Similarly, Harris, the Andes Team math teacher, believed that the Common Core as it was represented by the matrices had really influenced how she supported individual students in her class. When asked how the Common Core had influenced her instruction, she stated,

Independent pacing. It has really helped me. And I don't know if it's just the matrices themselves or the Common Core. The combination of them. But just having my instructional units accessible to students at any point in time. It's really great and it doesn't mean that I won't go back and fix RP3 (one of the Common Core standards and its associated math activities) and adjust it and tweak it and all of that. But at least there is a skeleton there, so if a kid wants to move forward or a kid is like, hey, I want to try out geometry, they can go right there and go into geometry and just practice. (Harris, interview 1).

These quotes about the math matrix demonstrate how Math Team teachers implemented the Common Core in ways that aligned with their educational principles of individualized, student-centered instruction in their classroom activities.

Some math teachers also used the matrix to create individualized homework plans for students. Instead of sending home the same homework for all students in her class,

Harris, the Andes Team math teacher, created customized math homework for each of her students based on their progress toward the Common Core standards. She stated,

I do a lot of customizing homework. It's hard in the beginning because parents are like, what? Because it's not a worksheet. And I say, 20 minutes of math practice. They ask, "What are they supposed to practice?" I'm like, I have built the plan for them, trust me, they have a plan. And it's a lot of work for me, but it's worth it. (Harris, interview 2)

Using the Common Core to support student learning both in and out of math classrooms shows how the Math Team implemented the Common Core by creating both new curriculum and new, customized, instructional practices based on the standards.

The math matrix at Mountain Top and the integrated units the Andes Team and the Division One Rocky Coast team created are all examples of principled adoption of the Common Core because they highlight how the confluence of agency and values shaped the implementation of the Common Core by teachers. Because these teams had agency, and used their values to make sense of the Common Core, they were able to implement the Common Core in ways that reflected those values. These teams' creation and implementation of curriculum based on the Common Core in ways that aligned with their values is different from what is found in most of the published research about responses to standards-based reforms, which I reviewed in Chapter Two. In my review of related literature, I examined a number of studies about teachers' implementation of standards-based reforms, but in each previous study there was a particular curriculum that teachers were required to use. For example, in Stillman's (2009) study, elementary school teachers were required to implement the scripted *Reading California* program, and in Goldstein's

(2008) study, kindergarten teachers were required to follow district "instructional planning guides." In contrast, with the Math Team at Mountain Top standards-based reform involved getting rid of a scripted curriculum and creating a home-grown, context-specific curriculum, which was very different from the requirements placed on teachers in other contexts. Neither the Andes Team nor the Division One Team had scripted curriculum to discard, but they also did not turn to published, package curriculum in order to implement the Common Core. Rather they created their own, student-centered curriculum that aligned with their constructivist beliefs about teaching and learning. Because these three teams had significant amounts of agency and because they were clear that the educational values and beliefs underlying the Common Core were consistent with their own, their implementation of the Common Core in the form of principled adoption looks different from many of the examples found in the existing literature.

In addition to agency, values also impacted how these three teams of teachers implemented the Common Core. Although the teachers in both Stillman's (2009) and Goldstein's (2008) studies tried to use their "professional beliefs, preferences, and strategic knowledge base[s]" to attempt to adapt the curriculum they were required to use, as noted above, they did not have sufficient agency to dispense with existing programs and create their own, new curricula (Goldstein, 2008, p. 448). Stillman's and Goldstein's examples, then, could be considered variations of "principled compliance" because the teachers implemented standards and curriculum in ways that generally aligned with their values, but they didn't have as much agency as Math Team teachers at Mountain Top. Thus the Mountain Top Math Team's implementation of the Common Core demonstrates a unique example of standards-based policy implementation, and a clear example of

how—when large amounts of agency and clear alignment between policy and teacher values exist—principled adoption results in curriculum and instruction that reflects teachers' shared educational principles.

Principled adoption, as I am considering it here, captures the way the Rocky

Coast Division One Team and the Andes and Math Teams at Mountain Top implemented
the Common Core. Related research demonstrates that response to standards-based
reform initiatives sometimes involved educators using their beliefs and values to justify
their responses to reform policy (Christensen 2007; Eisenbach, 2012), and
implementation was sometimes shaped by the amount of agency teachers had (Stillman,
2009). My research contributes to the field by examining how the intersection of these
two components—agency and values—shaped principled implementation of the
Common Core by teachers who took an inquiry stance on teaching, learning, and
schooling.

Principled Compliance

With principled adoption, teams of teachers chose how to implement the Common Core in ways that aligned with their principles. Unlike principled adoption, however, principled compliance with policy occurred when teachers were required to implement policy in particular ways that did not allow them sufficient latitude to tailor implementation in ways that fully aligned with their educational principles. However, similar to principled adoption, principled compliance also involved teacher critique of and reflection on implementation, and teachers did believe that the values promoted by the policy aligned with their own educational principles. In other words, principled compliance, as I use it here, denotes the responses groups of teachers whose values and

beliefs aligned with the Common Core, but perceived they had low amounts of agency over its implementation.

In theory, because these teachers agreed with the principles they perceived to be promoted by the Common Core, not having agency over how to implement this reform should not necessarily be problematic. However, because the teachers on this team worked from an inquiry stance, they questioned the ways that the implementation of the Common Core was being required—but they did not have the power to choose to implement it differently. Specifically, the Common Core was implemented in ELA classrooms through the Teachers College *Units of Writing* program, a scripted, packaged writing curriculum that was represented by its developers and supporters as aligned to the Common Core. Thus for the Mountain Top ELA team, the *Units of Writing* program they were required to teach was the Common Core. They did not, collectively, study and interpret the Common Core standards themselves—instead, they received training about how to use the *Units of Writing* program, and content-team time was spent discussing and unpacking the program, not the Common Core standards themselves. Therefore, in this section, I explain how collectively, ELA teachers displayed principled compliance with the Common Core as embodied by the *Units of Writing* program.

Principled Compliance with the Common Core by the ELA Team. The ELA team at Mountain Top was coordinated by Hillary Tupper, a former Mountain Top ELA teacher. Tupper was an enthusiastic supporter of the Common Core as well as the Common Core-aligned *Units of Writing* program used in Mountain Top's ELA classrooms. Principal Miller and Curriculum Coordinator Tupper decided to adopt the *Units of Writing* program during Miller's first year as principal of Mountain Top, in

response to their concerns about students' consistently poor scores on the writing portion of the state exam. They went to a presentation on the program by *Units of Writing*Program Consultants and observed other schools that used the program, to "make sure that taking on [the] Teacher's College [program, Units of Writing,] for the middle school wasn't going to be in opposition to [the] vision of going towards project based interdisciplinary learning" (Tupper, interview 1). After reviewing the program, they decided that the *Units of Writing* program

Was student-centered. Like, they write what they want to write about as long as it's within the genre that they are doing. There is a lot of student choice. It's really about building the fluency and the volume. The teaching methods in it are backed by so much research and it's laid out pretty clearly how to do it. It comes with incredible professional development. (Tupper, interview 1)

Because Principal Miller and Coordinator Tupper believed that the program would integrate well with applied learning, and because as they stated, "it is the Common Core—[the units] all match the Common Core directly," they decided "we couldn't say no" (Tupper, interview 1), and adopted the program for all ELA teachers to use.

What the above detail about the complicated situation with ELA and the Common Core at Mountain Top School makes clear is that from the beginning, ELA teachers felt they did not have agency over the *Units of Writing* program. As one ELA teacher said, "We didn't take a vote, no" (Baudin, interview 1). However, it is important to note the ELA teachers did not completely dislike the program. Anderson, the Andes Team ELA teacher, stated, "I like a lot of aspects of it" (Anderson, interview 2), while Baudin, the

Cascades Team ELA teacher, commented that "the writing checklist is a great thing," and she also liked the content of many of the mini-lessons in the program (Baudin, interview 2). What the ELA teachers did not like about the program was that they were not able to implement it in ways that aligned more clearly with their professional values about writing instruction that encouraged creativity, flexibility, and choice. In addition, and adding to the complexity of the situation, the ELA teachers believed that the Common Core actually supported their own values but the way they were required to implement the *Units of Writing* program diminished their ability to foster those qualities in the classroom.

In particular, the ELA teachers did not like the number of units they were expected to teach, the focus of the units, or the repetitiveness of the lesson formats. They felt that the sheer number of units rushed students through them without allowing time for them to learn the different genres in depth. They also felt that the units focused too much on non-fiction genres. For example, Baudin stated,

Narrative comes once a year now. Once a year. Narrative. Whereas every quarter when I had more of what I call "freedom of choice" when I did things, before structure, narratives were at least once a quarter and then every day in journals. (Baudin, interview 3).

Anderson also lamented the lack of fiction-based genres. She stated, "I just had this conversation on the ride here with my son who is in my class. He's like, why can't we write fantasy? Why can't we do more of that stuff? And I do feel like my hands are tied with what I can teach" (Anderson, interview 1). The repetitiveness of the lesson plans, all of which followed the same format, was also unpopular with the ELA teachers because it

did not engage and excite students. As Anderson reflected, "[The students] feel like its becoming very mundane and I feel like it is too" (Anderson, interview 1).

Because these teachers generally agreed with the values they believed were promoted by the Common Core, and therefore to a certain extent by the *Units of Writing* program since it *was* the Common Core for them, their inclination was to modify the *Units of Writing* program to be more in-line with their professional principles, which might have resulted in principled adoption. However, as stated earlier, the ELA team had very limited control over how to implement the program. Instead of adopting the program in ways that would have fit with their principles, which they could have done if they had had more agency over the curriculum, they were required to comply with the program as directed by the ELA curriculum coordinator.

Of course, the ELA team teachers did have some agency over the implementation of the program, and both Baudin and Anderson described the ways that they managed to exercise some autonomy. Baudin found that, for example, "mini-lessons of three to four minutes to talk about possessives is not enough" (Baudin, interview 1). In response, Baudin chose to extend the length of some mini-lessons, which she said she had the flexibility to do "so far. In this room, on the third floor," implying that she was removed enough from the main part of the physical school building that the curriculum coordinator was not aware that she was changing the program. Similarly, she stated, "If you come in here in May, you will see me with the door shut, we will be doing some narratives" (Baudin, interview 3), again implying that she was able to exert her control over the program in small ways to help it align with her values—but only in secret.

Anderson also lamented the lack of control she had over the program, and was particularly upset about being told to teach six writing units at the expense of having time for reading during the ELA periods. She stated, "I feel like through these six units, I have been told that this is how you are [teaching] them. [Although] we are told, we want you to use your professional judgment and do what you see is best for kids, we also have curriculum coordinators that have their say in what we do, even though they are not necessarily in the classroom" (Anderson, interview 1). The decision to teach six writing units using *Units of Writing* program, which had been made by Tupper alone, was not popular with the ELA team teachers. Again although they didn't have full autonomy over decisions about curriculum, teachers at Mountain Top attempted to share their opinions, and during the course of this study, Anderson continually raised issues with Coordinator Tupper about how to best implement the *Units of Writing* curriculum, and even wrote a letter to Principal Miller from her perspectives as both a teacher and a parent about the lack of creativity and the ultra-structured nature of the program. These actions demonstrate Anderson's principled compliance with the Units of Writing curriculum: she implemented the curriculum as she was told, but continued to agitate for changes to bring the program more in line with her professional values of creative, student-centered writing instruction.

The Common Core/Units of Writing implementation by the ELA team at Mountain Top is an example of what I am calling here principled compliance. This example reveals what happened when teachers believed to a certain extent in an educational initiative in the abstract sense, but were not given the latitude necessary to implement the initiative in ways that aligned with their educational principles. For

Baudin and Anderson, because they did have some agency in this situation, and because they saw themselves as professional teachers with valuable knowledge, skills, and experiences, compliance with the *Units of Writing* curriculum as instructed by Tupper did not mean blind compliance. They were "team players," as Baudin called herself, but they still manipulated the program in small ways that allowed them to implement it in ways more aligned with their educational principles. They certainly were not able to align it fully with those principles, because they did not have that much agency in this situation. But they did not completely lack agency either—as was evidenced by their principled responses to the demands of the curriculum coordinator.

Principled Neglect

The third type of principled implementation of policy which was present in this study was "principled neglect," a term that captures the range of responses displayed by educators who had agency over policy implementation but saw weak alignment between the policy and their own educational beliefs. These responses included ignoring most aspects of policy because they were understood as out of alignment with educators' principles, not changing teaching practice in response to policy, and compliance with only the technical requirements of the policy. Therefore, unlike principled resistance to policy, which occurs when educators are explicitly instructed by school personnel on how to implement policy, principled neglect occurs when educators have agency over whether, how, and in which ways to implement policy, and the result is neglecting to implement policy to a great extent because it is out of alignment with educators' principles.

Educators at both Rocky Coast and Mountain Top demonstrated principled neglect in response to the SBAC. As mentioned previously, decisions about test preparation, test administration, provision of opt-out information for families, and uses of testing data were made at the school rather than the team level, making the appropriate unit of analysis for implementation of the SBAC the school, rather than teacher teams.

None of the educators at Rocky Coast or Mountain Top saw the SBAC as consistent with their educational values for reasons described at length in Chapter Five. Of course, even though educators at both schools disagreed with the purpose, structure, and probable effects of the exam, they lacked the authority to simply not administer the exam. The SBAC was the state's measure of Adequate Yearly Progress, as mandated by the Elementary and Secondary Education Act (ESEA). In addition, the state planned to use the SBAC as the basis of each school's "report card," which would provide an A through F letter grade, calculated by the state, and published online for "accountability" purposes. Refusing to administer the exam was not a viable option at either school.

What educators could do, and did in response to the SBAC, however, was ignore the exam as much as possible. Because teachers had authority over curriculum and instruction, they were able to choose how they would (or would not) adjust instruction in response to the SBAC. The remainder of this section describes how educators at each school demonstrated principled neglect in response to the SBAC.

Principled Neglect of the SBAC at Rocky Coast. At Rocky Coast, principled neglect of the SBAC was tied closely to teachers' and school leaders' values of student-centered, developmentally appropriate support of their students, especially those with special needs because it was those students who had the most difficulty with the exam.

As discussed in Chapter Five, Rocky Coast educators were angered by the amount of time the exam took away from their regular instruction and frustrated that the exam did not give them useful, timely information to support student learning. To them, the SBAC did not represent an instructional tool that would support their mission of studentcentered, project-based curriculum that would develop students' critical thinking. As a result of their principled sensemaking of the exam, the only preparation Rocky Coast teachers did for the SBAC was a practice assessment with students "to get them familiar with the mechanics of taking the test, but that is it" (Hughes, interview 3). The response of Rocky Coast teachers—giving only one practice assessment to help students feel comfortable with the on-line testing logistics—was completely supported by Rocky Coast administrators, who also made sense of the SBAC as "a disaster" because of its effect on students and its limited use to improve teaching and learning (Williams, interview 3). In short, at Rocky Coast educators implemented the SBAC exam by almost completely ignoring it. They did not use it to plan instruction, they did not spend instructional time giving numerous practice tests, and they did not stop teaching their integrated, projectbased curriculum, all of which are ways of implementing standardized tests that are common (Au, 2007; Booher-Jennings, 2005).

During and after the SBAC exam administration, Rocky Coast teachers had even stronger negative responses to the exam. According to Principal Williams, "behavior incidents, particularly among students with either a special education diagnosis or an anxiety situation, skyrocketed during those two weeks" (Williams, interview 3). For teachers, these negative student reactions to the test reinforced their views that the exam

was antithetical to their educational principles. For example, Hughes, the science teacher stated,

Our school has made so much progress with kids who [came to us with] school trauma . . . who have come around in our program and are positive, happy, regulated human beings because they are getting appropriate challenge and they are being successful at those challenges and they are learning a social emotionally supportive community. Then . . . what do we have, two weeks of the worst behavioral outcomes we have seen in our kids in the entire year. Kids spinning out, losing their -- yeah, absolutely losing control. I understand, they are frustrated, they are exhausted and now they are taking this thing which makes them feel like everything they have gained this year, doesn't matter. You are taking a test which says, you are just too stupid. And I am irate. (Hughes, interview 3)

Powell, the Division One Humanities teacher, said that student reactions to the exam prompted her to suggest opting out of the exam to the parents of some students who were having a particularly difficult time. For example, she had one student with dyslexia whose experience with the SBAC was very difficult. She said,

[It] was really sad, it was really defeating. He was sitting in front of it and it felt like a lot of that work that we had done to bolster his confidence, rightfully so, was unraveled just in that 20 minutes. So I talked to him and I encouraged him. I was like, get a note from home tomorrow, you don't have to do this. (Powell, interview 3)

Principal Williams and Assistant Principal Barnes-Fisher, sent an email to families before the exam that Williams said "was carefully crafted to say, 'Parents may opt out. This test is used for these purposes." (Williams, interview 3). However, only a few students opted out before the exam started. However, after the first day, "very, very quickly participation dropped" as more and more students brought in notes from home stating that they were opting out of the exam (Hughes, interview 3). Rocky Coast teachers supported students opting out of the exam because they did not believe the test was a valid, appropriate measure of student learning, and, as shown by Powell's encouragement of her student with dyslexia opting out, because the exam itself caused so much stress for students.

In May of 2015, while Rocky Coast students were in the middle of taking the SBAC exam, the state legislature voted to drop the exam for the following year because of the exam's content and "opposition by some to the trend toward nationalized education" (Newspaper report, 5/18/15). Rocky Coast teachers had not planned to use the data from the SBAC to guide future instruction, but they were angered that the amount of stress and time lost as the result of the exam was completely in vain. Hughes said he was

Incredibly mad while it was happening and when I found out the day before we were done with it, it was like, they were going to cancel it, there are very few moments in my life where I—as like a pacifist kind of person—feel like I may be physically unsafe to the people around me and that was one of those moments. I was so frustrated I wanted to just flip a piece of furniture. (Hughes, interview 3)

Similarly, Principal Williams considered the decision to drop the SBAC the nail in the coffin of the usefulness of the exam. He stated,

Regarding Smarter Balanced, not only would I expect us not to get data, but unless someone tells me differently, I plan on spending about six seconds looking at it . . . the only possible thing that would come out of it, is if it will enable us to make some sort of critique or set of improvements for next year. And it's gone, so it's literally an event that is a non-event. (Williams, interview 3)

The fact that the SBAC became a "non-event" after so much stress was placed on students infuriated Division One teachers, and reinforced their principled neglect of standardized tests like the SBAC. They instead remained committed to performance-based assessments as well as the NWEA, both of which aligned with their educational principles and over which Division One teachers had agency.

Principled Neglect of the SBAC at Mountain Top. Mountain Top educators also demonstrated principled neglect in response to the SBAC. Like the teachers at Rocky Coast, Mountain Top educators were legally required to administer the test as were all schools in the state. Similarly to Principal Williams at Rocky Coast, Mountain Top's principal believed that teacher-created assessment and the NWEA were more accurate and appropriate measures of student achievement and did not encourage or require teachers to change instruction in order to prepare for the SBAC. Therefore, just like the situation at Rocky Coast, although Mountain Top teachers had limited agency over test administration, they did have control over whether and how they shifted their curriculum and instruction as part of implementation of the SBAC.

As at Rocky Coast, Mountain Top teachers gave students one SBAC practice test to refamiliarize them with the format of the exam. Mountain Top had administered the

SBAC pilot the previous year, so students had previous experience with the basic structure and administration. Moore, the Andes Team social studies teacher, stated, "We spent zero time prepping, in terms of teaching. We did a practice test through their portal thing. We did do a run through just to make sure they [had access to the test]. But that was another instructional day" (Hughes, interview 3). Similarly, the Cascades Team had students do "a sample test. We showed them how to load the test on the computer," and taught them how to use the calculator option for the math portion of the test (Hamilton, interview 2). The limited preparation of students at Mountain Top demonstrates their principled neglect of the SBAC: they complied with the letter of law by administering the test, but they exercised principled control over curriculum and instruction to maintain their student-centered—as opposed to test-based—approach to teaching and learning.

At Mountain Top, parents received a letter from administration informing them they could opt their children out of the exam. Wilson, the Andes Team science teacher, stated,

We had a few that opted out. It was kind of funny because there was a letter that was sent home, and if you read it, you could opt your kid out of Smarter Balanced. Kids came in and they were like, what? What? You could have opted out? And then the next day, a few more did. (Wilson, interview 3)

Many of the students who opted out of the exam at Mountain Top were teachers' own children. Ross, the Cascades Team math teacher, opted her 4th and 7th grade daughters out of the SBAC because she thought it was "taken in such seclusion from what they do on a regular basis. . . What validity does it have in terms of their long-term life goals? Like,

my 4th and 7th graders will not be affected at all by the fact that they didn't take [the SBAC]" (Ross, interview 2). Principal Miller also opted one of his own children out of the exam in his nearby hometown because he was absent from school during the regularly scheduled exam and he "didn't want him to then miss more school to take a test that had, at this point now, been thrown out. So, I just sent in a note for him" (Miller, interview 3). Opting out of the SBAC was generally supported by Mountain Top educators because they did not believe the test would help them improve their instruction.

However, Mountain Top educators also feared that if parents opted their students out of the SBAC, that they might also opt them out of the NWEA, the short, standardized ELA and math test teachers administered two to three times a year to measure student growth, which teachers actually valued and used to guide instruction. When asked whether she supported opting out, Harris, the Andes math teacher, stated,

It depends on what the data is used for. You know, I want to respect family's decisions, but I think they need to be fully aware of what decisions they are making. Because if its truly to be used for data, to help your child, you would think parents would want their child to get help no matter where they are. But [the SBAC is] just this big, political mess, is what it turned into. (Harris, interview 3)

Principal Miller's response to the opt-outs was similarly driven by his values about which assessments were useful and which were not. In terms of SBAC opt-outs, he stated, "We had about 12 kids opt out. So about 2%. A lot were educators' kids. My viewpoint all along has been, if I get a parent that calls me up and says, I don't want my kid to take it, fine, I don't care. So it wasn't a big deal to me" (Miller, interview 3). However, Miller

also worried that the opt-out movement would have a negative effect on how assessment in general was administered at Mountain Top. He stated,

But what we are kind of finding now and worrying a little bit about is, where does the opt out stop? There were parents that opted kids out of the NWEA. Well, that we actually do use for kids and for determination. So by not having that information, that hurts. (Miller, interview 3)

Clearly, opinions about and responses to opting out of the SBAC were driven by the values and beliefs Mountain Top educators' held about appropriate, useful assessment.

At both Mountain Top and Rocky Coast, therefore, educators engaged in "principled neglect" of the SBAC. Educators did not let the SBAC affect their curriculum and instruction because they did not believe that the values promoted by the SBAC aligned with their educational values. They did administer the exam, however, which demonstrates they did not have full agency over implementation of the SBAC as a school. They did have agency over how they chose to change curriculum and instruction in their classrooms, however, and as a result the educators in both schools responded to the SBAC with principled neglect. Of course, it is conceivable that the educators in this study could have displayed even more agency by refusing to administer the SBAC exam entirely. This decision, however, would have had strong, and negative, consequences for students, teachers, and the school. Agency over SBAC implementation, however, allowed the schools to both comply with the letter of the law and teach in ways that aligned with their educational principles.

Principled Resistance

As noted above, principled neglect is a form of policy implementation that occurred when groups of educators more or less ignored policy that did not align with their principles and they had the agency to do so. Unlike neglect, I am conceptualizing principled resistance as a form of implementation that occurs when teams of teachers or individuals reject the principles underlying policy and they do not have sufficient agency to ignore it. In other words, with principled resistance, teachers are required to engage in practice to align with a policy with which they disagree based on their educational beliefs and values. In this study, none of the teams of teachers demonstrated principled resistance to the Common Core, primarily because most of them generally agreed with the values that animated it, and neither of the two schools demonstrated principled resistance to the SBAC primarily because although they disagreed adamantly with its values, they had enough agency simply to administer the test but not to change any other aspect of curriculum, instruction or assessment.

Although principled resistance did not occur in this study, there are a number of examples of this in previous studies of related topics that illustrate the concept (Achinstein & Ogawa, 2006; Bauml, 2015; Crocco & Costigan, 2007; Friedman et al., 2009). Principled resistance, which involves educators' principled decisions to modify, adapt, or otherwise deviate from policy despite clear directives from authorities to do so, is a response that may occur when educators who work from an inquiry stance lack official agency simply to ignore policy they believe would not be in the best interest of their students based on educational principles. A number of studies document teacher resistance to policy that could be considered "principled resistance" in the way I am

theorizing it here (Achinstein & Ogawa, 2006; Bauml, 2015; Friedman et al., 2009; Smagorinsky et al., 2002). Below, I briefly describe examples from two previous studies to provide a sense of "principled resistance," as the form of implementation represented in the fourth quadrant of Figures 8 and 9. It is important to note that these studies focused on individual educators, not teams, the significance of which is discussed at the end of this section.

As part of a larger study about the influence of school and district organizations on new teachers' professional socialization, Achinstein and Ogawa (2006) used the phrase "principled resistance" to describe two novice teachers who were required to implement the scripted reading program *Open Court* in their elementary classrooms. Achinstein and Ogawa (2006) defined principled resistance as "overt or covert acts that reject instructional policies, programs, or other efforts to control teachers work that undermine or contradict professional principles" (p. 4). Similar to the teachers in my study who implemented policy based on their educational principles, the teachers in Achinstein and Ogawa's (2006) study appeared to work from what I would consider an inquiry stance on teaching, learning and schooling, and appeared to engage in what I would refer to as "principled sensemaking" of the required curriculum. That is, they analyzed *Open Court* in terms of their educational principles and values related to "diversified instruction, high expectations, and creativity" (Achinstein & Ogawa, 2006, p. 2) and chose to not to implement the program in the ways they were required to do so. Unfortunately because these teachers did not have agency to make these choices about how to implement the *Open Court* curriculum policy, the penalty for their resistance was high. One was not rehired after her second year of teaching because she was deemed "not

a team player" (Achinstein & Ogawa, 2006, p. 14). The other chose to leave his position after the second year because of increased pressure to implement *Open Court* "with fidelity."

The similarities and differences between the teachers in Achinstein and Ogawa's (2006) study and the Mountain Top ELA Team illustrate the similarities and differences between principled compliance and principled resistance. For both Achinstein and Ogawa's (2006) two teachers and the Mountain Top ELA Team in this study, educational policy took the form of a particular scripted curriculum, teachers were expected to comply with the curriculum as it was written, and they had limited agency over implementation. Moreover, both sets of teachers worked from a principled inquiry stance. The difference was in terms of the alignment the teachers perceived between their own educational values and those underlying mandated curriculum. Achinstein and Ogawa's teachers disagreed with *Open Court's* approach to literacy instruction and found it antithetical to their student-centered, creativity based teaching philosophies. In contrast, Mountain Top ELA Team teachers generally agreed with the Common Core, and they were positive about many aspects of the *Units of Writing* program. Thus they could comply with aspects of the program that did not violate their principles. For example, as one of the ELA team teachers herself noted, being a "team player" with regard to the Units of Writing curriculum was not too difficult for her because she saw some of her own views reflected in the program she was required to teach.

Principled resistance is further illustrated by another study concerning teachers' responses to policy that included a subset of elementary teachers who modified, adapted, and ignored literacy programs that did not align with their beliefs about student learning

(Friedman et al., 2009). Friedman et al. (2009) identified four "subcultures of democratic practice" (p. 249) across teachers in three schools. Each subculture "revealed a different way of teaching for, modeling, participating in, and acting for democracy within the often oppressive context of educational reform" (p. 254). Relevant to principled resistance were the subcultures of "democratic inquiry and practice" and "subversion," both of which involved teachers attempting to "implement, refuse to implement, or modify mandated pedagogy to serve their students" against the orders of their administrators (Friedman et al., 2009, p. 262). The teachers in these subcultures in Friedman et al.'s (2009) study made sense of policy based on their educational principles. For those that refused to implement, or modified mandated pedagogy, their response could be considered principled resistance when they were actively working against the expectations of their administrators and/or district.

These two cases of educators in Achinstein and Ogawa's (2006) study and Friedman et al.'s (2009) study illustrate the similarities and differences between principled resistance and principled neglect. Educators who respond to policy with either principled resistance or principled neglect have determined that implementing the required policy is antithetical to their professional, educational principles. For the teachers in Achinstein and Ogawa's (2006) study and Friedman et al.'s (2009) study, the mandated literacy programs were antithetical to their principles. For educators at both Rocky Coast and Mountain Top, the SBAC was antithetical to their principles. However, the educators in this current study demonstrated principled neglect in response to the SBAC because they had sufficient agency to ignore the SBAC almost entirely, with the exception of administration of the exam. Their administrators or other authorities did not

require them to change their teaching practices in order to improve their students' exam scores. The educators in the two studies I have used here to illustrate principled resistance did not have that same amount of agency; they were expected to comply with policy implementations mandated by their school and district administrators. Therefore, they responded with principled resistance to the required policies because they both disagreed with the values promoted by the policy and because they were required to implement them by administrators.

The experience of Achinstein and Ogawa's (2006) two teachers offers a picture of what principled resistance looks like for each of two individual teachers rather than for teams of teachers or whole schools, which is the unit of analysis of implementation that I used in my study. Although I did not locate an example of team-based principled resistance in the literature, Friedman et al.'s (2009) study comes closest to this. Although the unit of analysis in their study was individual teachers, those teachers reflected on the importance of their "collaborative inquiry" (p. 264) in informing and guiding their resistance to policy. Not being able to locate examples of principled resistance as a response to policy by a team of teachers raises questions about how policy is mandated in schools, and suggests that Lortie's (1975) classic study about teachers' isolation in their classrooms may still be operational in schools where teachers' values may not align with required instructional practice. Indeed, one of the four subcultures in Friedman et al.'s (2009) study was "subversion," in which teachers individually, behind closed doors, modified and adapted curriculum in alignment with their principles. For teachers who hold an inquiry stance—and work in communities to deepen, extend, and share their knowledge—working alone behind closed doors is a type of defeat that does not align

with their educational principles. Additional research that examines the causes and effects of principled resistance to policy could offer ways forward to mitigate the dilemma of balancing values, lack of agency, and lack of community for teachers who work from an inquiry stance.

So far in this chapter, I have presented and analyzed four types of principled response to educational policy: principled adoption, principled compliance, principled neglect, and principled resistance. All of these were animated by the intersection of educators' values and degree of agency. Below I discuss one response to policy that was not principled—skeptical neglect. At the close of this chapter I return to the principled implementation framework and discuss questions it raises for policy, practice, and research.

Non-Principled Educational Policy Implementation

Unlike the previous descriptions of principled implementation of policy, one team's response to the Common Core was not based on principles. Based on my analysis of the data, I developed the term "skeptical neglect" to denote a policy response of educators who have the agency to largely ignoring policy for reasons that were *not* based on their values and beliefs about teaching, learning, and schooling.

Skeptical Neglect of the Common Core by the Cascades Team

Skeptical neglect describes response to the Common Core by the Mountain Top Cascades Team, which neglected to implement the Common Core for three primary reasons: what has been called "reform fatigue" (Gokmenoglu & Clark, 2015), logistical scheduling issues, and different "teaching styles" among members of the team (Peterson, personal communication, 3/4/16). These reasons for essentially ignoring the Common

Core were driven by the skepticism of members of the team that the Common Core would remain policy for more than a few years, and their general indifference to the Common Core. Although the Cascades Team were generally in favor of the values and beliefs they believed were promoted by the Common Core and they had sufficient agency to have acted on those beliefs, they did not collectively work from an inquiry stance as a team as I have shown in Chapter Five. As a result, they did not base their (non) implementation on their educational principles. Instead, the general skepticism they felt toward the Common Core as a new, potentially short-lived initiative coupled with their agency over the curriculum influenced the team to collectively ignore the Common Core.

The Cascades Team was somewhat of a puzzle for data analysis of policy implementation because how the teachers worked together as a team did not reflect how they worked as individuals. On the one hand, as individuals, two members of the Cascades Team seemed to work from an inquiry stance and make instructional decisions in their own classrooms based on their beliefs and values. These two teachers even worked together occasionally to plan integrated math and science curriculum. On the other hand, another member of the Cascades Team did not appear to work from an inquiry stance. Although he valued student choice and creativity in instruction, he did not take up questions of knowledge, practice, or the purposes of education in ways that demonstrated that he fundamentally questioned "business as usual" in schools. Between these two extremes was another member of the team who had strong beliefs about the importance of creative expression in the classroom, but did not interrogate practice in ways that demonstrated an inquiry stance. Because the team did not collectively work from an inquiry stance, their response as a team to the Common Core was not primarily

based on principles. Thus, as I noted above, "skeptical neglect" is not represented in Figures 8 and 9, which displays types of principled policy implementation.

Another challenge I confronted when analyzing the data about the Cascades Team implementation (or lack thereof) of the Common Core was that at Mountain Top, implementation of the Common Core for grade-level teams was directly tied to applied learning because that was the only actual option presented to teachers and supported by administration that would require shared work with the Common Core. Ultimately, rejecting applied learning meant the team rejected collectively using the Common Core. As a result, the conclusion that the Cascades Team demonstrated "skeptical neglect" to the Common Core is logical, even though the rejection was somewhat circuitous. Therefore, the following discussion addresses why the Cascades team chose not to take up applied learning, and how that choice demonstrated "skeptical neglect" to Common Core implementation.

Multiple factors affected the Cascades Team decision not to collectively take up applied learning (and therefore not to implement the Common Core). One of these factors was "reform fatigue," which Gokmenoglu and Clark (2015) described as "relatively low teacher enthusiasm" for mandated professional development (p. 442) in their study of how teachers responded to professional development. I use this term to capture educators' frustration with the sense that new initiatives frequently emerged only to be changed, altered, or reversed. This phenomenon has been noted in a variety of descriptions of teachers' response to educational reform (Collette, 2015; Ekk, 2014; Hargreaves, 2003).

One of the factors that affected the reform fatigue of the Cascades Team was their relative longevity in education. As described in Chapter Four, the Cascades Team was composed of veteran teachers who had worked at Mountain Top for an average of 26 years (in comparison, the teachers on the Andes Team had worked at Mountain Top an average of 11 years). Perhaps reflecting their longer tenure in education and the number of changes they had seen during that tenure, Cascades Team teachers often spoke about the rapidity with which school policies and expectations changed. They were not opposed to change and improvement, but they were bothered by what they perceived as constantly changing expectations for teachers and students—and they considered the Common Core the latest of those changing expectations. For example, revealing his skepticism towards new externally imposed initiatives, Hamilton, the Cascades science teacher stated,

I see that as my general rule—keep students invested and keep them interested in what the role of science is in the world. Then whatever comes my way, I will adjust. But I'm not holding my breath, just because there are so many top-down initiatives that don't pan out. (Hamilton, interview 1)

Although all participants in this study expressed weariness at the rate with which new reforms were imposed upon schools, Cascades Team members were the most vocal about the negative impacts of the constant churn of new initiatives. Therefore, reform fatigue impacted how Cascades Team teachers responded to the Common Core. Because they were so wary of the constant changes in education, Cascades Team members believed that the Common Core was likely to go away at the whim of politicians, and as a

result they chose not to invest themselves very deeply in learning about the Common Core. For example, Ross, the Cascades Team math teacher stated,

I do like the Common Core better than the state standards, but it is hard to be completely invested in them because is it just gonna swing back to something else in three years? It's hard to buy in when in the 14 years I have been teaching, it shifts and shifts and shifts. (Ross, interview 1)

In part because of this reform fatigue, the Cascades Team members were collectively hesitant about both applied learning and the Common Core. This was the case despite the fact that they generally supported the principles they felt the standards represented. Collectively, they chose not to undertake applied learning, and individually, they responded to the Common Core in their classrooms either by completely ignoring the standards or by following the expectations of their content-area teams rather than choosing to implement the Common Core across their classrooms by way of applied learning. The Cascades Team's decision not to do applied learning was in part a rejection of the Common Core, because, as described above, by taking on applied learning the Cascades Team would be required to use the Common Core as the basis of their integrated instruction.

In addition to reform fatigue, Cascades Team teachers reported two additional reasons they did not take up applied learning. One reason was logistical: many of the students on their team were in a special education program that pulled them out of the Cascades Team during ELA and math instruction, so those students would only experience part of the integrated instruction, causing confusion and undue stress for those students. The other reason Cascades Team teachers decided not to do applied learning

was because of what the social studies teacher Peterson called different "teaching styles and philosophies" and what Hamilton called "part philosophical and part stylistic."

Although neither teacher described what these philosophical and stylistic differences were, Peterson said he preferred to remain isolated "in [his] own little world—my classroom and subject area—[instead of teaching] in a team or a co teaching model" (personal communication, 3/3/16). By calling his classroom "his own little world," Peterson indicated that he did not want to participate in an inquiry community that interrogated knowledge, practice, and the purposes of education. Baudin, the Cascades Team ELA teacher, expressed the same sentiment a number of times during her interviews, including commenting that she could make private decisions about what to teach when her "door was closed" (Baudin, interview 1). As a result of reform fatigue, logistical issues, and philosophical and teaching style differences, collectively the Cascades Team did not implement the Common Core—through applied learning or otherwise.

Skeptical neglect, as I described it here, is based on the premise that educators have a certain amount of agency over curriculum and instruction. Choosing not to implement applied learning, even though this was an aspiration for the entire school, reveals the substantial amount of control Cascades teachers had over how and what to teach. Cascades teachers exercised that agency by choosing not to implement the Common Core collectively as a team, demonstrating skeptical neglect in response to educational policy.

The Impact of Agency and Values on Common Core and SBAC Implementation

Across the two schools and five teams of teachers, I found four different types of response to the Common Core and SBAC, three of which were principled—principled adoption, principled compliance, and principled neglect—and one that was not based on principles—skeptical neglect. The principled responses to policy stemmed in part from the teachers' inquiry stance, which I described at length in Chapter Four. Building on this, in Chapter Five I argued that when educators work from an inquiry stance, they make sense of educational policy in large measure based on their sense of the extent of alignment between their own thoughtful educational principles and the principles they believe are promoted by the educational policy in question. In this chapter, I have shown that as a result of principled sensemaking and degree of agency, most of the educators in this study engaged in principled sensemaking and implementation of the Common Core and the SBAC. As noted, there was one exception to this—the Cascades Team which responded to the Common Core not primarily based on their principles but in terms of skepticism and neglect.

Concentrating specifically on the Common Core, it is worth noting that none of the educators in this study found the Common Core a particularly problematic policy. Even those who were indifferent and chose to neglect the Common Core for a variety of non-principled reasons were generally in agreement with Common Core standards. Most of the educators in this study were much more enthusiastic about the Common Core, believing that the standards would deepen meaningful, student-centered, inquiry-based instruction for students. This positive view of the standards stands in contrast to some research and media reports suggesting that educators—including national teachers

unions—are, increasingly, opposed to the Common Core (Bidwell, 2014; Simon, 2014). Why did the teachers at Mountain Top, Rocky Coast, and Grove generally support the Common Core, when so many others do not?

Two main issues are worth exploring here. One is the role that agency plays in Common Core implementation. As demonstrated above, when teachers who worked from an inquiry stance had agency over implementation, they were able to align their curriculum and instruction in student-centered, constructivist ways with the Common Core. They used the Common Core to deepen their principled teaching. In situations in which teachers do not have significant amounts of agency—such as those described by Achinstein and Ogawa (2006) and Friedman et al. (2009)—principled implementation may not be possible. Indeed, the National Educators Association, which is the country's largest teachers' union, took a stand against the Common Core based on its "botched" implementation, not based on the content of the standards themselves (Simon, 2014).

Support for the idea that lack of agency over implementation—and not the standards themselves—may be what is problematic about the Common Core is, curiously enough, found on the Common Core's own website. Possibly due to backlash against the Common Core because of unpopular implementation strategies, one of the first descriptions of the Common Core on its website is that the Common Core is not a curriculum and that the standards "do not dictate how teachers should teach. Teachers devise their own lesson plans and curriculum, and tailor their instruction to the individual needs of the students in their classrooms" (Common Core State Standards Initiative, 2016). This claim is disputed by others—notably political figures on the far ends of the political spectrum—who suggest that teachers are forced to implement the Common Core

in a one-size-fits-all manner (Schneider, 2015; Wilson, 2013). Even Diane Ravitch, who early on issued a statement of opposition to the Common Core, argued that the problem was the use of standards rather than standards themselves, stating "We must curb the misuse of the Common Core standards . . . Use them to enrich instruction, but not to standardize it" (Strauss, 2014b). Clearly, agency over implementation is believed to not only improve uses of the Common Core in the classroom, but also gives teachers the professional autonomy needed to make student-centered decisions in and across their classrooms. Especially important is that the principals in this study valued teachers' knowledge, practices, and beliefs about standards-based instruction, and therefore generally supported their teachers having agency over Common Core implementation.

When teachers have agency over implementation, and the Common Core is viewed not as a set of steps but as guidelines for learning, a second fundamental issue is raised: the standards themselves. As described in Chapter Two, researchers and educators have reviewed the content of the Common Core both positively and negatively. However, most of the teachers in this study viewed the Common Core quite positively and in alignment with their educational principles. If the teachers in this study had not viewed the standards positively, *even though they had agency*, it is likely they would not have implemented the Common Core in their classrooms. This is evident by their response to the SBAC, another educational policy over which they had sufficient agency to determine how they would adapt their corresponding curriculum and instruction. As I have shown above, the SBAC was viewed by the educators in this study as misaligned with their principles, and they therefore demonstrated "principled neglect" in response. That is, they essentially ignored the SBAC and did not change their curriculum and instruction to align

with the demands of the exam. Principled adoption and compliance with the Common Core indicates that, although educators were very aware of the many negative critiques of the Common Core—their genesis, their implementation, and certainly, their aligned tests—they believed the standards themselves were useful. Across the country, as some states work to get rid of the Common Core and replace it with their previous standards or with standards that do not carry the Common Core label, teachers who work from an inquiry stance may be experiencing some reform fatigue of their own (Tucker, 2016). These issues—about the political nature of the Common Core, its uses, and its tenuous future in light of disagreement over its very nature, are addressed further in Chapter Seven.

This chapter theorizes that implementation of educational policy by teams of critically-minded educators is informed and shaped by the alignment of the educators' educational principles and degree of agency. This theory takes into account numerous complex issues in policy implementation, including power, values, and community. A decade ago, Honig (2006) argued that to understand policy implementation in education, researchers needed to account for more than simplistic understandings of "what works," and instead argued that "confronting the complexity of policy implementation is essential to building the kind of instructive knowledge base" necessary to improve practice, research, and theory (p. 3). Although the principled implementation framework I presented in this chapter does not perfectly capture and explain all of the possible responses to policy by educators who work from an inquiry stance, it is an attempt to begin to reconcile what I found were the two major influencers on educators' implementation of policy: agency and values. Specific combinations of agency and value

in particular settings led to different types of responses to policy within teacher communities. This helps to explain both principled implementation of the Common Core and principled rejection of the SBAC.

Honig (2006) additionally suggested that "implementation research should aim to reveal the policies, people, and places that shape how implementation unfolds, and provide robust, grounded explanations for how interactions among them help to explain implementation outcomes" (p. 2). Although this study did not focus on student-level outcomes such as achievement, one obvious result of Common Core implementation at Rocky Coast and Mountain Top was engaging, integrated, rich curriculum. On many occasions I observed students grappling with heady content, asking insightful questions, and making connections across disciplines. And in both schools, students were generally enthusiastic about learning. The detailed analysis provided in this chapter about the various types of implementation provides one example of the type of "grounded explanation" called for by Honig (2006).

In Chapter Two, I analyzed numerous studies that linked educators' policy response to their values (Christensen 2007; Coburn, 2006; Eisenbach, 2012; Goldstein, 2008; Stillman, 2009). What my study adds to the literature is the purposeful interrogation of the relationship between educators' values, their perceptions of the values underlying policy, and their degree of agency. In addition, the role of leadership as I have described it for the principals in this study is also a factor that affects agency, and therefore implementation. Considering all of these factors together led to in-depth analyses of four forms of policy implementation (or non implementation) that occurred when educators worked from an inquiry stance.

Currently many standards-based educational reform policies are intended to increase teacher and school accountability rather than to promote student-centered teaching and learning. In addition, agency is limited for teachers in many schools. Given these two constraints, it is important to consider the implications of principled sensemaking and principled implementation for research, practice and policy. How can policy makers capture and build upon teachers' principled sensemaking? How can administrators support teachers' work from an inquiry stance on teaching, learning, and schooling, and support their agency? These questions, along with other considerations of how the findings from this study might be used in other contexts, are the focus on the next chapter.

CHAPTER SEVEN

Uncommon Responses to the Common Core and SBAC:

Implications for Research, Policy, and Practice

Throughout the process of data collection, analysis, and the writing of this dissertation, the Common Core and its associated exams continued to make almost daily appearances in the media. Currently nine of the original 46 states that adopted the Common Core are considering dropping or revising the standards, following the lead of South Carolina, Indiana, and Oklahoma, the states that repealed the Common Core in 2014 (Sullivan, 2015). In 2015, six states dropped the SBAC or PARCC exams, and as of March 2016, four more states have legislation pending that would drop either the PARCC or SBAC, and an additional two states are embroiled in lawsuits that would require them to drop the SBAC (Hart, 2015). Researchers have also been busy examining these initiatives. Judging from the steady increase of articles about the Common Core in research databases, new research about the Common Core continues to be funded, conducted, and published at a fast pace. Indeed, since I conducted an initial review of Common Core research, the number of published dissertations with the words "Common Core" in the title increased from 51 to 173: a 339% increase in 12 months.

Despite all these rapid, often dramatic, changes, one factor remains consistent; In most media and research reports about the Common Core published over the last 12 months, educators' critiques of, opinions about, and analysis of the Common Core and its accompanying assessments have generally not been included. The trend of ignoring educators' critical ways of making sense of the Common Core and its assessments

beyond basic perceptions in the midst of dramatic debate by state legislators and the general public suggests that educators' voices are not often valued in the realm of policy making and are often neglected in educational research.

To illustrate this point, consider a report published in February of 2016 by Harvard University's Center for Education Policy Research titled, "Teaching Higher: Educators' Perspectives on Common Core Implementation" (Kane, Owens, Marinell, Thal, & Staiger, 2016). Media portrayals of the Harvard study clearly positioned the Common Core as a positive initiative and positioned teachers as the initiative's recipients (Barth, 2016; Brenneman, 2016; Sullivan, 2016). For example, an *Education Week* article stated, "The study starts by addressing a common query: Are teachers embracing the Common Core?" (Brenneman, 2016). This implies at the outset that the Common Core is worthy of "embracing." Kane and colleagues framed the teachers in their study as obedient, almost docile, implementers of the Common Core, stating, "Over the past three years, while the battle over the Common Core State Standards (CCSS) has raged, teachers in many states have quietly retooled their lesson plans and materials to meet the new standards" (Kane et al., 2016, p. 4). "Quiet retooling" of lesson plans does not capture the critical, nuanced ways in which the educators in my study—and, perhaps, educators in other schools across the country—have worked to make sense of and implement the Common Core in keeping with their own thoughtful educational principles and consistent with local knowledge and perspectives about the needs of their students and communities. Instead, media and some research portrayals of teachers may perpetuate deficit-views of teachers as passive receivers and implementers of others' "expert" knowledge and policy. As Friedman et al. (2009) argued, "When change venues

deemphasize or ignore teacher knowledge and expertise, and view teaching as a technocratic cadre of skills, they de-professionalize teachers, devalue their expertise, and cast them in a deficit light" (p. 257). As a result, policy, research, schools, and students suffer.

The original intention of this dissertation was to describe and analyze school-based educators' perceptions of and responses to the Common Core and the SBAC in two middle schools in order to both inform decisions about the future of the Common Core and SBAC in schools and to contribute to a broader understanding of how school-based educators take up and respond to standards- and accountability-based reforms. As important to the *what* of this dissertation was the *how*: that is, because previous research only occasionally provided space for educators themselves to express potentially critical views of policy, this study purposefully asked educators to reflect on the Common Core and SBAC without assuming a priori that the policies were necessarily positive and worthy of implementation. As I argued in the introduction to this dissertation, educators' perspectives in policy creation and implementation decisions are often missing, and as a result, educational policy initiatives often fall short of their creators' expectations (Hargreaves & Shirley, 2011; Lefstein & Perath, 2014).

The Common Core and SBAC are no exception. Lack of educator participation in implementation decisions has caused uproar and implementation failure across the country (Simon, 2014; Strauss, 2015). However, in an unexpectedly hopeful turn, the findings from this dissertation suggest that not only is botched implementation of the Common Core and SBAC avoidable, but that appropriate implementation could even have positive effects on curriculum, instruction and assessment under certain conditions.

As I have shown throughout this dissertation, these conditions include empowered educators who work from an inquiry stance; administrators who support teachers' professionalism; adequate attention to the values and beliefs of educators and policy; and teacher agency over policy implementation. In short, for policy to improve teaching and learning, educators' perspectives, opinions, and critiques of policy and educators' agency over their teaching must be considered in both policy development and implementation.

This dissertation proposed two new concepts to further understanding of how educators who work from an inquiry stance think about and respond to policy: one, principled sensemaking, which is an extension of sensemaking theory (Spillane, Reiser, et al., 2002) that captures educators' understanding of the values and beliefs promoted by educational policy; and two, principled implementation, which captures the different types of policy implementation that occur as a result of the intersection of educator agency and values alignment. The remainder of this chapter examines implications and contributions of these findings to research, policy, and practice. I begin by deepening and extending the principled sensemaking framework I proposed in Chapter Five and revisit the concept of "reform fatigue" as potential contributions to and next steps in research. I then explore the implications and contributions this work makes to the field of policy creation by specifically examining the potential role of school-based educators in the policy-making process. I also consider ways the concept of principled implementation could be used to improve understanding of educational policy implementation. Finally, I consider the implications of this study for practice by considering the role of school administrators in the implementation of standards-based reforms, and ways that professional development could be reimagined based on findings from this study. In

conclusion, I propose that in research, policy, and practice, the profession would benefit from paying increased attention to educators' principled sensemaking of policy, and by creating opportunities for all members of the profession to work from an inquiry stance.

Principled Sensemaking: Contributions and Implications for Research

As discussed in Chapter Five, the concept of *principled sensemaking* emerged from data from both the pilot study and the current study as a way to understand how educators who worked from an inquiry stance made sense of policy. I proposed that principled sensemaking, as I offer the idea in this dissertation, builds on previous uses of sensemaking in two ways. First, principled sensemaking integrates sensemaking theory (Spillane, Reiser, et al., 2002) with the notion of inquiry as stance (Cochran-Smith & Lytle, 2009), which creates space for consideration of the critical, nuanced, professional and principled critiques that the educators in this study made of the Common Core and SBAC. Previous uses of sensemaking, which often assumed a priori that the policies being studied were worthy of implementation and, if implemented, would have a positive impact (Louis et al., 2005; Marszalek, Odom, LaNasa, & Adler, 2010), tended to dismiss educators' own critiques as emerging from a lack of knowledge (Fullan, 2001; Spillane, 2004), instead of acknowledging that insightful purposeful critique can occur when educators work from an inquiry stance. Second, principled sensemaking builds on previous uses of sensemaking theory by taking an asset-based rather than a deficit-based view of teachers as knowledge generators and critical questioners. These two additions to sensemaking theory—purposeful, principled interrogation of values promoted by the policy in question and taking an asset-based view of teachers—extend and refine

sensemaking theory and allow for more nuanced understandings of how educators make sense of policy based on their principles.

As far as I can determine, the concept of "principled sensemaking" is new in the field of educational research, but a related concept, "critical sensemaking," was previously developed in the field of organizational management. Helms Mills and colleagues are credited as the originators of critical sensemaking (Helms Mills et al., 2010). Their conceptualization of critical sensemaking descends from Weick's (1995, 2001) work about sensemaking in organizations and is focused soley on the application of Weick's sensemaking theory to organizational studies, not as a way to understand how educators perceive educational policy. Helms Mills and her colleagues were looking for a way to explain the role of power, and particularly differential amounts of power, in the functioning of organizations. They defined critical sensemaking as "a framework for understanding how individuals make sense of their environments at a local level while acknowledging power relations in the broader societal context" (Helms Mills et al., 2010, p. 190).

Certainly, issues of power affect sensemaking and need to be considered, particularly as researchers unpack the contexts in which sensemaking occurs. However, the way critical sensemaking is used in the very limited⁴ business literature that employs the critical sensemaking framework focuses not on how study participants understood power, but on how the researchers accounted for power dynamics in their analyses of the

⁴ The critical sensemaking body of literature is very small. In the database "Business Source Complete," I located nine studies that used critical sensemaking: seven studies published by Helms Mills and her colleagues, and two others—a study of immigrant professionals (Shenoy-Packer, 2015), and a study of unpaid caregivers in the UK (Tomkins & Eatough, 2014).

organizations they studied. With the concept principled sensemaking as I describe it, however, not only could the power dynamics of schools, districts, and even the educational climate be taken into account, but individual educators' beliefs about and feelings of power could also help unpack how power issues affect sensemaking.

Although there are limited direct applications of the conceptualization of critical sensemaking in educational research, the concept of principled sensemaking as I offer it here benefits from an analysis of how power dynamics affect, influence, complicate, and complexify how educators make sense of policy based on their principles. Critical education theorists, such as Apple (1987) and Giroux (1988), raise questions about whose voices count in education, such as "Whose knowledge? Whose interests? Who benefits?" (Schubert, 2008, p. 405). These questions are the same questions raised by educators who take an inquiry stance; indeed, Cochran-Smith and Lytle (2009) trace the roots of their conceptualization of inquiry as stance partially to prior "critical and democratic social theory [in which] there was an emerging focus on the role of teachers in research conceptualized as a form of social change" (p. 91). As Cochran-Smith and Lytle (2009) explained,

Fundamental to the notion of inquiry as stance is the idea that educational practice is not simply instrumental in the sense of figuring out how to get things done, but also and more importantly, it is social and political in the sense of deliberating about what to get done, why to get it done, who decides, and whose interests are served. (p. 121)

The concept of principled sensemaking could be used by researchers to unpack issues of power, control, and voice when analyzing how educators understand and implement

policy. Unlike research that positions teachers as technicians and assumes that teachers either do or do not have adequate information about new policies often fails to recognize teachers' local knowledge, experiences, and professional values. Principled sensemaking helps incorporate issues of power, voice, values, beliefs, and critique into analysis of educators' sensemaking.

In Chapters Five and Six I used the concept of "reform fatigue" (Gokmenoglu & Clark, 2015) to help characterize the assumption by educators—based on experience—that reform policies shift quickly, and, like previous reforms, the latest reform will be short lived. Based in part on reform fatigue, some of the teachers in this study expressed skepticism about the Common Core even though they believed it was a positive initiative and liked many of its standards. However, the term "reform fatigue" needs further theorizing and clarification. Here, I briefly explore how other researchers have taken up this concept, and suggest possible next steps for future research.

Gokmenoglu and Clark (2015) used the term "reform fatigue" in their study about professional development in Turkey. The study's abstract stated, "Teachers reported that professional development activities only moderately satisfied them. We speculate that 'reform fatigue' may be partially responsible for relatively low teacher enthusiasm for mandatory, centrally designed training" (p. 442). However, the term "reform fatigue" was not used again in the article nor was the concept further clarified. The abstract implies that Gokmenoglu and Clark (2015) understood "reform fatigue" as the low "enthusiasm" and dissatisfaction teachers demonstrated in response to professional development, but they did not explore the result of this dissatisfaction on other aspects of their teaching or professional lives. Along similar lines, Reeves (2010), a professional development

consultant at ASCD, has written about "initiative fatigue," which has to do with the lack of time, money, and effort each new initiative receives rather than with how teachers' respond to new initiatives (Reeves, 2010). D. Hargreaves (2003) argued that schools should avoid "innovation overload" by focusing on one main "innovative activity that can be well managed," but Hargreaves did not define the phrase "innovation overload" (Hargreaves, 2003, p. 35).

These conceptualizations differ somewhat from the way I described "reform fatigue" in Chapters Five and Six to capture teachers' reticence to take up policy on the basis that many initiatives quickly come and go. The "fatigue," in this conceptualization, was teachers' weariness from learning something new just to have it change—over and over again—which resulted in lost time for other important aspects of teaching. Clearly, the above conceptions of "reform fatigue," including the one I proposed, do not adequately capture educators' sensemaking of the nature of educational reforms, primarily because they are superficial and undeveloped. In addition, there is a potential danger here to frame reform fatigue in such a way that could position teachers as "responsible for what really are conditions of exploitation" (Shirley, 2016).

One possibly promising way to conceptualize and develop further research about the meaning and effects of reform fatigue is by integrating ideas from recent research about "alienated teaching" (Brooks, Hughes, & Brooks, 2008; MacDonald & Shirley, 2009; Stone-Johnson, 2016). Alienated teaching is a decidedly broader concept than reform fatigue, and "takes many forms, including disengagement from work, isolation and neglect" (Stone-Johnson, 2016, p. 30). However, factors that affect alienated teaching, including "rapid curriculum change in conjunction with rising accountability

for schools and teachers to provide evidence that they have kept up with the change" are the same as those affecting reform fatigue (Stone-Johnson, 2016, p. 31). Additionally, the concept of alienated teaching does not place the blame for this type of response on teachers, but rather on educational systems (MacDonald & Shirley, 2009), making this concept a potentially useful, and asset-based, tool to use in the further development of the concept of reform fatigue. Further research that theorizes principled sensemaking and reform fatigue could develop, deepen, and apply these beginning ideas in other school contexts, and investigate other ways the concept might be useful to the field of educational research.

Principled Implementation: Contributions and Implications for Policy

At the outset of this dissertation, I argued that one of the reasons this research was important was because school-based educators' perspectives have seldom informed policy—policy that educators are expected to implement. By analyzing Rocky Coast and Mountain Top educators' perspectives on the Common Core and SBAC, I attempted to make sense of their perspectives about these particular polices. In addition to finding out how educators in these two schools made sense of and implemented the Common Core and SBAC, I also developed the concept of *principled implementation* as a way capture part of what happens when reflective educators respond to policy based on their educational values and degree of agency. This concept is represented by the four-quadrant graphic in Chapter Six (Figure 8).

The concept of principled implementation raises the issue of the role of agency in policy implementation. Currently, some educational policies—especially those that include curricular and instructional programs—attempt to remove agency from educators

by relying on scripted guides that teachers are required to follow (Au, 2011; Crocco & Costigan, 2007; Milner, 2013). However, my study suggests that trying to control teachers' actions and remove their agency as professionals may have multiple negative effects on policy implementation. With the concept of principled implementation as I have developed it in this study, there are two quadrants of response to policy when teachers do not have agency over implementation: principled compliance and principled resistance (see Figure 8 in Chapter Six). Principled compliance has to do with teachers general compliance with policy, as it is written, when they perceive that its values are consistent with their own, even though they may have questions, critiques, or skepticism about implementation that may or may not be sufficiently addressed, depending on the degree of agency. Principled compliance, in this case, appears to be a relatively positive outcome for policy that is intended to direct teachers' practices in the classroom. Policy makers intent on creating policy that controls and standardizes teachers' actions might hope for principled compliance, because principled compliance would indicate not only that teachers perceived the policy in a generally positive way, but that they were changing their teaching practices to align with the policy.

This outcome is not as positive as it may seem at first glance, however. While teachers who implement policy in terms of principled compliance do in fact implement policy, they do so without being able to make the modifications necessary so that implementation is consistent with their beliefs about teaching, learning, and schooling and also is locally responsive to the particular students in their classrooms and to the needs of their communities. In this study, teachers who demonstrated principled compliance in response to the Common Core expressed some stress and even anger at

being unable to teach in the ways that they believed would better support student growth and learning. As noted in Chapter Six, one teacher resorted to closing her classroom door and defying the script in small ways in order to ensure her students were able to write poetry at least once during their eighth-grade year. Festering frustration and isolation are not positive outcomes of policy.

The other principled response to policy I found for teachers who lacked agency can also lead to undesirable consequences. Teachers may engage in *principled resistance* to policy when they do not see alignment between their educational values and those promoted by the policy, and, simultaneously, they do not have agency over policy implementation. As examples from related literature suggest, the result of principled resistance may be teachers quitting or transferring (Achinstein & Ogawa, 2006; Crocco & Costigan, 2007), being fired (Achinstein & Ogawa, 2006), or remaining isolated in their classrooms (Friedman et al., 2009). These negative outcomes of attrition and isolation are not acceptable if the true goal of policy is to improve teaching and learning.

If it is the case, as this study suggests, that agency plays an important role in how teachers take up and implement policy, then policy makers need to consider the ways that agency impacts policy implementation. The concept of principled implementation suggests that while values alignment is crucial to positive forms of implementation, agency also needs to be considered in substantial ways. For example, policy that has embedded in it measures that strip teachers of agency—such as scripted, packaged curricula—may increase the chances of negative policy outcomes (Au, 2011, 2012). Policy that is designed to be flexibly implemented in ways that are responsive to teachers' ideas about how to support of the learning of students in their local contexts

may have a better chance of being implemented in positive, effective ways. For the teachers in my study, the Common Core was primarily understood as a flexible, guiding document, not a scripted, narrow list of instructions. As such, educators were able to implement the Common Core in ways that enriched teaching and learning for their students. Of course, many elements are at play when considering teachers' agency over policy implementation. School leadership and context have particularly large influences on how teachers are able to enact agency over policy implementation (Coburn, 2006; Eslinger, 2014; Milner, 2013), and I discuss the role of school leaders in the subsequent section about implications for practice. Based on the findings from my study, however, I would suggest that policy makers' understanding of and accounting for these contextual conditions while creating policy that allows teachers to tailor implementation may increase the chances that the policy will have positive effects on teaching and learning.

Another major reason the concept of principled implementation has the potential to positively impact policy development is because of its contribution to understanding how teachers' values and beliefs factor into policy implementation. The concept of principled sensemaking suggests that not simply teachers' beliefs, but teachers' beliefs about the values animated and promoted by policy, affect how policy is implemented. That is, values alignment is not simply a teacher "agreeing" with a policy. Instead, most of the educators in this study looked carefully and critically at the policies in question to determine what possible effects the policy would have on teaching and learning, and then assessed whether those possible effects were in line or out of line with their professional educational beliefs. When educators saw misalignment, they were very reticent to implement those policies. In the case of the SBAC, teachers in this study believed that

tailoring instruction to fit the SBAC would decrease creativity, interdisciplinary connections, and critical thinking, all of which were central to their educational values. Because they had the agency to act on those beliefs, the educators in this study demonstrated principled neglect of the SBAC by essentially ignoring it.

The third implication of this study for educational policy has to do with policy creation in the first place. Although this is not a novel finding (Cohn & Kottkamp, 1993; Gardner, 2010; Hargreaves & Shirley, 2011), my study suggests that educators need to be major players during policy development. For example, the educators in my study universally disliked the SBAC exam. Their critiques of the exam—including its negative effects on students, curriculum, and instruction, as well as the fact that it could not be used to measure growth or inform instruction—are critiques others have raised about high-stakes standardized tests for years (Grant et al., 2002; Palmer & Rangel, 2011; Thompson, 2001). What baffled Mountain Top educators in particular about the SBAC was that they had piloted the exam the year before this study, and had never once been asked for their feedback on the exam. Then, during the year of this study, teachers were especially troubled when state legislators and education officials did not gather teacher feedback about the Common Core and SBAC prior to state level consideration about whether the initiatives would be continued or discontinued. Teachers felt that in terms of both the technical side of exam creation and political decision making, their opinions were neither sought out nor valued. If for no other reason, given the hefty price tag of the SBAC—\$3.5 million for one year of administration in the state in which my study was conducted—it seems reasonable that educators might be surveyed about the exam and its uses and effects, as they administered it.

The critiques voiced by participants in my study echo critiques by many educators across the nation. Gardner (2010), a Los Angeles Unified School District teacher and lecturer at UCLA, has argued that policy makers have left teachers out of the policy development process for decades. When reflecting on the lack of teachers in the development of the Race to the Top policy, he stated,

Teachers have been marginalized when so much depends on their support to make reform work. Unless they are firmly on board, the viability of the movement is unavoidably jeopardized. This practice is nothing new to education reform . . . It is a carryover from the Bush administration that is insulting at best, and self-defeating at worst. It says unambiguously that those who have never taught a day in public school - theoreticians - know better than classroom teachers - practitioners - what needs to be done to address the undeniable ills afflicting education in this country. No other profession looks so widely outside its own ranks for solutions to problems . . .That's a big mistake, with serious consequences down the road. (Gardner, 2010)

Some of the "serious consequences" of the failure of the SBAC can be seen in this study: angry, frustrated teachers, stressed out students, wasted school time, and wasted resources.

Whether teachers are consulted about policy creation or help co-author policy, at some stage most educational policies that have a direct impact on teaching, curriculum and assessment should be vetted by practicing teachers. This is not to suggest that teachers spend all of their time creating policy; indeed, the politics of policy necessitate

different, specialized knowledge that most school-based educators do not possess. Nor did the teachers in this study want to be policy makers. They did, however, want to be included, and their critiques and perspectives based on local knowledge and experience could have positively contributed to the development of policy.

Leadership and Professional Development: Contributions and Implications for Practice

In Chapter Four, I expressed surprise that the two schools I intentionally chose to study because they had different structures from one another and from the pilot study school were, in reality, so similar. These similarities were especially evident in terms of innovative leadership, energetic teachers who worked from an inquiry stance, and dedication to student-centered learning environments. For six months, I had the opportunity to visit these schools every week and watch positive student-teacher interactions and teacher-administrator interactions. Although of course no school is perfect and every school has its difficult moments, for the most part I watched students wrestle with complex tasks and demonstrate novel solutions to problems. I observed team meetings where teachers could not stop laughing. Multiple times, I observed 75 teenagers stand in a circle in a field, silently, and meditate for five minutes without laughing. While there are many implications for practice I could suggest, I focus instead on two that have implications for practice that tie directly to one purpose of this study; understanding and improving standards-based educational policy. These two topics are the leadership styles of both school principals and inquiry-based professional development.

One of the benefits of case study research is that it is based on the day-to-day reality experienced by participants (Stake, 1995). In addition to conducting interviews

with Principals Williams and Miller that uncovered their views about standards-based teaching and learning in general and the Common Core in particular, I was also able to witness the ways these two principals guided and supported their respective teachers toward deeper and richer standards-based instruction. Principals Williams and Miller genuinely believed in the power of standards-based—but not standardized—teaching and learning. They used professional development time for discussion and planning of standards-based teaching, and they continually supported the use of their respective schools' unique approaches to curriculum that were both standards-based: applied learning at Mountain Top and place-based interdisciplinary "investigations" at Rocky Coast. Both administrators helped their teachers plan units of instruction and stated they were always available to give feedback when teachers had questions. In short, as my data analysis revealed, both Principal Williams and Principal Miller were "instructional leaders" (Hallinger & Murphy, 1985) who were deeply engaged in the intricacies of curriculum and instruction in their schools.

Hallinger and Murphy (1985) developed the concept of instructional leadership in the 1980's as a way to capture how effective school leaders framed and supported a school's mission, managed the school's instructional program, and promoted positive school climate. However, during the 1990's, researchers and school-based educators began to critique the concept of instructional leadership as too directive, and attention shifted to the concept of "transformational leadership," which focused on "the collective capacity of schools to improve school performance" (Hui-Ling, Fong-Yee, & Chen, 2015, p. 494). Both instructional leaders and transformational leaders focus on developing shared vision, a climate of high expectations, and an emphasis on teaching

and learning, but the differences between the two "lie in the degree to which leadership is being held by an individual or is being shared, and the extent to which the leader emphasizes a coordination strategy vs. an empowerment strategy" (Hui-Ling et al., 2015, p. 494). That is, "transformational leadership seeks to build the organization's capacity to select its purposes and to support the development of changes to practices of teaching and learning" instead of directly coordinating or shaping the school's curriculum and instruction (Hallinger, 2003, p. 330). Hallinger (2003), who originally analyzed the differences between instructional and transformational leadership, also noted that "the suitability or effectiveness of a particular leadership model is linked to factors in the external environment and the local context of a school" (p. 329).

Based on data about the three schools I studied for this dissertation and the pilot study, it is clear that one of the reasons all three schools were student-centered, positive learning environments where students and teachers alike were engaged and productive, was that the three principals demonstrated both instructional *and* transformational leadership. All three principals cared deeply about their school's mission and vision and worked tirelessly to make sure that teachers were empowered to make decisions, share their opinions and perspectives, and take on leadership roles. These qualities would suggest more of a transformational-bent to their leadership styles. However, although these principals believed in and encouraged teacher leadership, all three also had very clear, specific understandings of the types of standards-based teaching, learning, and curriculum that they believed best supported student learning and growth. These principals used their extensive knowledge about standards-based instruction to shape

their schools' approaches to teaching and learning in ways that ultimately benefited both students and teachers.

While these principals were supportive of their teachers and respected them as generators and critiques of knowledge and innovators of practice, they also would, and did, make staffing decisions based on a lack of alignment between teachers' and the school's values, which at Grove, the pilot school for this study, led to improved student achievement. This indicates that these principals maintained a particular focus on the kinds of instruction they believed would benefit students, and held teachers accountable to that vision while still supporting novel and creative variations in how and what teachers taught. My study suggests that it was this balance between instructional and transformational leadership that created the conditions for principled implementation of the Common Core and principled neglect of the SBAC. With the exception of the *Units* of Writing curriculum at Mountain Top, without requiring daily lesson plans or implementing scripted curriculum (Daly, 2009; Daly, Der-Martirosian, Ong-Dean, Park, & Wishard-Guerra, 2011), these three principals encouraged agency and guided the implementation of the Common Core without dictating what exactly teachers should do and what exactly implementation would look like.

This suggestion—that part of the reason that the leaders in these three schools were so effective at managing standards-based reform was because they demonstrated both instructional and transformative leadership—might be of interest to other school and district leaders who are considering how to deepen standards-based reforms without resorting to scripted, "teacher proof" curriculum. Given the wide range of leadership capabilities demonstrated in research (Fullan, 2001; Hallinger & Murphy, 1985),

developing the skills of principals who are able to balance directed and facilitated leadership could lead to the proliferation of more positive learning environments where standards-based, but not standardized, instruction improves the educational experiences of students.

Particularly important in this study was the ways that the three principals themselves worked from and encouraged their schools and staffs to work from an inquiry stance. In Chapter Four, I used the inquiry as stance framework (Cochran-Smith and Lytle, 2009) to analyze how the educators in this study understood knowledge, practice, communities, and the purposes of education. School culture and professional development at the two schools also were impacted by the ways most educators in this study worked from an inquiry stance. Working from an inquiry stance enabled critique of the Common Core and SBAC in ways that deepened instruction and gave teachers the opportunity to really wrestle with meaningful issues about curriculum, pedagogy, student support, and school mission. Within this context, professional development was teacher centered in the way that strong instruction in K-12 classrooms is student centered. That is, the learner was the focus of the professional development. At Rocky Coast in particular, professional development was tailored to timely, mission-driven topics that exposed teachers to a wide range of ideas and provided ample space for teacher reflection on and critique of those ideas. Professional development was not an opportunity to provide knowledge to teachers, but an opportunity to elaborate, uncover, and make explicit their own values and beliefs about educational issues and practices.

In the case of Common Core professional development, news reports indicate that the purpose has often been to teach teachers how to think about, use, and implement the

Common Core in the "right ways" (Carle, 2014; Strauss, 2013b). However, my study suggests that meaningful, student-centered, and teacher-invested Common Core implementation might depend instead on professional development that supports teachers as they uncover and unpack the values and beliefs they believe are promoted in the Common Core, and then wrestle with whether, how, and in what ways those beliefs align with their own educational principles. This type of professional development would give educators the opportunity to work from an inquiry stance, which would enable deep, engaging reflection on the Common Core and other educational initiatives. Whether or not educators work from an inquiry stance in the ways conceptualized by Cochran-Smith and Lytle (2009), such as the principled ways the educators in this study worked, everyone operates based on some set of values even if they are in part contradictory. In addition, although educational policy may be presented as neutral or positive, all policy is an attempt to operationalize a particular set of values. Having the opportunity to unpack those values, wrestle with them, and assess how they align or do not align with their own values honors teachers' knowledge and professionalism. It provides the education profession the opportunity to look inside "its own ranks for solutions to problems," not outside, as Gardner (2010) argued is the current trend in education.

The ideas I have presented here—including the benefits of leadership that is both instructional and transformational, and professional development that gives educators the opportunity to unpack educational policy based on principles—underscore the importance of creating educational environments where all stake holders are intellectually, professionally, and morally engaged. This study provides examples of two schools where educators who had agency over curriculum and instruction took up

educational policy in principled ways based on rigor and reflection, and implemented policy it in ways that fit their students, the local context, content, and school mission. These examples suggest other schools could benefit from similar ways of implementing standards-based reforms by focusing on instructional and transformational leadership as well inquiry-driven professional development.

Multiple Methods, Varied Paths? Future Implementation of Standards-Based Reforms

In the introduction to this chapter, I described some of the very recent federal and state policy shifts concerning the Common Core, SBAC and PARCC. Although many states have dropped the SBAC and PARCC, most states have preserved the Common Core or are simply retitling the Common Core to include state names—what one teacher in Tennessee described as "putting a cow in a horse costume. It's still a cow" (Sullivan, 2015). And while the passage of the Every Student Succeeds Act in December of 2015 did not change the requirement to have "challenging" standards and to test students every year in grades 3-8 and once in high school, there is more flexibility on the accountability end—that is, states have more control over deciding what happens to "low performing" schools and deciding which and how many tests are used ("Every Student Succeeds Act," 2015). Of course, the presidential election could have an impact on how the Common Core and its associated exams are legislated. For example, presidential candidate Ted Cruz has promised to "repeal every word of the Common Core" if he is elected (Sullivan, 2015)—but the prospect of "repealing" the Common Core, according to some analysts, is not very likely (Brewer, 2015; Hefling, 2015; Sullivan, 2016). Of course, the SBAC and PARCC exams are faring much worse than the Common Core. The opt-out movement

has had an enormous effect on public understanding of how testing—and the amount of testing—impacting students and curriculum. Yet high-stakes standardized measures of student achievement are still the law of the land, despite massive opt-outs in some states.

School-based educators remain engaged with the work of teaching and learning in their schools, despite and perhaps in spite of all of the political and policy changes that are currently unfolding. It is hoped that the multiple findings from this research—including the role of principles and agency in sensemaking and policy implementation, and the importance of creating policy with school-based educators that acknowledges and accounts for their principles and agency—provides some insight into these two schools, and into the role educators' principles and agency might play in other contexts.

School-based educators' participation in policy creation and implementation decisions could lead to various, and varied, ways to implement educational policy that reflect the needs and goals of students, teachers, and communities. Maintaining high standards without forcing standardization could improve teaching, learning, and schooling in unique, positive, ways. Ultimately, teachers are a key "part of the democratic process that ensures a competent, reflective, and informed sharing of ideas that is based on education, expertise, professional development, experience, and comprehensive evidence of pupil performance that moves far beyond a single score on a standardized test" (Friedman et al., 2009, p. 256), and as such, school-based educators' perspectives, insights, knowledge, and principles need to guide not only curriculum, assessment, and instruction in the classroom, but also research, policy, and practice in the profession.

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Appendix A: Sample Interview Protocols

Teacher Interview #1

Introduction Questions:

What was school like for you when you were growing up?

Tell me about how you decided to become a teacher. What influenced you?

Why do you continue to do it today?

So you are currently teaching _____ here. What did you do before this?

If you had to describe this school to someone you'd just met, what would you say?

What about the strengths and challenges of the school, and its vision/mission? How would you describe the culture? Describe the students? Describe the teachers?

What parts of this school are a good fit with your personal beliefs about education? Are there any that don't fit well? Why?

Shift to standards based teaching and learning:

Personally, what do you think the role of standards should be in teaching and learning? How did you develop that opinion?

What influenced you?

Any learning experiences that you remember?

When did you first start teaching with standards?

How has it changed over time?

What is the expectation of SBL at this school?

How are standards used here?

Common Core

I want to shift to a particular set of standards, which as you know is the focus of this project, and talk about the Common Core.

If you had to describe the Common Core to a parent or someone in a different profession, how would you do it?

Do you remember first hearing about the Common Core?

When did you learn about them?

Do you remember where you were hearing about them from, what your sources of information were?

What did you think about them at that time?

So I want to talk a little about the Common Core specifically at this school. What do you think the role of the Common Core is at this school?

How well do you see the Common Core fitting in with the mission and vision of this school?

What are the expectations around the Common Core at this school?

What PD or other learning experiences have you had here?

Where does information about the Common Core come from?

Current beliefs about Common Core:

So you shared with me what you thought about the Common Core initially—currently, do you consider the Common Core a positive or negative overall phenomenon? Why?

Teacher Interview #2

Introduction:

Review what discussed previously

Equity and Common Core: effect on students:

One of the arguments in support of the Common Core is that they will prepare all students to be college and career ready.

First, what do you think that means, and second, do you agree?

Another argument in favor of the Common Core is that they make school fair, more equitable, for all students.

Again, what do you think that means, and do you agree or disagree?

Which students do you see the Common Core working well for? Why?

Are there any students the Common Core doesn't work well for? Why? Example?

Perceptions of effects on Common Core:

What do you think the effects of the Common Core are on your school, and on your students?

Example?

What are the effects on you as a teacher?

On curriculum?

Instruction?

Assessment?

Have you done anything differently than you would have, or used to do, as a result of the Common Core?

What has changed?

What has influenced those changes?

Were you told to do something differently, or did you take it upon yourself? Why?

Can you describe a lesson you've taught in which you really used the Common Core to plan your instruction?

How did it go?

What did you think?

How did it influence your thinking about the Common Core?

Collective understanding of Common Core:

I want to shift to talking about the effect of the Common Core on team work that you do here. Generally speaking, what is the role of teams at this school?

What role does the Common Core play in your work together?

What effects have the Common Core had on how you plan and work as a team?

What about effects on school culture?

Do you think there will be an effect of the Common Core on education across the state? Why?

What does your principal think the school and teachers should be doing in response to the Common Core?

What about messages from the district?

Messages from the state?

There are a lot of mixed messages about the Common Core these days in the media—do you follow these debates?

How would you describe and explain them to someone outside of education?

Perceptions of professionalism:

People often talk about "professional" teachers—what does that term mean to you? What do "professional" teachers do that others don't?

Following that definition, do you think teachers are treated as professionals at this school? Examples?

Do you think that the Common Core influences teacher professionalism in any way, either generally or at this school?

Interview #3

Standardized Assessments: General

What do you think the role of standardized tests should be in education? Why? Can you describe to me the standardized tests that students at (name of school) have taken historically?

What types of things, if any, do you do to help prepare students to take standardized tests?

What types of things, if any, do you do with the results of these tests?

What is your overall impression of these tests?

What are the expectations at (name of school) for standardized testing?

Have those expectations changed over time? Why?

Has your team done anything in the past to prepare for the testing?

Where does your information come from regarding standardized assessments? How do you learn about them?

SBAC:

The students have taken the Smarter Balanced exam for the first time this spring. How did the test go? Please describe.

What student reactions to the test did you see?

In preparation for the test, did you make any changes to curriculum or instruction?

Why do you or don't you prepare students for the Smarter Balanced exam?

What teacher reactions did you see to the tests?

What conversations did your team have about the SBAC?

Were you in alignment with what your team thought and did about the testing?

What do you think of the opt-out movement that is taking place this spring around this test?

Where do you get your information from surrounding the SBAC?

What is your sense about what school leaders think about the SBAC?

Why do you think that?

What has influenced your thoughts about the tests outside of this school?

Effects of the SBAC on Common Core sensemaking:

Your students have taken the SBAC for the first time.

Did that experience change your opinions about the Common Core in any way? If so, how? If not, why not?

Do you think that these tests were good measures of the Common Core? Why/why not? Do you expect to make any changes for next year's testing? Why or why not?

What communication did you receive about how the school did on the SBAC?

About the process, content, results?

Do you expect your team to make any changes based on the experience of taking the test this spring?

There have been varied news reports about the success of the testing.

Did you follow those?

What were your opinions?

Appendix B: Interview Matrix

This Interview Matrix demonstrates how research questions and topics were aligned across the sensemaking and inquiry as stance frameworks.

KEY:

Interview 1: Purple Interview 2: Green Interview 3: Tan

Influencers of sensemaking → TOPICS:	Individual Cognition and Inquiry as Stance Questions	Situated Cognition and Inquiry as Stance Questions	Role of Representations (in the media, by the principal, district and state) Questions
Topic 1: Getting to know you	What was school like for you when you were growing up? Tell me about how you decided to become a teacher/admin. What influenced you? Why do you continue to do it today? So your current position is as a How long have you been in this position? How did you decide to start this school? Tell me about that.	If you had to describe this school to someone you'd just met, what would you say? Strengths, weaknesses, vision/mission? Culture? Students? Teachers? What parts of this school are a good fit with your personal beliefs about education? Are there any that don't fit well? Why?	
Topic 2: Standards based learning	-What do you think the role of standards should be in teaching and learning? -When did you first start teaching with standards? How has it changed over time?	-What is the expectation of SBL at this school? -How are standards used here?	- How did you develop that opinion of standards—what influenced you? -Any learning experiences that you remember?
Topic 3: Perceptions of Common Core	-What is Common Core? -When did you learn about them? -What did	-What is role of Common Core at this school? -What PD have you	-Where else did your info come from about the Common Core?

Topic 4: Current beliefs about Common Core	Do you consider the Common Core a positive or negative overall phenomenon? Why?	had? What other learning experiences? -What are the expectations around the Common Core at this school? How well does the Common Core fit in with the mission and vision of this school?	-How has the principal talked about the Common Core? What do you think his opinion is? Why?
Topic 5: Equity and Common Core: effect on students	One of the arguments in support of the Common Core is that they will prepare all students to be college and career ready. First, what do you think that means, and second, do you agree? Another argument in favor of the Common Core is that they make school fair, more equitable, for all students. Again, what do you think that means, and do you agree or disagree? Which students do you see the Common Core working well for? Why? Are there any students the Common Core doesn't work well for? Why?		(related to arguments—as represented by the NCCSO)
Topic 6: Perceptions of	What do you think the effects of the Common	What is the role of teams at this school?	-What has influenced those
effects on Common Core	Core are on your school, and on your students? What are the effects on you as a teacher? On curriculum, instruction,	What effects have the Common Core had on how you plan and work as a team? What role does the Common	changes—were you told to do something differently, or did you take it upon yourself? Why? -What does your

Tonio 7.	assessment? Have you done anything differently than you would have, or used to do, as a result of the Common Core? What has changed? Can you describe a lesson you've taught in which you really used the Common Core to plan your instruction? How did it go? What did you think? How did it influence your thinking about the Common Core?	Core play in your work together? What about effects on school culture? Do you think there will be an effect of the Common Core on education across the state? Why?	principal think the school and teachers should be doing in response to the Common Core? -What about messages from the district? State?
Topic 7: Perceptions of professionalism	People often talk about "professional" teachers—what does that term mean to you? What do "professional" teachers do that others don't? How, if at all, does the Common Core influence teacher professionalism?	How do you perceive educators are treated at this school?	There are a lot of mixed messages about teachers these days in the media—do you follow these debates? How would you describe and explain them to someone outside of education?
Topic 8: Standardized Assessments: General	-What do you think the role of standardized tests should be in education? Why? -Can you describe to me the standardized tests that students at (name of school) have taken historically? -What types of things, if any, do you do to help prepare students to take standardized tests? -What types of things, if any, do you do with the results of these	-What are the expectations at (name of school) for standardized testing? Have those expectations changed over time? Why? -Has your team done anything in the past to prepare for the testing?	-Where does your information come from regarding standardized assessments? How do you learn about them?

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	tests? -What is your overall impression of these tests?		
Topic 9: SBAC	-The students have taken the Smarter Balanced exam for the first time this spring. How did the test go? Please describeWhat student reactions did you see to the test? -In preparation for the test, did you make any changes to curriculum or instruction? -Why do you or don't you prepare students for the Smarter Balanced exam?	-What teacher reactions did you see to the tests? -What conversations did your team have about the SBAC? -Were you in alignment with what your team thought and did about the testing?	-What do you think of the opt-out movement that is taking place this spring around this test? -Where do you get your information from surrounding the SBAC? -What is your sense about what school leaders think about the SBAC? Why do you think that? -What has influenced your thoughts about the tests outside of this school?
Topic 10: Effects of the SBAC on Common Core sensemaking	-Your students have taken the SBAC for the first time. Did that experience change your opinions about the Common Core in any way? If so, how? If not, why not? -Do you think that these tests were good measures of the Common Core? -Do you expect to make any changes for next year's testing? Why or why not?	-What communication did you receive about how the school did on the SBAC? About the process, content, results? -Do you expect your team to make any changes based on the experience of taking the test this spring?	-There have been varied news reports about the success of the testing. Did you follow those? What were your opinions?