

Running head: ASSESSMENTS ALIGNED TO SKILLS IN SOCIAL STUDIES

ASSESSMENTS ALIGNED TO SKILLS IN SOCIAL STUDIES: A CASE STUDY OF A
HIGH SCHOOL PROFESSIONAL LEARNING COMMUNITY

By

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ASSESSMENTS ALIGNED TO SKILLS IN SOCIAL STUDIES

Abstract

Teacher professional learning communities (PLCs) are an increasingly common initiative to improve student achievement. This study applies literature about PLCs to understand the collaborative practices of one team of high school social studies teachers. The purpose of this study is to investigate one PLC's development of common assessments. It examines the interactions between teachers during the implementation of the Common Core State Standards for History and Social Studies (CCSS). The study focused on the interactions among teachers during PLC time designated for teacher learning that improves student achievement. The problems examined included how teachers created and continued to use assessments aligned to the CCSS.

This qualitative case study included three sources of data: PLC meeting notes, teacher-created common assessments, and interviews of teachers who participated in the PLC. Ten teachers and one supervisor participated in the interviews; two participants were interviewed twice.

Three themes emerged from the data: the importance of developing a shared vision, the supportive nature of the school leader's role, and the ways teachers networked for specific expertise to support their work. Implications that followed from the findings included how teachers benefitted from the leadership of their colleagues, time to work together on specific goals, continuous professional development designed around recommended changes, and

ASSESSMENTS ALIGNED TO SKILLS IN SOCIAL STUDIES

resources directly related to their work. This study provides details to help school leaders facilitate teacher collaboration around assessments aligned to reading and writing skills in secondary social studies contexts.

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ASSESSMENTS ALIGNED TO SKILLS IN SOCIAL STUDIES

Table of Contents

Abstract	i
Acknowledgements	iii
Chapter 1: Introduction	1
Context of Case	3
Statement of Problem	4
Chapter 2: Related Literature	6
Professional Development and Learning	6
Social Studies Education Vision and Assessment	8
Effective Professional Learning Communities	11
Chapter 3: Methodology	24
Setting	25
Sample	26
Data Collection	31
Data Analysis	34
Limitations of Design	37
Summary of Methods	41
Chapter 4. Findings	42
Shared Vision	43
Administrative Support	62
Networking for Specific Expertise	76
Summary of Findings	85
Chapter 5. Conclusion and Discussion	88
Future Research	93
Implications	98
Impact	102
References	107
Appendix A. Semi-Structured Interview Protocol	121
Appendix B. Table of Relationships between Interview Questions and Literature	123
Appendix C. Coding Scheme and Definitions	124
Appendix D. Sample of NJ Student Learning Standards for Social Studies	125

Chapter 1: Introduction

In the era of the Common Core, social studies teachers are tasked with developing and implementing instruction and assessments focused on building literacy skills. The standards lay out rigorous requirements for student achievement in reading and writing within the content areas of social studies and science in addition to skills that students learn in literacy classes. Examples of skills required by the CCSS include analyzing primary sources and citing evidence from a text to support an argument. The standards were drafted during the 2009-2010 school year and adopted by New Jersey in June of 2010 (Common Core State Standards Initiative, 2016; Mooney, 2010). In New Jersey, the implementation of the CCSS coincided with the passage of the Teacher Effectiveness and Accountability for the Children of New Jersey Act of 2012 (TEACHNJ) that required teachers to set achievement goals for students that aligned to the standards and the promotion of PLCs as the mechanism by which teachers learned professionally about how to implement the standards (Renshaw, 2012; Pine & Dougherty, 2013). Around the country, educators collaborated on the challenging task of implementing the standards (Amore, Hoeflich, & Pennington, 2015). This dissertation investigates details of the implementation of the CCSS through examining the collaborative creation and implementation of assessments by a team of social studies teachers.

The CCSS grew largely out of a partnership of the National Governor's Association and the Council of Chief State School Officers. The process of developing the standards began in 2009. Forty-two states voluntarily adopted the standards, in part to have a chance at receiving funding through earning a Race to the Top grant (Common Core State Standards Initiative, 2016). Race to the Top was a federal policy designed to encourage states to adopt rigorous, common standards that would better prepare students for success (The White House, 2009).

While the program did not require the adoption of the standards, the grant application required states to either adopt the CCSS or prove the rigor of the state's standards. A survey of state deputy superintendents of education described the challenges helping educators learn about the CCSS, providing technical assistance to districts/schools, and developing materials to support instructional leaders on the CCSS (Rentner et al., 2013). Efforts to move from policy to practice were encouraged by both the federal and state levels of government.

Over the next few years, districts in NJ rewrote curriculum to align to the CCSS. The NJDOE checked that districts could produce curriculum documents that contained the CCSS through their quality assurance process. However, there is scant research on the actual classroom-level implementation of instruction and assessment that aligns to the standards (Loveless, 2014; Santelises & Dabrowski, 2015; Will, 2016). While controversy about the CCSS has swirled nationally and even resulted in NJ renaming and making slight revisions to approximately fifteen percent of the CCSS, teachers have been working to instruct and assess in alignment to the standards (Clark, 2016). Few examples exist of questions that would accurately assess students' mastery of the standards, especially for specific periods of history.

The NJDOE strongly suggested that teachers collaborate to learn about and implement the CCSS. Specially, the NJ Department of Education (NJDOE) issued guidance that stated, "professional development shall have as its primary focus the improvement of teachers' and school leaders' effectiveness in assisting all students to meet the CCCS" and "shall include the work of established collaborative teams" (Pine & Dougherty, 2013, p. 6-7). There were five forms the NJDOE released in 2013 to help teachers and administrators develop student growth objectives (SGOs) as part of the TEACHNJ Act. One of the forms was a standards alignment check that asked teachers to list the standards measured with the assessment related to their

SGOs (NJDOE, 2013b). Another suggested that teachers collaborate on creating their assessments. For example, it asked the question, “How do I intend to collaborate with my colleagues on assessment development?” (NJDOE, 2013a, p. 1). These documents show that there was a clear push from the state level for teachers to develop assessments collaboratively to measure students’ progress on the CCSS.

Context of Case

This qualitative single case study investigated the details of two concurrent initiatives in a large, suburban district in New Jersey, referred to as Valleyview School District: the creation of professional learning communities (PLCs) and alignment of social studies assessments to the recently adopted CCSS. A PLC was defined, for the purpose of this study, as a formal group of teachers collaborating regularly with a focus on improving student learning (DuFour, 2007; Vescio, Ross & Adams, 2008). The overall goal of PLCs in Valleyview is to raise student achievement. Examining the details of the development and implementation of assessments aligned to the CCSS in one group of teachers may provide useful information to those interested in social studies education, teacher collaboration, and increasing academic rigor in general. Specifically, this study analyzed PLC notes, assessments teachers created, and educators’ statements about the PLC. The interview participants included ten teachers and one administrator, all of whom played a role in the PLC some time between 2012 and 2015.

Valleyview is among the growing number of districts attempting to improve student achievement by implementing PLCs (Vescio et al., 2008). In Valleyview’s schools, white students outperformed African-American, Latino and low-income students in language arts and mathematics, as evidenced by state standardized test results; this is common throughout the state (New Jersey Department of Education, 2012). Given this performance data, educational leaders

in the district also hoped that PLCs will improve the achievement of all students while closing gaps in performance among different subgroups of students.

In PLCs, teachers work together to construct new understandings and improve their instruction. PLCs follow the concepts of adult learning theory that suggest that adults learn in their cultural context when they engage in critical reflection (Merriam, Caffarella & Baumgartner, 2007; Mezirow, 2000). Valleyview first implemented teacher PLC meetings in 2011. Small groups of teachers teaching the same class or similar classes meet twice a month during the school year for a minimum of forty-five minutes each time.

As far as the actual functioning of the PLCs, teachers are responsible for setting the norms and agendas for the meetings. In theory, content-area supervisors and school principals advise and monitor what teachers do at PLC meetings; the level of supervision and guidance varies by the school and individual administrators. In the first two years of implementation, teachers created common assessments to measure student achievement in each class. There was optional professional development (PD) on effective PLC practices offered in the summer of 2013, which was attended by less than 10% of teachers in the district. Also during that summer, committees of teachers in Valleyview finalized a minimum of four common assessments in each subject area for grades three through eleven in social studies.

Statement of Problem

For change to happen that benefits students, PLCs must help teachers learn. Although Valleyview has committed time to PLC meetings, research shows variability in the success of PLCs in helping teachers to improve their practice and student learning (Hargreaves, 2013; Levine, 2011; Wells & Feun, 2007). Since I am an administrator responsible for student achievement and teacher supervision, I want to better understand the intricacies of PLC practice

in our context so that I can encourage all PLCs to follow effective practices. The purpose of this study is to investigate one PLC's development and use of common assessments.

This case study will examine the characteristics and actions of one high school PLC in order to provide a rich description of their collaborative work, triangulated through multiple sources of data to improve the validity of the findings (Creswell, 2009). Namely, interview data was compared to assessments and PLC notes. In the context of the implementation of new curriculum standards, this study seeks to understand the perceptions teachers have on their collaborative work around creating assessments and the extent to which teachers engaged in practices associated with effective PLCs. In particular, it will answer the following question about a PLC using assessments that particularly followed best practices in the field: In a PLC that created common assessments more tightly aligned to the Common Core State Standards for History and Social Studies than others in the same setting, what factors contributed to the effective development and continued use of those assessments?

The stakeholders of this study are varied, including decision-makers at the district level, school-level, teachers and students. District administrators, school leaders, and board members want to implement programs that efficiently improve teaching and result in increased student learning. Teachers want their PD time to be productive and relevant to their classroom responsibilities. The ultimate stakeholders are students who deserve a high-quality education. This study included three components of data analysis: a document analysis of meeting notes, a review of common assessments, and interviews of teachers.

Chapter 2: Related Literature

Since secondary social studies education provides the backdrop of this study, the teachers and their practices are situated in the context of that field. In addition, sociocultural learning theory that underpins PLCs and research on effective PLCs are two areas of literature relevant to this study. This literature review provides related background information, a rationale for PLCs, and a description of characteristics of effective PLCs. In the first section, sociocultural learning theory explains how teachers can learn together in the context of their school and improve through collaboration. Then, literature about social studies education and the evolution of the field provide background for the change in curriculum standards that occurred as the PLCs developed common assessments. Finally, studies that describe the practices of PLCs to improve teaching and learning give further information about the areas investigated in the interviews: a shared vision, norms, roles, agendas, and conflict during the assessment creation process. The last section on effective PLCs contains subsections that emerged from an analysis of both seminal and recent studies about PLCs.

Professional Development and Learning

PLCs, a primary mechanism for teachers to learn in Valleyview, are an outgrowth of sociocultural learning theory that emphasizes the social and contextual components of learning (Coburn, 2001; Mezirow, 2000; Putnam & Borko, 2000; Zemke and Zemke, 1995). The sociocultural perspective of learning emphasizes that learning is social, shared, and situated in specific contexts. According to sociocultural theory, many factors affect capacity, including students' knowledge, teachers' understanding of the content, teachers' strategies to teach the content, materials available for learning, and the context of the school (Coburn, 2001; Feiman-Nemser, 2001; Palinscar, 1998; Putnam & Borko, 2000; Supovitz, Sirinides & May, 2010).

Collaboration focused on evidence of how to improve instruction in teachers' classrooms can increase teachers' motivation to work jointly rather than only tell stories or share materials in a way that reinforces the status quo (Little, 1990). The point of PLCs is to structure regular teacher collaboration, which is an important step in authentic teacher learning. Based on sociocultural theory, teachers need to learn together to improve their shared practice.

Sociocultural learning theory also suggests that teachers need their learning to be situated in actual problems of practice they experience. Working collaboratively ensures that the teachers' learning is relevant to the context in which they teach. Multiple schools with different contexts, ranging from small rural schools to large urban districts, have succeeded in dramatically improving some aspect of their students' performance through increased collaboration (Odden & Archibald, 2009; Saunders, Goldenberg & Gallimore, 2009; Wells & Feun, 2012). PLCs are increasingly common in schools that are trying to improve instruction (DuFour, 2007; Vescio et al., 2008). Having PLCs focus on teaching and learning in a school forms the basis for discussions that are relevant to teachers' daily work. Theories about the sociocultural nature of teacher learning provide a rationale for PLCs improving teacher practice and therefore increasing student learning in specific contexts.

Understandings of how teachers learn and change their practice stress the importance of the sociocultural theories that underlie PLCs. The basis for PLCs is the idea that people learn in collaboration with peers, and that joint work related to their teaching can motivate teachers to improve (Little, 1990; Palinscar, 1998). Increasing accountability standards demand that teachers continuously improve their practice. This call for better performance requires capacity-building of educators; capacity refers to the knowledge, skills, and resources that affect the relationship between teachers, students, and the content in the curriculum. Building this capacity

involves continuous PD embedded in teachers' classroom practice (Elmore, 2002; Fullan, 2001; Hall & Hord, 2006; Supovitz, 2006). According to sociocultural learning theory, the best professional development for teachers facilitates their collaboration about specific ways they can improve instruction in their classrooms.

Social Studies Education Vision and Assessment

Given the importance of context to teacher learning, key concerns and developments in the field of social studies education provide important information about the sociocultural setting of the teachers. This section first examines fundamental disagreements about a vision for social studies education among educators in the field. A description of recent changes in social studies standards then provides context for the teachers' work in creating instructional activities and assessments after those standards became law during the period of time researched in this study.

Educators, practitioners, policymakers, and politicians have long disagreed about the definition and goals of social studies as a field. A prominent president of the National Council for Social Studies famously defined social studies as the study of human relationships using disciplines such as political science, economics, history, and geography (Wesley, 1942). In 1994, the National Council for the Social Studies (NCSS), defined social studies as “the integrated study of the social sciences and humanities to promote civic competence... to help young people develop the ability to make informed and reasoned decisions for the public good” (Schneider, 1994, p. vii). While the field has always struggled with clear identification of the purpose of studying social studies, more recent NCSS statements prioritize skills such as locating information and developing arguments.

The question of focusing instruction more on content or skills has existed in social studies education for decades. The field has debated whether to teach students about historical decision-

making or engage them in the process of decision-making. To teach about decision-making, students study historical facts including details about the decisions others have made. Teaching about the decision-making process involves skills such as gathering data, analyzing sources, and creating an argument (Shermis & Barth, 1978). As part of the New Social Studies movement, social studies educators focused on teaching inquiry, critical-thinking about big concepts, and decision-making skills essential for citizens; the movement advocated moving away from studying history as a chronology of facts and encouraged connections to today. These ideas proved controversial and caused backlash during the rise of the conservative movement (Massialas, 1992). However, teaching skills such as reading and writing about historical texts has grown in popularity since understanding by design promoted focusing on essential questions and enduring understandings (Wiggins & McTighe, 2005). The field has generally moved towards teaching that develops skills and knowledge with real-world applicability.

Calls to change social studies curriculum and instruction by spending more time developing skills of citizens and less time memorizing facts date back decades and continue today (Cogan, 1976; National Council for Social Studies, 2013; Schachter, 2009). The field of social studies is focusing increasingly on using social studies content as a vehicle to build skills, as demonstrated by the widespread adoption of the CCSS and the College, Career and Civic Life (C3) Framework for Social Studies State Standards (NCSS, 2013; National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010b). However, a report from an educational advocacy group found evidence that most assignments teachers give do not match the rigor of the CCSS (Santelises & Dabrowski, 2015). Both sets of standards, the CCSS and C3, suggest that social studies teachers instruct students in reading, writing, speaking, and analyzing.

Following this trend to focus on enduring understandings and skills, research about best practices in social studies suggests using reading and writing in instruction and assessment (NCSS, 2003; Zemelman, Daniels & Hyde, 2012). According to a literature review of articles published by the National Council of Social Studies over a thirty year period, writing activities, along with class discussions and asking questions requiring reasoning, help students develop critical thinking skills (Karabulut, 2012). A recent description of authentic intellectual work in social studies listed three criteria related to skill building: construction of knowledge, disciplined inquiry, and value beyond school (King, Newmann & Carmichael, 2010). Best practices in the field suggest providing social studies instruction that requires students to examine historical sources, identify perspective, and craft arguments.

Well-known assessments of social studies content, including the Advanced Placement history tests and New York Regents exams, increasingly have used stimulus-based multiple choice questions and document-based essay questions (Rothschild, 2000). Document-based essay questions (DBQs) consist of texts provided for students to read and cite from while writing essays about historical topics that require evidence to support an answer to the question. In addition, the Partnership for Assessment of Readiness for College and Careers (PARCC) tests of English/Language Arts Literacy contain text-based questions about passages related to social studies (Pearson, 2015a; Pearson, 2015b). PARCC is the required standardized test for students in NJ from upper elementary school through high school. Stimulus-based multiple choice questions and DBQs are examples of relatively authentic intellectual work in social studies.

Both research and standards in the field of social studies suggest emphasizing skills necessary for students to use in the real world – reading, writing, and thinking critically. Social studies education is a relatively under-researched field. A review of curriculum across all fields

concluded that social studies instruction and assessment lacked a sufficient research base (Choi & Wegner, 2015). A search of the What Works Clearinghouse of the Institute of Education Science yielded one article about social studies education, and did not list social studies under the menu of “Topics in Education” even though it listed literacy, math, science, early childhood education, and educational technology (U.S. Department of Education, 2016). A review of literature on professional development of social studies teachers concluded that more research is needed regarding teacher learning communities in social studies (van Hover, 2008). This dissertation will contribute to the field in its examination of assessments and teacher collaboration after the adoption of the CCSS. The relative lack of research about social studies education demonstrates the importance of this study to examine the collaborative processes of teachers as they implement changes in line with recent developments in the field.

Effective Professional Learning Communities

The many changes in the field of social studies education require teacher learning to address, and PLCs serve as a main vehicle for teacher learning in Valleyview. The concept of PLCs requires teachers to change their mindset from reflecting on what they taught to analyzing what students learned (DuFour, 2007). Assessments are therefore a key part of the PLC’s collaboration. A review of literature about PLCs found that PLCs showing improved student achievement had a “persistent focus” on student learning (Vescio et al., 2008, p. 87). PLCs improve student learning when teachers collaborate as part of a continuous cycle of planning, assessment, and reflection grounded in concrete results (Carmichael & Martens, 2012; DuFour, DuFour, Lopez & Muhammad, 2006; Leclerc, Moreau, Dumochel and Sallafranque-St-Louis, 2012; Odden & Archibald, 2009; Supovitz, 2006). Improved student learning results when PLCs collect data on students’ needs, plan instruction based on those needs, and reteach concepts until

students demonstrate achievement. This section of the literature review provides a research base for this inquiry into PLC characteristics and actions, including how teachers establish a common vision, share leadership through responsibility for various roles, set their agendas, develop norms, use assessment data, and deal with conflict. In addition, it addresses the role of the administrator in supporting a PLC.

Shared vision. In effective PLCs that improve student achievement, PLC members share a clear vision of improving student achievement measurably through their collaboration (Fullan, 2001; Kise, 2012; Leclerc et al., 2012; Supovitz, 2006). Schools that have doubled part of student performance on standardized tests have started by reviewing past performance data to set specific goals (Odden and Archibald, 2009). The vision of student academic growth can guide teacher collaboration and school-wide conversations about new practices (Printy, 2008). Developing a shared vision is the first step in a successful school improvement process based on teachers learning to change their practice.

Empirical research demonstrates the connection between the PLC characteristic of sharing a vision for improving student achievement and achieving that vision. In a quasi-experimental study, gains in test scores resulted after a treatment that involved regular meetings about student learning. At these meetings, administrators and teacher leaders planned interventions and shared strategies to improve student achievement (Saunders et al., 2009). In the quantitative component of a mixed-method study of two suburban districts, the district in which teachers shared instructional practices and remediated struggling students had higher teacher self-reported scores on a survey that asked about shared vision (Wells & Feun, 2012). In a case study that triangulated transcripts of different PLC meetings with observations and interviews, the PLC considered by the authors as most effective discussed their vision for

student success and the role of the teacher in ensuring that success (Nelson, 2007). Another case study suggested that a vision developed during PD about formative assessment sparked positive changes in instructional practice (Hollingworth, 2012). These studies suggested that effective PLCs develop a shared vision of staff collaborating to help every child succeed as a part of positive change.

Use of assessment data. A key component of a shared vision in effective PLCs is a focus on evidence of student learning. Using data to set goals, make decisions, and monitor progress can help schools improve achievement. Schools that have greatly increased scores on standardized tests have started by reviewing data to set specific goals, such as having all students reading proficiently by grade three and passing algebra by grade nine (Odden and Archibald, 2009). Clear goals and leadership that encourages analyzing data can result in teachers collaborating to improve instruction (Waters & Marzano, 2006). For example, a school that had strong leadership for data use and a structure of teachers working together to analyze data also had more teacher interdependence when compared to other schools with teachers who did not personally examine the data (Young, 2006). Using data to identify a vision and goals for educators to address collaboratively is essential to increasing student achievement.

Additional studies suggest that the most authentic, effective form of teacher learning in PLCs involves teachers reflecting on student achievement. For example, a case study of two schools that had relatively advanced PLC development found that both schools had an unwavering focus on student learning (Hipp et al., 2008). In another school, PLC development revolved around implementing more formative assessment so that teachers constantly had a clear picture of what students had learned (Hollingworth, 2012). A comparative study of secondary math and science teachers suggested the most successful PLC in the sample used inquiry to

investigate student achievement and discuss how to meet the differing needs of students (Nelson, 2007). In the past, PD has focused on teacher learning, but effective PLCs focus on student learning.

Furthermore, school leaders can create conditions so that using data helps teachers continuously improve towards the school's goals. Leaders should ensure that data is easily accessible in a format that teachers can use in a timely fashion to monitor their instruction (Kerr et al., 2006). One of the steps used by schools with impressive test score gains was implementing formative assessments during units to ascertain what students have mastered and what they still need to learn. There are many options for formative assessments, including reading skill tests, instruments measuring mathematical number-sense, and online benchmarks in various subjects (Odden & Archibald, 2009). Combining the focus on student learning goals with the continuous assessment of progress towards those goals can give teachers the motivation and knowledge needed to improve.

To ensure successful monitoring of teaching and learning through data analysis, leaders should provide teachers with PD about using data and select research based-strategies that closely match the concerns identified. The results of a study across three districts show that districts with more focus on and time using data improved staff perceptions that data analysis helped them improve instruction. In addition, using data practices that support instructional initiatives, or tight-coupling of data analysis and reforms, can encourage teachers to use data (Kerr et al., 2006). Using data to examine the effectiveness of instruction can help schools develop an understanding of what good practice looks like (Elmore, 2002). In multiple cases of schools that significantly increased student standardized test performance, schools adopted strategies related to the goal in mind, such as new curriculum to improve math performance or

smaller classes for reading to improve literacy scores (Odden and Archibald, 2009). Providing PD on data use and making sure that reforms are closely tied to issues that emerge from data analysis can improve the ability of educators to increase student learning.

Different tools can help teachers and leaders collect and analyze data on a continuous basis (Putnam & Borko, 2000; Supovitz, 2006). One example is the *Leading for Learning Sourcebook*, which contains specific questions that educators can discuss to improve student achievement (Knapp et al., 2003). Another way to organize conversations about student learning data is doing an equity audit; equity audits encourage examining data about teacher quality, programmatic equity, and student achievement outcomes beyond state standardized tests (Skrla, Scheurich, Garcia & Nolly, 2004). In addition, the protocol from a critical friends group offered guidelines for reviewing student work collaboratively that many teachers in an urban high school described as meaningful and useful for informing their daily practice (Curry, 2008). PLCs can use this research about tools to discuss data effectively.

Evidence from the mixed-methods and quasi-experimental studies also explains conditions and tools useful to help PLCs focus on student data effectively. Teachers who had access to a data management program and common assessments to analyze student performance gave support to failing students more often than those in a comparison district (Wells & Feun, 2012). In another case, treatment schools in a quasi-experimental study about PLC implementation had both higher test scores and improved school ranks compared to the comparison group; these achievements emerged after the treatment schools began using a discussion protocol that helped teachers discuss specifics about student learning (Saunders et al., 2009). Access to timely data and meeting protocols can help PLCs improve achievement. Given

the importance of using data, creating rigorous and high-quality assessments aligned to best practices in the field is a key part of PLC collaboration.

Discussion norms. In addition to a shared vision and focus on data, having specified norms for discussion in a PLC can keep groups of teachers focused on student learning. When two PLCs in the same school were compared, the one with more discussions on student learning had a richer understanding of problems of practice and possible solutions to them. A norm used by the more effective of the two PLCs in that study was to have a check-in from each teacher, which led to discussions of problems of practice (Horn & Little, 2010). Another case study also found that opening PLC meetings with teachers quickly summarizing their classroom happenings helped start discussions on solving problems of practice (Richmond & Manokore, 2010). A third example of discussion norms is using a dialogue protocol of a critical friends group to increase listening and decrease defensiveness during teachers' discussions of classroom activities (Curry, 2008). Group norms can ensure a focus on learning and equal participation.

One particularly compelling example of discussion norms is the protocol focused on student learning associated with gains in standardized test scores from a quasi-experimental study of PLCs. The protocols involved examining student work to understand academic problems, analyzing assessment results, and planning collaboratively to address common student needs. In addition, the protocol listed steps to help PLCs focus their meeting time on student learning (Saunders et al., 2009). Discussion norms can help ensure that the process of PLCs is achieving their goals, including to monitor student achievement on a regular basis, design instruction specific to students' needs, and improve overall student achievement.

Agendas. Another tool that can encourage collaborative instructional improvement is agendas (Spillane, Halverson & Diamond, 2004). An agenda is an outline of tasks that teachers

will complete at a meeting. Effective meeting tasks can include examining evidence of student learning and analyzing overall trends in performance on formative assessments (Hollingworth, 2012; Odden and Archibald, 2009). In less effective examples of teacher collaboration, teachers share stories about their teaching without specifics evidence about student needs and how to address those needs (Little, 1990). Agendas that include the development of norms and use of data indicate a PLC that is engaging in practices likely to improve student achievement.

In particular, inquiry cycles can lead to teachers analyzing student work and using student learning as a basis for improvement of their practice. Inquiry cycles involve asking a question about student learning, collecting data to answer the question, and using the findings to pose further questions about nuances in students' performance (Nelson, 2007). Effective PLCs share knowledge of the subject at hand, how learners learn it, and the best methods to teach it. Supervisors can interact with teachers to encourage a focus on how learners learn a subject and the best way to teach the subject (Stein & Nelson, 2003). Once PLCs establish a vision of improving student learning and focus their discussions on evidence of student learning, they can set agendas that continue taking steps down the path of collaborating to meet students' needs.

Teacher roles. Theoretical, empirical, and practical works about teacher collaboration suggest the importance of teachers taking responsibility for a range of leadership roles and tasks (Spillane, Halverson, & Diamond, 2004; Supovitz, Sirinides & May, 2010). Since Valleyview does not have coaches or department chairs in social studies, I use the phrase "teacher leader" to describe a teacher who takes initiative informally to lead within his or her PLC. Distributed leadership theory posits that change can occur through the multiplicative efforts of a variety of formal and informal leaders (DuFour, DuFour, Eaker & Many, 2006; Spillane, Halverson, & Diamond, 2004; Supovitz, Sirinides & May, 2010; Vescio, Ross & Adams, 2008). Strong

leaders in a department can facilitate discussion and help all teachers participate in collaboratively setting goals, implementing plans, and innovating (Borko, 2004; Printy, 2008). Teacher leaders can help facilitate change by supporting colleagues and providing innovation-related interventions (Hall & Hord, 2006). On the more practical side, DuFour (2006) suggests a host of specific roles such as agenda-setter, note-taker, time-keeper, and facilitator. Lead teachers play an important role in creating agendas for learning and motivating teachers to learn.

There are a number of other roles suggested in PLC literature for which different members of the PLC may take responsibility, thereby sharing leadership for their joint work and common practice (Hord, 2004). A qualitative study of thirty PLCs suggested that teacher leaders can help colleagues move from simple, surface sharing to collective inquiry by asking probing questions and intentionally planning for collaborative dialogue (Nelson, Deuel, Slavit & Kennedy, 2010). Similarly, another study concluded that using protocols and sharing resources are leadership tasks that promote collaborative inquiry into ways to improve student learning (Thorton & Cherrington, 2014). By taking on different roles to contribute to their PLCs, teachers can realize the promise of this model of professional learning.

Administrative support. In addition to roles of teachers, literature suggests that administrators can positively contribute to the effectiveness of a PLC by sharing leadership, structuring time for teachers to work on shared goals, facilitating professional development, and providing resources. In this study, the term “shared leadership” refers to an administrator collaborating with teachers on goal-setting, curriculum, instruction, assessment, and group processes. This term appears in the literature as one of Hall & Hord’s (2006) dimensions of a professional learning community, where they list three factors by which an administrator can help staff to function as a PLC. These factors of the administrator are “a need to share authority,

the ability to facilitate the work of the staff, and the capacity to participate without dominating (p. 27).” Similarly, Marks and Printy (2003) describe “shared instructional leadership” as “active collaboration of principal and teachers on curriculum, instruction, and assessment” where the administrator asks for “the ideas, insights, and expertise of teachers in these areas” (p. 371). Both works stress the importance of collaboration between administrators and teachers in order to change practices. Shared leadership promotes teachers taking an active role in the PLC process to improve teacher and student learning.

One study involving interviews at twenty schools divided into a high and low levels of readiness for teacher collaboration describes shared leadership between administrators and teachers (Huffman, Hipp, Pankake, & Moller, 2001). The authors found that schools with a high level of readiness for PLC success had shared decision-making between educators, time for teachers to collaborate to achieve their common vision, professional learning aligned to classroom responsibilities, and instructional materials designed to help teachers implement best practices. Administrators play an important role in each of those supports for PLCs.

Just as literature on the role of teachers in effective PLCs stresses sharing leadership within the PLC, research on effective educational leadership suggests that administrators broadly share leadership with teachers. For example, a survey of elementary school teachers provided data that an inclusive leadership style positively affected professional community across elementary schools in one urban district (Bryk, Camburn, & Louis, 1999). In another study at the elementary level, qualitative interviews and observations demonstrated that schools with PLCs in the sample all had teachers in leadership roles and that school leaders typically involved teachers in the decision-making process about who those teachers would be (DeMatthews, 2014). Similar findings occurred other levels according to a study of twenty-four high, middle, and

elementary schools. In these schools, shared leadership focused on instruction corresponded to higher student achievement; the authors argued that transformational and shared instructional leadership led to strong school performance when leaders and teacher worked together around high quality teaching and learning (Marks & Printy, 2003). Sharing leadership with teachers has particular benefits for teacher collaboration and student achievement.

Another way that administrators can support teachers collaborating is to structure time for teachers to discuss and work on common goals, which closely relates to sharing leadership. Multiple experts in the field of teacher collaboration suggest that school leaders facilitate collaboration between teachers to improve teacher and student learning (Bryk & Driscoll, 1988; Darling-Hammond & Sykes, 1999; DuFour, 1999; Smylie & Hart, 2000). As far as empirical evidence about the importance of teacher collaboration, Bryk and Driscoll (1988) developed a quantitative measure of schools as communities and compared the outcomes of schools related to this metric. They found that schools organized as communities (i.e. higher on the community index measure they created) had structures that helped teachers collaborate towards shared goals along with positive effects on teacher and student learning (Bryk & Driscoll, 1988). This study shows that school leaders can positively impact teacher collaboration and student achievement through their support of PLCs.

In keeping with the idea of leaders supporting PLCs by structuring teacher interactions, a qualitative study of multiple cases suggested that leaders develop a collaborative culture with common preparation time for teachers and encourage teachers to adopt team goals (Leithwood, Leonard, & Sharratt, 1998). Another in-depth qualitative study of language arts reform found that teachers' discussions affected whether they implemented changes in their instruction, which also shows the importance of structured meeting time (Coburn, 2001). These studies provide

evidence that leaders can support PLCs by structuring collaborative time focused on the achievement of common goals.

Facilitating teacher engagement in professional development specific to their content area also contributes to PLC effectiveness. As numerous authors have explained, effective professional development is job-embedded and provides continuous support for teachers to learn tools that they can use to teach their subject matter (Darling-Hammond & McLaughlin, 1999; Elmore, 2002; Wineberg & Grossman, 1998). A qualitative study that involved interviews and document analysis suggested that a coherent focus on subject-specific knowledge development had the most teacher-reported positive effects on instruction (Firestone, Mangin, Martinez, & Polovsky, 2005). Attending professional development workshops and following up with teachers to provide feedback about implementation efforts is another way that an administrator can support teacher learning (Gallucci, 2008). Making their learning visible can help leaders take part in the teachers' community of practice (Printy, 2008). While the whole purpose of PLCs is to promote teacher learning, administrative facilitation of specific professional development experiences for the teachers can move PLCs forward.

Finally, an administrator can support PLC work by providing resources to teachers. Professional development should help teachers learn how to use resources that will improve student achievement; the more teachers can directly apply resources from professional development, the better (Darling-Hammond & McLaughlin, 2000). One study cites an example of a teacher leader helping others with setting up materials to implement listening centers as part of the balanced reading program (Huffman et al., 2001). In a quantitative study involving a large, national survey of high school math and science teachers, one of the findings was that sharing appropriate resources encouraged teachers to participate in the professional community

(Printy, 2008). In sum, literature suggests many ways that leaders can support PLCs, including sharing leadership, structuring teacher interactions around common goals, providing professional development relevant to teachers' daily work, and ensuring teachers have access to necessary resources.

Conflict. One role that leaders and teachers can take is that of assisting colleagues in dealing with conflict. Conflict can have positive outcomes such as increasing the quality of group decisions, creativity of products developed, and intellectual growth of teachers; however, it can also have negative effects on a group, including anxiety among group members and suppression of ideas (Achinstein, 2002; De Dreu, 1997; Grossman, Wineberg & Woolworth, 2001). According to a case study of a high school involved in significant reforms, dissent can serve as a constructive force in the change process when there is a norm of academic freedom, structures support constructive controversy, and policies require collaboration (Uline, Tschannen-Moran & Perez, 2003). Teacher leaders can recognize and use conflict as an opportunity to deepen understanding (Nelson, Deuel, Slavit & Kennedy, 2010). While many teachers understandably want to avoid conflict, research has demonstrated its potential for creating positive outcomes as teachers collaborate together.

Multiple studies focus on how teacher collaboration can positively influence student learning through productive conflict. Teaching has historically been a highly autonomous endeavor, so efforts to spur teacher learning through collaboration must consider the importance of individual needs in a PLC (Little, 1990; Scribner, Hager & Warne, 2002). Since teachers share the common ground of a desire for maximum student learning, discussion protocols can ground controversial discussions in evidence of student learning to determine the best course of action (Levine & Marcus 2010; Nelson et al., 2010). As mentioned in the sections on using data

and developing norms, discussion protocols can improve group function. For example, the Tuning Protocol and the Sticky Issue Protocol can help teachers discuss controversial issues in a structured, respectful manner designed to facilitate productive deliberation and learning (Zepeda, 2008). The Descriptive Review protocol can assist teachers in working with struggling students (Feiman-Nemser, 2001). Dealing with conflict is another way that the use of discussion protocols can help a PLC function effectively. The conflict that can arise during collaboration can serve as a catalyst for change when situated in discussing evidence of student learning.

Literature about PLCs suggests that teachers can improve student achievement by developing a shared vision, focusing on data about student learning, creating norms for collaboration, setting agendas for their joint work, developing roles to facilitate their shared practice, and employing strategies to use conflict effectively. Administrators can support PLCs by sharing leadership, structuring time for teachers to work on common goals, supporting professional development, and providing resources. Recurrent themes in this literature include the importance of teacher collaboration, shared leadership, and the use of protocols. In sum, this literature provides context for studying a social studies PLC during the implementation of the CCSS.

Chapter 3: Methodology

This single case study examined how social studies teachers collaboratively created and used common assessments as part of a PLC during their implementation of the CCSS. Case study is appropriate in this situation because the research questions investigate a complex phenomenon in its context, seeking depth and nuance (Whittemore, Chase and Mandle, 2001; Yin, 2013). In addition, I did not have control over the behavior of the participants (Yin, 2013). By conducting a case study, the data collected provided a thick, rich description of the “how” of the assessment creation, including information about the sociocultural context and interactions of teachers as they collaborated.

This research yielded insight into the collaborative process teachers used as they learned about and implemented the CCSS in a PLC. Sociocultural learning theory and research about effective teacher PD both suggest that teachers learn best through collaborating about data and practices related to their everyday instruction (Coburn, 2001; Elmore, 2002; Printy, 2008; Vescio et al., 2008). The most important sources of data were interviews in which I asked teachers to reflect on the process they used to create the assessments. I used documentation of the PLC work, including the assessments and agendas they created, to triangulate the interview findings.

I selected the case and sample purposefully according to the research questions (Creswell, 2009; Yin, 2013). As I had reviewed assessments as part of my job responsibilities over a period of two years, I was familiar with the scope and rigor of the assessments across PLCs. Therefore, I was able to pick an unusual case of teachers who had created and continuously implemented assessments that tightly aligned to the CCSS and best practices in social studies education when compared to other cases in that context. The rationale for researching this single, unusual case was that it could demonstrate how this team deviated from

“everyday occurrences” (Yin, 2013, p. 51). Literature about change in education suggests that practices tend to take about five years to shift significantly (Fullan, 2001; Hall & Hord, 2006). Given that the teachers created and implemented these assessments within two years of the publishing of the CCSS, the speed and thoroughness with which the teachers implemented this reform was unusual and important to understand. This study endeavored to collect rich detail about these teachers’ learning and interaction.

A strong case study examines multiple sources of evidence to provide a complex, holistic picture of the issue in question (Creswell, 2013; Yin, 2013). For this study, I began with reviewing exams and assessments generally, and then more specifically through the lens of the CCSS and best practices in social studies education. I selected the PLC of teachers based on the quality of all of their assessments throughout the year. I interviewed almost all teachers who participated on that team and the administrator involved with the PLC; I chose two of those educators who emerged as leaders to interview a second time.

Setting

Valleyview School District serves almost 7,500 students, of whom approximately seven percent are Latino, six percent are African-American and slightly fewer than ten percent of students receive free or reduced-price lunch. Valleyview was once a rural, farm area that has grown into a suburb of nearly 40,000 residents in the last forty years. Average home values are approximately \$400,000, over half of adults have at least a bachelor’s degree, and the median household income is over \$110,000. While Valleyview is a relatively wealthy community, it is also relatively diverse for a suburb in New Jersey. Although a small percent of students enter the district without speaking English proficiently, over twenty percent of people speak a language other than English at home (U.S. Census Bureau, 2014). The classification rate, or percent of

students receiving special education services, is slightly above the state average (New Jersey Department of Education, 2014). These demographics show that Valleyview is a relatively diverse district for a suburb in New Jersey.

Valleyview High School is a comprehensive high school serving students in grades nine through twelve. The high school contains over 2,000 students and the social studies department consists of over twenty social studies teachers. The entire staff of the high school numbers over two hundred. All teachers are contractually obligated to participate in PLCs, and the PLCs are currently organized so that teachers meet with others who teach the same courses that they teach as much as possible. There are no formal leaders or specific roles for teachers in the PLCs. However, each high school department has a “department liaison,” whose primary responsibilities involve coordinating ordering, supplies, and departmental testing of students. While the liaison does not have any particular role in the PLC, he or she often acts as an intermediary between teachers and the supervisor due to the more frequent communication with the supervisor. The last three department liaisons have participated in the world history PLC that is the sample for this study.

Sample

The world history PLC, hereafter referred to as the world PLC, was selected through a document analysis that demonstrated their assessments aligned more closely to the CCSS than other PLCs in the same context. Among high school PLCs, I compared the types of assessments and the types of questions on those assessments for their alignment with the CCSS, the use of stimulus-based multiple choice questions, and the reading level of the texts on those assessments. The CCSS focuses on reading and writing about historical texts; a thorough reading of the CCSS demonstrates its emphasis on students critically reading sources and gathering evidence to

support an argument in response to those sources National Governors Association, 2010b). Therefore, exam questions that provide a stimulus align more tightly with the CCSS and best practices in the field of social studies assessment described in the literature review. The document analysis showed that common stimuli on high school social studies exams in Valleyview are written quotes from a primary source document, charts, graphs, maps, historical photos, and political cartoons. Table 1 demonstrates that the world PLC had an equal to or much higher percent of stimulus-based questions on exams when compared to the other PLCs. The world PLC also had much more frequent DBQs when compared to the other PLCs.

To provide a few details about the world history course, world history is a required course and designed for freshmen. It is the first in a sequence of the three required social studies courses. The state of NJ requires one year of world history and two years of US history to graduate high school. There are a few options for students in terms of taking world history. Most ninth-grade students (approximately 70%) take world history at the college prep level. Some of those classes are structured with a social studies teacher and special education teacher coteaching the class to meet the needs of students with individualized education plans. Around 20% of students take world history honors with department permission based on previous performance. The two teachers who teach world history honors use the unit-level common assessments of the PLC while giving different midterm and final exams. The remainder of students take world history in a small group based on their individual education plans with changes made to the common assessments. In the US history classes, teachers give separate common assessments to honors students. The comparison below compares the common assessments that the majority of students take in the college prep (not honors) track across the three years.

Table 1

Comparison of Exams in 2013-14

	Number of Stimulus-Based Multiple Choice Exam Questions	Total Multiple Choice Exam Questions on Midterm and Final	Percent of Multiple Choice Questions with Stimulus	Exam Essays Requiring Evidence from Documents	Number of DBQs per Year
World PLC	72	150	48	2	9
PLC 2	27	235	11	2	4
PLC 3	79	165	48	1	3

The second criteria that demonstrates the alignment of the world PLC's assessments with the CCSS is the Lexile of the documents in DBQs. As described in the literature review, DBQs are a best practice in social studies assessment. The CCSS provides ranges of reading challenge according to Lexile text measure for high school grade levels (see Table 2). The Lexile measure of a text is a number that describes the complexity of the text, including its semantic and syntactic features; however, the metric does not take meaning into account and may underestimate the difficulty of texts that use simple, familiar words to convey complex ideas (MetaMetrics, 2016; National Governors Association, 2010a). The CCSS contains Lexile measure ranges for each grade level in order to assist teachers in preparing students for careers and college by the time they graduate high school (National Governors Association, 2010a). The Lexile measure of the texts on the assessments provides an imperfect, but useful, measure of the alignment of the assessments to the CCSS.

Table 2 shows that the documents in the DBQs of the world PLC on the midterm and final exams more closely match the Lexile range for their grade of the CCSS than those of the other PLCs. In addition, the world PLC is requiring the most reading out of the three PLCs on its exam. The world PLC required the most DBQs of students, incorporated appropriately challenging readings, and asked students to complete a significant amount of reading on exams when compared to the other PLCs. The assessment analysis was a key component to selecting the sample and demonstrates that the world PLC is a unique case in terms of collaboration around CCSS-aligned assessments. The description of the assessments demonstrate that the world PLC created common assessments that were the most aligned to the CCSS and current assessment practices in social studies, such as multiple choice with stimuli and DBQs.

Table 2

Lexile Ranges of Documents on Exam Essays

	Lexile Range of Documents in Exam Essays	Relevant Lexile Band for Grade Level (National Governors Association, 2010a)	Words Count in Documents Related to Midterm and Final Essays
World History PLC	890-1230	1050-1260	1,533
PLC 2	480-1780	1080-1335	1,081
PLC 3	900-1120	1185-1385	503

Regarding recruitment to participate, the high school principal sent a notification about the opportunity for teachers to participate in this study to all teachers who were in the world PLC for at least a full school year by the time the study started. Given the unique nature of the world PLC, the sample provided information needed to answer the research questions about assessment

and collaboration; in addition, it helped me to learn about ways to support other teams of teachers to achieve similar goals (Patton, 2008). Study participants included six current teacher participants and four former teacher participants of the PLC, plus the former supervisor involved. The sample did not exclude anyone based on gender or race. The teacher participants had a range of experience and education levels, from second-year teachers with bachelor's degrees to veterans with graduate degrees (see Table 3). Characteristics of the teachers, other than having participated in the world PLC for at least a year at the beginning of the study in the fall of 2015, were not part of the recruitment criteria

Table 3

Demographic Information by Participant

Participant	Degree	Fields of Study	Years in Teaching	Gender
1	BA	History	Between six and eleven	F
2	BA	History	Between six and eleven	F
3	BA	History	Between six and eleven	F
4	BA	History	Fewer than five	F
5	MA	History, Ed Leadership	Between six and eleven	M
6	MA	History, Ed Leadership	Between six and eleven	M
7	MA	History, Special Education	Fewer than five	F
8	MA	History, Special Education	Twelve or more without gaps	F
9	BA	History	Twelve or more without gaps	M
10	MA+	History	Twelve or more without gaps	F
11	MA+	History; Teacher Leadership	Twelve or more without gaps	M

Ten teachers were interviewed once, with an additional two follow-up interviews after preliminary data analysis (one of which was with the supervisor). The follow-up interviews focused on leaders among the group. The findings of the first round of interviews suggested a few main contributions to the PLC related to assessment, according to teacher perceptions: coming to agreement on the assessments, facilitating time to work on specific tasks, providing

learning opportunities, contributing content knowledge, and making suggestions for helping struggling students. Given these findings, two second-round interviews were conducted.

Data Collection

As a qualitative single case study, the approach for data collection was to gather thick, rich descriptions of teachers' work together. In order to develop a complex, holistic account of assessment creation, I collected data from a number of perspectives including current and past PLC participants, furthered detailed in the Sample section. Data from multiple perspectives forms an essential component of case study research because it helps understand the lived experiences of participants in their complex environments and the meanings they attach to those experiences (Creswell, 2013; Yin, 2009). As the supervisor of this team of teachers and other similar teams, my goal was to learn more about how I could support them as they learn together and change their practices in the future. Using the qualitative methods of interviews and document review, I gathered data in a relatively unintrusive way to answer my research questions about collaboration around assessment creation and continued use.

Interviews and document analysis were the sources of data for this study (see Table 4). The first round of interviews was completed from October through January of the 2015-16 school year. The second round of interviews was completed in February of 2016. The organization, analysis, and dissertation writing occurred through February of 2017. Following the conclusion of the study in 2017, all data, consent forms, audio files, and interview transcripts will be maintained for three years post-study, after which it will be deleted.

Table 4

Data Collection Table

Type of Data Collection	Sample	Data Analysis	Timeframe
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(Measure)			
First round interviews	Ten participants in the world PLC	Gained a rich understanding of the teachers' perceptions of their vision, collaborative practices, and leadership of the team	October 2015 - January 2016
Assessment Document Analysis	Midterms, final exams and common assessments from three PLCs	Examined reading levels and use of historical stimuli	Ongoing as part of job responsibilities, coded in February 2016
PLC Notes Document Analysis	PLC notes from September 2012 through June 2016 for the world PLC	Examined for evidence of assessment discussions and effective PLC practices	Ongoing as part of job, coded in February 2016
Second round interviews	Two peer-identified teacher leaders from the world PLC	Deepened the detail in understanding teacher learning and collaborative work	January - June 2016

I used the lens of sociocultural learning theory to examine teacher collaboration around common assessments. In order to gain insight into how the teachers created and implemented rigorous, CCSS-aligned common assessments, I considered the many factors that affected their capacity like students' readiness, teachers' approach to instruction, materials available for learning, and the context of the school (Coburn, 2001; Feiman-Nemser, 2001; Palinscar, 1998; Putnam & Borko, 2000; Supovitz, Sirinides & May, 2010). I asked questions around common themes in the literature about effective PLCs, including about how the PLC spent their time, set agendas, created discussion norms, developed roles, and addressed conflicts. Appendix B shows how each research question related to the literature.

Interviews. Interviews were scheduled by email for participants who contacted me after seeing the approved recruitment email from the building principal. At the beginning of each

interview, I explained the study to the subject, read the consent, and answered any questions the subject asked. The subjects initialed all pages of the consent form and signed it. Participants had a choice of whether or not to consent to audio-recording. A dated and signed copy of the consent form was given to each subject. The interviews were held at a time and place convenient for the subject, including in the teacher's classroom, in my office, and over the phone.

First round interviews were conducted with ten teachers who participated in the world history PLC, eight social studies teachers and two teachers dual-certified in social studies and special education. Nine of the ten teachers consented to an audio-recording of their semi-structured interview, and one subject preferred I take notes of the interview. Two of the interviews occurred over the phone due to the preference of the interview subjects. The nine recorded interviews were transcribed word-for-word. During the interviews, I urged participants to elaborate on their answers and provide as much detail as possible.

The semi-structured interview protocol (Appendix A) was designed to provide insight into teachers' views on their collaboration and learning over the course of implementing the CCSS. Semi-structured interviews are a way to understand participants' views and experiences with a set of questions, but also allow the interviewer to probe responses as necessary (Merriam, 2009). The questions were developed based on literature about social studies education and professional learning communities. The original interview protocol was piloted with a social studies teacher and revised accordingly for clarity and succinctness in questions.

Data from the first round was used to select teacher leaders for a second round of interviews. As described in the literature review section on roles, the PLC does not have a formal leader or teachers with formal leadership roles who participate other than the department liaison (whose role is not related to instruction or the PLC). The second round interviews took

place later in the same school year as the original interview. These interviews provided the opportunity to learn more in-depth information about the professional learning and leadership tasks that certain teachers contributed to the PLC related to assessment. Talking with the teachers provided details about their lived experiences and perceptions; the second round interviews were also an opportunity to request feedback on preliminary findings.

Document analysis. Easily available documents collected in a systematic manner can contain information helpful to answering research questions (Merriam, 2009). Two types of documents were analyzed: assessments (detailed above in the Sample section) and PLC notes. The assessments were used to select the sample as a unique case. PLC notes were used to confirm statements from the teachers and understand their use of time together. When the PLC process began, PLCs were asked to record a log of their meeting activities and attendance. These logs existed over the period of the study and were reviewed for patterns in agenda items. Information from these notes provided a source to triangulate the data from the assessments and interviews.

Data Analysis

Using data from different sources was an essential way to gather thick, rich detail as well as examine the multiple perspectives of the teachers about their collaboration (Yin, 2009; Whittemore et al., 2001). Creating codes provided a way to link the data with the theoretical concepts, as well as both simplifying and adding complexity to the data (Coffey & Atkinson, 1996). I read through all the data once prior to formulating a coding scheme. I uploaded the interviews and PLC notes into Dedoose, a web-based application designed for managing data, creating excerpts, coding, and matching demographic data with qualitative results.

After the first read-through of the data, I developed inductive codes from the themes that emerged from the data. In order to prepare for in-depth analysis, I tagged all of the interviews with demographic data about the participants, coded the data using key terms, and wrote memos to myself during the process to make sense of the data (Coffey & Atkinson, 1996; Creswell, 2013). During this process, the following inductive themes emerged: 1) the importance of a shared vision of social studies education, 2) the effects of the school leader's actions, and 3) the ways teachers networked for specific expertise. I also used deductive codes related to the literature review, including roles, vision, agenda, norms, assessment, conflict, and PD. These concepts led to the further development of subcodes and revisions to codes based on the evolution of my understanding of the data. For the second round interviews, I asked clarifying questions that arose from the data analysis, using the coding scheme I developed during the first round of analysis. I checked the draft findings with the administrator and teacher interviewed. Both participants added helpful insights including how the determination of PLC composition was made and details about the professional development provided prior to the assessment creation.

Validity. I employed multiple methods to address validity concerns. Ways I addressed the ethical and validity issues of conducting research in my work context were: reflectively avoiding an agenda, strengthening the respectful and trusting relationships I had with the subjects, and including clear statements about my positionality (Creswell, 2013; Magolda, 2000). In short, I took every care to avoid bias and accurately portray the perspectives and work of the educators in this case.

Participants were asked to comment on the preliminary findings to improve validity of the study, which relates to a key criteria of validity: authenticity (Whittemore et al., 2001).

Discussing findings with the participants ensured that the portrayal of the collaborative practices and assessments matched the participants' perceptions of meanings and experiences. The trust built over a period of years with these teachers helped the teachers offer honest insights about their practice. Another component of the study that helped the teachers feel comfortable was in the design; by choosing a unique case of alignment to the CCSS and best practices in SS assessment, I encouraged the teachers to share openly about their practices to help other teams achieve similar goals and therefore help students.

During the process of coding and analyzing the data, increasing validity by having integrity to what the data showed was of the utmost importance to me (Whittemore et al., 2001). Given my working relationship with these teachers, my understanding of their context and commitment to represent their voices fairly also adds to the validity of this study (Lincoln, Lynham & Guba, 2011). I endeavored to member-check the data in two ways to ensure my findings made sense to the participants (Creswell, 2009; Creswell & Miller, 2000). My first step in member checking was to email transcripts to the participants. I read through all of the transcripts to correct any errors from transcription and emailed a copy of the transcript to each participant. I requested that they suggest changes to or deletions from their interviews if they read any inaccurate information or statements that made them feel uncomfortable. No participants requested to change the words of their interviews or strike any information.

I also shared findings with each participant and asked for comments. During the second round of interviews, I asked participants questions about the findings. In addition to member-checking, triangulating interview comments with data from interviews of other participants and the PLC notes improved the study's validity. For example, if a teacher reported serving in a significant role in the PLC, I sought to verify that comment with other members of the PLC

and/or the supervisor. PLC notes were particularly useful to double check that the teachers spent their collaborative time as they described it in their answers to interview questions. While external validity of any case study is limited, the rich detail of descriptions of teacher collaboration provided could benefit others on the journey of collaboratively developing assessments related to the CCSS.

Limitations of Design

One weakness of the design is the threat to validity of teachers not wanting to share negative information with their supervisor about their practices or those of their colleagues. Given the positive relationship I have cultivated with these teachers over a three-year period and the study design to take lessons from their collaborative work, the teachers appeared comfortable answering questions and multiple participants commented that they enjoyed reflecting on their PLC's work. Teachers did share ways they wanted their PLC to improve, which provided evidence that they trusted me with sensitive information. However, I still had the dual roles of researcher and evaluator to the teachers despite every effort to keep those responsibilities separate, and my role may have limited the information teachers shared.

Another possible limitation to this case study is that I may have been unaware of biases I had as a participant in the context in which I researched. I endeavored to "discuss the findings with my personal views, with the extant literature, and with emerging models that seem to adequately convey the essence of the findings" (Creswell, 2013, p. 52). However, I may have avoided asking probing questions that could paint my colleagues and I in a negative light. While I endeavored to portray the evidence I collected honestly, it is not in my personal or professional interest to share information that paints Valleyview in a negative light. While there are benefits to my positionality described below, researching in a work context leads to limitations.

Positionality. There were benefits and weaknesses to my positionality that may have affected this study. One weakness to conducting research in my workplace was the chance that the research was “biased, incomplete, or compromised” (Creswell, 2009, p. 177) due to my connection to the research site. Participants may have lacked honesty because they told me what they thought I wanted to hear. I may have overlooked important questions or findings because of my saturation in the context. I designed validation procedures aimed to address these shortcomings and remained cognizant of these issues throughout the study, but it was impossible to remove all effects of my context and positionality on the study.

As a supervisor for the teachers interviewed, I took the utmost care to avoid coercion and negative impacts to the participants. The principal of the school let teachers know about the study, and I did not follow up with any participants who did not contact me. In addition to the high level of confidentiality, the risk to participants is lessened further due to the fact that the interviews involved information typically discussed with their supervisor as part of regular work routines. Therefore, participation in this study did not increase the level of risk already faced by teachers in their daily interactions with their supervisor.

I took multiple precautions to minimize risk to subjects, including informed consent, confidentiality, and secured records. Any information that identified a particular study participant has been kept confidential and secured. Participant identity was kept private from other school members and study participants. Audio recordings have been stored on a password-protected computer. All documents have been stored electronically in the same manner. Hard copies of documents collected are stored in a locked file cabinet, to which only I will have access. Additionally, all written work generated from these data reports has guarded the

confidentiality of the participants such that the teacher will not be identified. Pseudonyms were used to protect teacher privacy.

Conducting research in a context with which I was highly familiar had a number of benefits, including selecting a case, asking questions in ways that facilitated gathering information in a time-sensitive way, and using the findings. First, my knowledge of the context allowed me to identify a unique case among the PLCs. In working with the teachers for two years prior to the study, I reviewed exams and common assessments. I mediated disputes for various PLCs and participated in discussions about their assessments. This insider knowledge allowed me to see the strengths of the world PLC and design a study to learn more about the factors that contributed to their development and continued implementation of CCSS-aligned assessments.

Another benefit to conducting research as an insider was that I applied my knowledge of the context to the study design and implementation. I was able to ask questions in ways that made sense to teachers and probe as necessary depending on the role of the teacher. Since teachers' time is so limited, I did not have to spend precious interview time asking for demographic information that I already knew. I was able to modify the protocol of questions depending on the teacher's PLC history, such as which PLCs he or she participated in over time, so that they made sense for the teacher. The teachers also did not have to spend time explaining their assessments, curriculum, or PLC members with me, since I am familiar with all of that information.

My familiarity with the context also assisted how to ask and/or modify specific questions in the protocol. For example, I asked teachers to describe a recent PLC meeting. Some of the interviews occurred in the weeks following an abnormally long meeting, which was a half-day

in-service devoted to PLC reflection and agenda-setting. Because I wanted an authentic idea of what the teachers decided to discuss, I asked them to refer to a meeting other than the half-day in-service. My knowledge of the teachers' individual and collective practice also helped me rephrase questions as needed. For example, I asked teachers to describe discussions that their PLC had around assessing the CCSS. When teachers stared blankly or stated that they did not know much about the CCSS, I rephrased the question to ask about when their PLC discussed students critically reading texts and gathering evidence to cite while writing an argument. The ability to rephrase questions led to richer responses in multiple cases.

Finally, my understanding of the work the teachers did helped me craft the study in a way that the teachers and I could use the findings to benefit student learning (Creswell, 2009; Patton, 2008). For example, when multiple participants mentioned the importance of release time (when a substitute taught students while the teacher completed professional responsibilities) where all members of the PLC participated in revising an exam, I shared this information with other administrative colleagues and successfully advocated for two release days for other groups of teachers who had extensive exam revisions to complete in order to align their exams to the CCSS and best practices. As another example, I shared the analysis I did of the Lexile levels of the previous assessments with the teachers. Although I had presented information about the CCSS and Lexile levels before, seeing the Lexiles of texts on their exams and how they compared across grades motivated the teachers to align their texts more closely. After presenting information to teachers about the Lexile measures of texts on their exams, I had two teachers follow up with questions about how to find measures of text complexity themselves in the future.

Summary of Methods

This case study of a unique PLC involved interviews of eleven individuals who participated in the world PLC around the time of its inception or shortly thereafter. The uniqueness of the PLC was determined by an analysis of the assessments the PLC created. In interviews, the participants answered questions about their philosophy, collaboration, and professional development experiences. They also shed insight into the inner workings of the PLC that created and continued to use assessments that were closely aligned to the CCSS. In addition to the interviews, PLC notes served as another source of information. The data was analyzed through a mix of deductive and inductive coding, with special attention to possible biases in the analysis through member checking the findings with participants and comparing the interview results with PLC notes.

Chapter 4. Findings

According to the findings, educators who are passionate about instructing and assessing according to rigorous standards can create change in a collaborative setting. Important factors in the success of the case examined included the development of a shared vision, varied forms of support from an administrator, and communication through networking with colleagues who possess expertise needed. Subthemes to these main ideas included teachers having a common goal for assessments, sharing leadership across participants, benefitting from multiple learning opportunities about innovations, using relevant resources, consulting with context experts, and seeking advice from teachers who have in-depth experience helping struggling learners. The findings described can help both teachers and school leaders improve practices in social studies education and PLC implementation.

Regarding PLC practices, the findings include areas in which the world PLC follow best practices as well as examples of how they can grow to be more effective in their collaboration. During this study, the world history PLC was in the first few years of their journey to improve their practice through analyzing evidence of student learning and planning collaboratively. To develop and continue implementing common assessments, the PLC followed some of the best practices in the literature about PLCs such as adhering to norms of interaction, creating clear agendas, and taking on specific roles. The PLC could continue to grow by expanding their agendas to include discussions grounded in evidence of student learning.

Evidence from the interviews suggested three themes related to how the world history PLC developed and continued to use assessments related to the CCSS. First, this section describes the shared vision of the teachers who created the DBQ common assessments. Through questions about this process, the first theme emerged that the teachers' shared vision of social

studies education and assessment formed the foundation of their work together. An analysis of the PLC notes over a four-year period supports that the teachers focused their work on the creation and implementation of assessments that matched their view of social studies education. Regarding the second theme, the interview data also showed that administrator actions assisted the teachers by providing the opportunity for teachers to lead colleagues, professional development, and time to work on clear goals. Finally, the third theme describes how teachers networked for specific expertise, seeking out knowledge and skills from members of the world history PLC and colleagues outside of the PLC to meet their professional needs.

Within each theme, I also provide a variety of voices to support ways that the PLC could continue to grow. The PLC would benefit from developing a clearer vision about how their collaboration can improve student learning. The teachers shared common goals related to rigorous writing instruction, yet multiple teachers discussed the desire for more specificity in terms of instructional goals in writing and assessment practices that accurately measure student learning through common assessments. Having an administrator arrange more time together to improve PLC practices and plan writing instruction may improve teaching and student learning outcomes. In addition, teachers expressed a desire to have more choice over their PLC time as they described how networking with various colleagues meets their professional needs; this suggests that conversations about PLC groupings and goals are important to maximize teacher learning. The following chapter explains the factors that contributed to the PLC's CCSS-aligned common assessments and areas for continued growth.

Shared Vision

Teachers in the World PLC came to a shared vision to achieve their goal of designing skills based assessments, and specifically DBQs. Coming to this shared vision enabled them to

be effective in their work. The PLC participants differed, however, in their conceptualizations of the CCSS and the purpose of their work as a PLC. After providing some evidence about conversations that occurred during the process of teachers deciding to make their common assessments DBQs, this section contains a number of sub-findings: teachers had conversations to build consensus around their assessments, members of the PLC shared a vision of skills based instruction, understanding of the CCSS varied by participant, and different ideas existed about the purpose of PLC collaboration.

Conversations to build consensus. Prior to understanding details of ideas teachers shared and those upon which they disagreed, some background about their process and conversations in developing common assessments is necessary. Out of the six teacher participants in this study who developed the assessments, four reported strong consensus on the idea of creating common assessments that were document-based questions to assess students' reading and writing skills (the focus of the CCSS for social studies). Carter described the genesis of the DBQs:

I think the world PLC took the path of least resistance and said, "Hey. Let's look to other school districts, other states to see how they're doing it." We relied, initially, we relied very heavily on the Regents, because they were using document based questions, so he said, "Why reinvent the wheel? Let's use some of these DBQs and let's find some others."

In that quote, he clearly referenced that the teachers paid attention to best practices in the field and thought it would be easiest to agree on document-based questions. He continued to describe the consensus teachers developed in this statement in response to whether any disagreements arose as all of the world history teachers worked together on developing the common assessments:

I think the only disagreements that we had was the balance, or some of the very minute choices of maybe some of the questions. Maybe trying to find, you know, should this DBQ have a map in it or should it have a picture? How many questions are we going to

have per common assessment? I like to teach this more, so ... Actually, that might be the biggest issue is that individual preferences in terms of curriculum and balancing everybody's needs and saying, "Well, I do two weeks on the French Revolution." Another teachers says, "Well, I love it. I'd like a couple more questions." I know that a couple of people were like, "Well, I don't really touch on this thing but I'm going to have to teach it now because we're putting a DBQ in there." Those were probably the biggest disagreements but we didn't have disagreements in terms of the structure.

The above quote provided further evidence of this participant's favorable opinion on the flexibility offered by DBQs and showed that he did not perceive disagreements around the question about what type of assessments to develop.

Three other colleagues described the decision to create DBQs with clarity due to the way DBQs combined testing students' knowledge and skills. Kelly described "strong agreement" among those present about the types of assessments to develop. Another colleague, Kelsey, echoed the idea that the teachers reached agreement quickly due to the benefits of DBQs as the type of assessment they created. She explained the process of assessment creation similarly:

In world, it was very much a consensus of that it was going to be the easiest to give document-based questions. They met the requirements of being rigorous, and it was also something that is subjective enough that you wouldn't necessarily feel like you're teaching to the test. When we tried to create those common assessments, it was based on one thing that we knew everybody would cover within a unit. Then that way it would give us more freedom in the classroom to be like ... You know, Billy really likes to teach Napoleon, so he can spend extra time on Napoleon. I could spend extra time on the Enlightenment or extra time on World War II because that was my thing, so the consensus was there that would free us to still be able to have much more freedom in the classroom as opposed to multiple choice questions.

Kelsey's description of the positive aspects of creating document-based questions showed her perspective on how that format helped build consensus by offering the teachers instructional autonomy about the exact content they taught.

Another teacher echoed these comments about the flexibility offered by DBQs in the following exchange:

Me: Can you talk about the discussions you had around the common assessments?

Cameron: Yeah. Well, as long as it has to do with the nature of the common assessment being a document-based question. We needed people to pull primary sources, and we needed to come up with questions for the essay side of the DBQ, questions that we thought, number one, students needed to know but also questions that each of us covered in our classrooms already given what the curriculum asked us.

This statement provides further evidence that multiple teachers who created the common assessments viewed DBQs as the best method due to their ability to measure essential learning while allowing a measure of flexibility.

Of the two participants who reported disagreements during the development of the assessments, there was only one person who remembered strong disagreement. The participant who recalled a large degree of conflict about the common assessment creation stated:

It was all about how quickly we could find three or four sources that relate to a prompt we came up with. It was a nightmare to agree on exact wording... We had to make the prompts too vague that so everyone could be happy. I asked about the wording, and said it needed to be something students could support or defend. There were some prompts I really didn't like because I could see that we were not going to get anything good from them. I couldn't just stand up and say, "That's unworkable." But, what we are getting from those prompts is unworkable. We are getting stuff that means nothing. Writing the common assessments was hell.

This participant had strong feelings about the process and products created, from the perspective of wanting to make the assessments more coherent. Regarding the assessments, this participant stated, "The prompts, sources and skills we are asking for don't match." While this participant was not satisfied with the products, she strongly stated her support of skills-based instruction. When asked, "Do you see yourself more on the content side or skills side of what is important to teach?," the participant replied, "It's all about the skills." This participant had a clear orientation toward teaching and assessing students' skills, which matched the idea of creating DBQs.

Another teacher who works relatively closely with the participant above reported minor issues with coming to consensus about making the common assessments be DBQs. This

participant, who participated in most of the previous sessions about the CCSS and assessment, stated:

It was interesting because when we were talking about common assessments we couldn't agree on how to assess them. What we should stress in the Common Core. Do we go for content? Do we go for skills? I remember we were given five days ... It was 25 hours so the five, five days to write the common assessments. I remember the first day we didn't really accomplish anything in terms of writing because it was what do we do? What do we focus on? What do we emphasize? That was kind of a hard thing to agree on.

The quote above demonstrated that the teacher perceived some conflict during the early portion of the common assessment writing process. This teacher further described how the teachers resolved disagreement about the types of assessments:

What we ended up finally doing, and I don't even remember who proposed it, somebody said, 'What if we take the curriculum, and we look at the central questions, and we work off of that.' That was kind of how we figured out the direction we wanted to go. We really didn't know. Everything was so new, and everything was changing.

This resolution leveraged the curriculum upon which the teachers had agreed, which further shows the importance of viewing the common assessment development as part of the process of learning about the CCSS that the teachers experienced.

Despite some struggles of some of the members in the PLC to see the value in DBQs as assessments aligned to the CCSS at the beginning of the common assessment development, all teachers in the world history PLC had a shared vision that strong social studies instruction and assessment involved teaching and assessing students about skills, which the next section describes in detail. The PLC therefore created rigorous and skills-based assessments, which aligned to their beliefs prior to the CCSS. The assessments the teachers developed and continue to implement aligned with their vision for social studies instruction and assessment. The shared vision section will provide evidence about the teacher's beliefs and shared vision, including their

statements suggesting teachers' previous affinity to teaching skills, varied familiarity with the specifics of the CCSS, and mixed ideas about the purpose of their collaborative time.

Shared vision of skill-based instruction. All of the teachers interviewed emphasized the importance of teaching skills in their instruction. Every single participant made specific statements about their value of teaching students skills as part of the purpose of social studies education. Many explained that the skills would benefit their students throughout life. For example, Carter said students need to know how to write well, "because that's going to transfer over to the life outside the classroom." Kelly said that skills were more important than content and called content "an enhancement." Diana agreed with her statement, "I think that there are certain skills like reading, critical thinking, analysis, writing that are super crucial because they can be applied to anywhere." Another teacher, Lena, said that she had to emphasize skills so that students could research and read about the content. Teachers who value students acting as historians must focus on building students' ability to critically read, write, and analyze sources.

Along a similar vein, Cara relayed an anecdote that underscores her affinity towards skill-based social studies education and shows how she reinforces the importance of writing with her students. Cara retold:

One of the kids said to me, "Why can't we just do multiple choice questions?"
I [Cara], "Because you need to learn how to read, and write critically. That's what we're trying to teach you."

He said, "Well, I think our common assessments should be multiple choice questions."

I said, "Fine. You can email my supervisor, and give her a really good argument. You write her a nice long email, and you tell her exactly why you should have multiple choice."

He starts, "Okay, I'm going to write you something."

I'm like, "Okay."

Then he sits there, and he starts writing. He's like, "I don't like these assessments. They take too long. They're too much work."

I said, "That's going to be your argument?"

This anecdote shows the applicability of social studies skills to real-life situations. Given that Cara directed the student to use the skills they are developing in class to address his concerns, she is leveraging every opportunity to hammer home the importance of developing skills.

Teachers in the PLC share strong beliefs about the importance of teaching literacy skills in social studies.

It was noteworthy that the two special education teachers commented specifically about their role as the special educator requiring a focus on skill-based instruction. Jennifer stated, "I have to teach skills, as the highly qualified Special Education teacher in the room." Dara agreed and expanded on her thinking of the importance of instructing students about skills with the statement:

I think that the skills need to be in place for them [students] to be able to learn the content appropriately. I think without certain skills, it's just information, and just words, and facts, and nothing that they can really do too much with. I think the skills are necessary for them to be able to process it [content] appropriately and fully comprehend and analyze, and to be able to get something out of it.

Both general and special education teachers in the PLC shared a vision for focusing on skills.

While some social studies teachers may focus on dates, names, and places, the world PLC had a shared commitment to the rigorous work of teaching students how to comprehend texts, craft an argument, and support their propositions with specific evidence.

In explaining the importance of skill-based instruction, members of the PLC described how the PLC's vision of social studies education as teaching skills affected their common assessment development. Two teachers commented on the importance of the common

assessments requiring writing of students. Cameron expressed the reason that the common assessments focused on writing in his statement:

We recognize the fact that writing is so important. Writing and reading are so important in social studies that, if we're going to have a common assessment, multiple choice common assessment only assessed them on their knowledge of the content and it didn't help with their explanation or application of that content knowledge. The difficulty and what the students were able to show us that they learned was extremely limited with just multiple choice assessment. So, if we want to be able to give meaningful feedback to our kids and really understand what they understand, then we needed them to write. We need them to express themselves. We need to give the resources to work with. And that allowed us to work interdisciplinary skills into our common assessment.

Another teacher, Carter, concurred with the statement: “We all know that those multiple choice questions don't really do much. It might show their knowledge on a certain topic but it's not advancing their literacy in writing and critical thinking skills.” Both teachers clearly state that they wanted assessments that measured the important components of what they taught and how they endeavored to improve students’ ability to communicate. The teachers’ value of skills-based instruction relates to their choices in assessment creation, which suggests that their shared vision of the purpose of social studies contributed to their development of assessments that required students to read and write. This finding was confirmed in second round interviews, where both participants stated that their shared commitment to literacy skill-building in social studies led the PLC to develop DBQ common assessments.

Table 5

Topics Discussed at World PLC Meetings

Task	2012-2013 Frequency	2013-2014 Frequency	2014-2015 Frequency	2015-2016 Frequency	Total Frequency
assessment writing and revision	11	14	8	5	38
assessment implementation discussion	5	4	4	7	20

instructional strategies		1	1	9	11
pacing discussion	4	1	3		8
work on review sheet	1	3	1	1	6
teacher evaluation requirement		2	2	2	6
goal setting	2			2	4
norms	1		1	1	3
student data		2	1		3
review game creation				3	3
communication with teachers of WH not in PLC	2				2
Google group for communication with PLC				1	1
responding to parents				1	1

An analysis of the PLC notes for the four school years spanning from 2012-2016 supports the argument that the teachers worked toward a shared vision of developing assessments to measure students' reading and writing skills. The notes, organized by date, have topics discussed at each meeting and a plan of items for consideration during the next meeting. Inductive coding of the notes led to the development of thirteen discussion topic categories, eleven of which appeared more than once over the four-year span. Table 5 shows the frequency of the topics of conversation by year according to the notes.

Teachers spent most of their time creating and revising common assessments over the four years (see Table 5). The next most frequent topic of their time together was discussing logistics of how to implement assessments. By the fourth year of the PLC, discussions about implementation happened more often than assessment writing and revision. Instructional strategies was the most common topic of conversation during the 2015-16 school year, which was the last year of this study. Table 5 confirms that the PLC spent little time analyzing student data and that discussing the common assessments dominated the teachers' meeting time together.

The table suggests that teachers could benefit from additional supports in understanding the best practice of analyzing student data, like discussion protocols.

Mixed understanding of the CCSS. Although the teachers agreed to create and continue to implement common assessments that aligned to the CCSS, evidence from the interviews suggests that the teachers varied in their level of familiarity with the CCSS. Multiple teachers brought up the CCSS in conversation in an appropriate context, which demonstrates comfort with the idea of the standards. Kelly and Cameron described how the CCSS required the teaching of skills across content areas. Jennifer mentioned that the special education teachers used the CCSS to create IEP goals for students. Kelsey demonstrated her knowledge and fluency with the idea of the CCSS in response to a question about why the common assessments addressed students' writing skills. Here is our exchange:

Me: You mentioned writing being a goal for the common assessments. How did that develop?

Speaker 2: Charlie, to be completely honest. To be perfectly honest, like that was ... definitely Charlie drove that as the goal to meet the Common Core Standards within social studies.

In this quote, Kelsey shows her familiarity with the CCSS and understanding of how the CCSS related to selecting a DBQ format for the common assessments. Citing the CCSS in an appropriate context without prompting shows that Kelsey understands the standards.

Similarly, Carter mentioned the CCSS in a question about the purpose of a PLC. Here is the question and statements that followed:

Me: I want to switch gears a little bit to talk more generally about PLCs and what you think the purpose of PLCs are.

Carter: I think they're evolving. I think now that we have all this PARCC data and we're having common assessments, you know, traditionally PLCs were a place for teachers to almost have a bitch session, and now that there is this pressure and there are curricula that we need to follow, and there's data that is kind of following teachers along and representing how they do, you know, the PLC is a really, really great place to have dialog between teachers in terms of individual kids or individual classes, or individual

assessments. Having one brain and one set of eyes on something is good, but having five or six is that much better. The PLC for me was always a place where we could revise and refine, and I don't know if you know this, but ... Yeah. You do. Remember we started with the English and history PLC?

Me: That was actually before me, but so many people have brought it up, because basically what people have said is originally that was the model that people had wanted, and then it changed.

Carter: Then I asked Karen and Charlie and said, "Hey. Look, can we do this hybrid?"

This was just as Common Core and things were coming, and we were working on creating the common assessments and my room is right next to Catherine [an English teacher], and I said, "Look, why can't we do a English history PLC? We can try to marry up some of the curricular and what you're reading at the time. We can kind of marry those two things together, and talk about kids' writing. Those are two skill like minded places." I said, "Look, can we do this?" We were given the green light to do that. I think that it would work if the curricula at the time were more aligned. You know what I mean?

In his statements, Carter referenced the CCSS when describing the context for the joint literacy and social studies PLC. Since the CCSS requires the teaching of reading and writing in social studies, his statement above shows that he understands the CCSS. In addition, using the CCSS as a term in context shows his familiarity with the standards.

On the other hand, some teachers made statements that suggest a lack of familiarity with the CCSS. As demonstrated in the first section of this chapter, all of the teachers in the sample strongly believe in focusing on reading and writing skills with their students. However, five teachers in the sample expressed some confusion about or disagreement with the CCSS, which contradicts their focus on the very same skills required by the CCSS. For example, Cara disparaged the CCSS when asked how she learned about it.

Cara: I read some of it, and then my eyes glazed over. My eyes glazed over, or I'd be like, "Wait, you want me to teach what?"

Me: Yeah.

Cara: Why can't we focus on this?

Me: Yeah.

Cara: I remember sometimes making in the PLCs joking about some of the standards, and things we had to do, and we're like, "Seriously? As history teachers? Really?"

In this quote, Cara expresses some concerns over the expectations of the CCSS and a desire to have more freedom from the standards that she shared with colleagues.

Another example of a teacher's lack of fluency with the standards is in Dara's answer to a question about conversations in the PLC about the CCSS and assessments:

Me: I wanted to explore a little bit more your feelings towards the Common Core being really heavy in our assessments, and any conversations in the PLC about that, or your thoughts?

Dara: Not that I can think of we've had any discussions in PLC about Common Core with the common assessments.

Me: Even more just in general about the focus on writing, and critically reading, and evidence and argument. I mean, those are a lot of the conversations you have, right?

Dara: Yeah.

Me: You're not saying, "All right. We're going to talk about the Common Core now." When you're talking about how do I get the kids to cite text evidence, you're talking about the Common Core.

Dara: We have had specific discussion with citing evidence. We have decided a way that we want them to be able to cite it. We actually sat down and discussed what's the best way that we can get them to cite it, so that they're not wasting all of their time writing the entire citation, which I still have kids do.

Dara was able to give an example of a conversation about citing textual evidence from the PLC, but only after explanation on my part based on my knowledge of their PLC discussions and agenda items. This part of the interview suggests that Dara did not feel comfortable speaking about the CCSS despite teaching and assessing a specific skill from it.

Similarly, Diana verbalized in an exchange that she was confused about the CCSS and that the teachers speak about the standards without explicitly or intentionally planning to do so.

Me: How did you learn about the Common Core?

Diana: Reading it and asking Cara honestly. I still feel like I struggle with it and I still feel like I have to re-read certain things because I want to make sure that I'm doing what I should be doing but also doing it in a way that's fitting what the overall standards are.

Me: Yeah.

Diana: Do you know what I mean? It's like, one of the things is trying to find a combination of both skills and also content. That's something I think I struggle with. I think I'd like to find more Common Core skills for Social Studies as opposed to specific pieces of content. If that makes any sense?

Me: Yeah. The Common Core is all about skill.

Diana: Right.

Me: We haven't really delved into some sections of it like the speaking and listening standards for example.

Diana: Right. Yeah.

Me: Which may be on the horizon. It's on the very long list.

Diana: That's the thing. It's almost like to, I'll check with Cara, or Will, or Jennifer and be like, "Hey, what are you guys doing? How are you meeting these, or how are you wording it, or what are you putting together?" Usually we end up just talking about it without realizing we're talking about that specifically.

Diana acknowledged her lack of understanding of the CCSS and suggested that the PLC does not explicitly discuss the standard, which corroborates Dara's account of PLC discussions. Her self-reflection suggested that her focus on skill-based instruction derives from her vision for social studies education rather than the influence of the CCSS.

In line with this finding of a mixed familiarity with the CCSS, the following exchange with Larry in regard to a question about how he learned about the CCSS showed his confusion about the standards:

Larry: I always get confused about the Common Core. These are the standards, and I'm putting them in my Genesis. Isn't there a state Common Core and then there is ...?

Me: There is a state core curriculum, that's why you're confused, and there is the national Common Core.

Larry: What am I uploading to Genesis [lesson planning site]? Which one?

Me: Both. Both of them ...

Larry: They're both merged in.

Me: You could select from both of them. If I pull open your plans, I can look at which one in particular you tend to use more of than other ones.

Larry: Well, to answer your question, I mean look, I'll be honest, I don't go home and pleasure read them. I think they've gotten better because I remember when Charlie was here. We had some other ones we used and they were nightmarish. Are these mine?

[I show Larry his plans.]

Me: Right now, you're using New Jersey Core Content Curriculum Standards, I can tell by the numbers. I don't see any Common Core in yours.

Larry: I'm using the same ones that Cara uses... How do you access that? How do you even access all the thing? Because I click on the 2014 standards, when you go to "search for."

Me: Yeah. It's all fine. I mean, some people tend to say one or the other more often probably depending on how they click in Genesis.

Larry: Well, I have to talk and learn how to actually click over to the ... [pause]

Me: Common Core?

Larry: Yeah.

This exchange shows that Larry is not familiar with the CCSS or how to cite them in his lesson plans, which suggests that he does not attribute his focus on skill-based instruction to the CCSS.

However, Larry also stated that teaching reading and writing skills was “stuff I’ve always done,” referring to his history of literacy instruction in social studies. Collaboration on lesson plans allowed him to avoid referring to the standards regularly even though he perceives his teaching as aligned to them.

One participant expressed clear disdain for the standards. This participant stated, “I tried to learn as little about the Common Core as possible. I trust that I am rigorous enough to cover it.” Ironically, this participant was strongly in favor of skills-based instruction and assessment, particularly in terms of reading historical sources, analyzing them, and writing arguments using evidence from them. However, the participant clearly did not attribute her orientation towards teaching reading and writing to the CCSS. As discussed in this chapter, this teacher was not the only one who described teaching the CCSS in spite of the standards, not because of them. This finding was discussed with the supervisor during a second round interview, in which he confirmed that some teachers did not have many opportunities to learn about the Common Core. Multiple teachers expressed a strong vision for teaching the reading, writing, and critical thinking skills in the CCSS, even though they did not demonstrate understanding of the standards.

Ambiguous vision of PLC purpose. While the literature on PLC suggests that teachers should have a clear vision for their work together focused on analyzing student data, members of the world history PLC expressed different ideas of what the purpose of the PLC was and which activities would lead to an increase in student learning. In fact, a few teachers expressed their confusion over the purpose of a PLC, while others described how their understanding of the purpose of a PLC did not match what their PLC did. For teachers that described purposes for

their collaborative time, two ideas emerged: discussing teaching in general and analyzing specific student performance.

First, teachers expressed confusion over the purpose of their collaboration both explicitly and in the split responses from the group. One teacher described the purpose of PLCs as “evolving,” while another qualified his answer of communication with “I guess.” Perhaps the most clear example of the confusion over the purpose of PLC collaboration came from Lena. When asked what the purpose of the PLC was, Lena responded, “I’m not 100% sure what it is supposed to do. I guess it is to refine our skills as teachers. We can share our common experiences and learn from one another.” Another teacher also explicitly described her confusion; Kelly described it as “hard and ambiguous to identify what is the true goal of the PLC.” She described the purpose both as analyzing student data and discussing general planning. Five other teachers stated that the purpose of the PLC was to analyze student achievement data collaboratively and determine ways to improve it. However, four teachers, including both novice teachers and two experienced teachers, described the predominant purpose of PLCs as common planning.

In addition to Kelly, five teachers in the sample described the purpose of PLCs as focusing on student learning outcomes and comparing data to determine best practices. The six teachers who mentioned analyzing student data all had more than seven years of experience. For example, veteran teacher Jennifer stated, “I wish it were more student-driven.” Furthermore, other another teacher described how the PLC does not live up to the ideal purpose of collaboration. Kelsey made this point explicitly when she said,

What we are doing with PLCs is a little bit different than I think actually what PLCs are supposed to be used for, where it's supposed to be more of the idea that, like, let's say I have a lot of kids in common like with John Smith or Molly Jones, and they're in math, and I'm in social studies. The way that it was originally presented to us was that we were

going to be able to make our own PLCs and we should talk about what we should do best for the kids.

Kelsey was referring to the idea that a PLC should focus on student achievement across classes rather than curriculum implementation in one subject. She also described how she would like to eventually be “able to move towards that idea of, ‘How did you teach this? I didn’t teach it the same way. Your kids did a lot better.’” This example shows that Kelsey wants to ground the PLC’s collaborative discussions in an analysis of student results.

Kelsey was not the only teacher who mentioned both the desire to focus on student achievement as well as a difference between what she originally learned about PLCs and the actual implementation of collaborative time. Jennifer said,

I remember sitting in the initial meeting of PLCs in the auditorium, and we were shown this video, and it was supposed to be, it is a learning community where teachers bring in, let's say student work, and I would turn to a fellow History teacher, or Special Ed teacher or anyone else and say, "Can you please look at this essay. What do you see the weaknesses are, what do you see the strengths are? What would you do to fix this?" Very collaborative, and everything was geared towards helping our students be more successful than they were... That was what we initially thought this was going to be and it turned more from student-driven to administrative-driven.

Jennifer went on to describe how the PLC time was used to satisfy an administrative directive to create common assessments and how she wishes that the purpose of the PLC was to discuss more about the results of student learning and successful practices in light of student achievement data.

Another experienced teacher described goal setting around students’ current performance, which also relates to focusing on student data. Cara stated, “The goal we've been going back and forth with is really what constitutes a good written response. What we want to see with the thesis. What we expect the students to do. What they're not doing, and how we're going to get them to that point.” This shows that Cara has a view of PLC purpose related to analyzing specific examples of student learning. She is interested in comparing student work to the

standards, developing common expectations, and selecting best practices through those discussions.

Both of the teachers with administrative training also fell into the category of viewing the purpose of a PLC as analyzing student data. Cameron described the purpose of PLCs to be able to develop common best practices to achieve the standards by looking at student data; specifically, he said the purpose of a PLC is “to come together as a group of teachers to align teaching practices and philosophies so that we could be more student-centered. Students need to be our focus, but teachers need to align some practices so that we can make student experiences similar, regardless of which class or teacher they have for a particular content area.” He described using data to motivate teachers to share ideas with each other.

The other teacher with administrative training also brought up discussing student achievement as the purpose of PLC collaboration. Carter stated, “Now with PARCC data you could use that PLC to really almost isolate kids and say, ‘Look, this kid is weak in writing. We know that history teachers have kids write a lot. Let's hone down and help a couple of kids.’” This quote demonstrated that Carter sees PLCs as time for teachers to review data and use their analysis to plan collaboratively to meet student needs. While they all described it slightly differently, a theme here among most of the experienced teachers is that the purpose of PLCs should be to analyze student achievement and plan to improve it.

One teacher brought up both analyzing data and communicating more generally. Kelly mentioned the idea of analyzing data in PLC meetings, but also brought up communicating about pacing and general lesson ideas. When asked about the purpose of PLCs, she said teachers may use the time for discussions like:

"Hey, where are you on this pacing?" or, "How did your kids do on this particular assessment?" The other type of component that I like with the PLCs, it's just

brainstorming and having accessibility to more activities and ideas. Sometimes you get really bored after a year or two of maybe how you have been trying to develop an approach, so that's always exciting.

In that statement, Kelly focused more on collaborative planning and what the teacher did rather than what the student learned. Although she mentioned the idea of analyzing data, this quote showed that she elaborated more on the purpose of the time being for collaborative planning.

Another experienced teacher, Larry, also agreed that the purpose of PLC meetings was to share planning ideas. Larry said,

The purpose of a PLC I guess is for teachers in a similar discipline to communicate with each other and share information, which we've always done even before the three letters came in, PLC. We've always been doing this but not on company time. Well, I don't know if I said it right, now after school on a meeting, you know what I mean? We do it throughout the day or we can chit chat during lunch or something like that or we'll communicate via e-mail.

This quote shows that Larry did not see a difference in the purpose of a PLC from the routine types of general conversations teachers have to collaborate. By mentioning collaboration within a discipline, Larry's description illustrated his focus on teaching activities rather than evidence of student achievement. Both of these experienced teachers attended a training session on PLCs, yet were still unclear about their goal in the district.

Two newer teachers also focused on the purpose of the PLC being to share generally despite the training they received in the district; they additionally described wanting reassurance from more experienced teachers for their plans. When asked about PLC purpose, Diana responded,

Sometimes I really need the PLC because I show up and I'm like, "Is anyone else experiencing this? From these kids? Is anybody getting this?" I know my kids, my students are telling me the one thing. I want to know what other people are experiencing too. Sometimes it helps to see where I'm at and where they're at so that I can understand okay if everybody is in the same area but I have these three kids that are really standing out, and compared to everybody it's the same. Then I know that those three kids, it might be something else. It might be something I need to address even further. It helps to because I don't feel so alone. Especially when I'm really struggling to try to teach them

these certain skills, or writing, or analysis I usually can go to them and be like, "Does anybody have any ideas for how this would work?" Everyone's awesome. They're like, "Oh yeah, here is six different documents I've attached that will help you with that."

Diana mentions her desire to compare her methods to her colleagues and resources that she could use to teach specific skills. Her overall focus is on what she is doing, yet she also mentions looking at student-level results.

In addition, Dara was clear on her planning orientation to the purpose of PLC meetings. She said that the purpose of a PLC was as follows:

To be able to collaborate with other people who are teaching the same thing as us, or as myself. To be able to see how is it that they're teaching content, what specific content they're teaching as a new teacher? With a broad curriculum, that's definitely something. What are other teachers focusing on that I need to make sure that I'm focusing on. How are they teaching it? What's effective? What's not effective? What can I share that I've had success with? How can I ask them, "I haven't had success with this, can you help me?" Then, to be able to, obviously for our PLC meeting, being collaborative on assessments, in midterms, and study guides. What can we do that will work for all of us in our individual classes?

Like Diana, Dara was concerned with learning what her colleagues were doing, hearing about whether they thought her strategies were on track, and ultimately using that information to help students. She wanted to make sure that she had access to the veteran's pedagogical content knowledge and effective strategies. These two new teachers also participated in professional development about the purpose of PLCs, yet described more of departmental logistical discussion than collaboration following best practices of PLCs as described in the literature and district introduction to the concept.

In sum, the teachers had a common vision about instruction and assessment that required students to demonstrate reading and writing skills. Multiple teachers did not speak about the CCSS with clarity and did not connect their own beliefs to the idea of implementing the CCSS. In addition, multiple views of the purpose of a PLC existed. Novice teachers wanted general

ideas of how to implement the curriculum and more experienced teachers varied in their vision for PLC. Some wanted to share lesson ideas while others wanted to analyze student data and collaboratively plan to address student needs. The lack of time teachers spent on analyzing student data and the varied perception of the purpose of a PLC suggests that teachers need concrete examples of what PLC conversations about student data look like, such as related discussion protocols.

Administrative Support

The support of the supervisor emerged as another factor in helping teachers to create and continue implementing high-quality CCSS-aligned assessments. This is a particularly interesting finding because all teachers in the sample mentioned support from an administrator even though none of the questions in the interview protocol explicitly asked about administrator support or actions. In particular, teachers mentioned how the supervisor shared leadership, provided time together to work towards common goals, and facilitated professional development.

Shared leadership. Patterns of responses and specific quotes from teachers suggest that the administrator shared leadership in terms of promoting the shared vision, managing conflict, and providing resources. He largely left it up to the teachers to manage the day-to-day interactions of the PLC. As for common responses about who contributed to the PLC, most participants stated that Cara was a leader in the PLC because she often set the agenda and facilitated discussions. In particular, every interviewee who participated in the PLC in 2015-16 cited Cara as a colleague who contributed significantly to the progress of the group. In her interview, Cara responded that she kept the PLC organized and took the lead when asked what she contributed to the PLC. Cara began working at the school in 2011, and started participating in the world history PLC the year that common assessments were written. Since she was

relatively new to teaching world history during the curriculum writing and assessment development process, evidence from the interviews suggested that other teachers took on leadership roles in the earlier years. The five participants who no longer worked with the world history PLC by 2015-16 provided other examples of teachers taking on leadership roles.

Participants mentioned varied contributions of their colleagues in the interviews that provided evidence about how different teachers shared leadership in creating and continuing the use of common assessments. These contributions by different teachers occurred at various times throughout the process, supporting the idea voiced by multiple participants that teachers all contributed to the PLC. One participant, Larry, said those exact words: “I think everyone has contributed.” Another member of the PLC during common assessment creation (Kelsey) agreed, saying, “I feel like everybody in that PLC was definitely an equal participant in what we were doing, like what we were talking about, what we were creating or advising or discussing.” These teachers participated in the PLC during the assessment development stage during 2012-13 and described how they contributed questions and resources related to the assessments they created during that period. Also during that period, teachers and the supervisor provided examples of how teacher leaders managed conflict. After teachers developed the document-based essay assessments, contributions teachers mentioned of their colleagues included providing resources, which helped the PLC continue to use those assessments.

Two teachers mentioned that they worked to build consensus in the PLC around the shared vision for assessments focused on reading and writing skills, and the supervisor confirmed their contribution toward that end. First, Cameron described the challenge of developing similar ideas about how to move forward with assessment creation in the PLC prior to writing the assessments in 2012. He stated,

We didn't have too many problems with resistance, we just had some people that were maybe old school and didn't align with everyone else that we'd have to work through. That's probably one of the bigger challenges in the beginning with the PLC.

It was a process to gather the support of colleagues, especially those who had been teaching independently for many years.

Regarding the two teachers who described their efforts to promote the shared vision, their statements were confirmed by the administrator with whom they worked. When talking about PLC agenda-setting and assessment development process, Cameron said,

A lot of it [the PLC] was self-directed, but some of it was set by the content supervisor. Sometimes, we were encouraged to talk about certain things because we knew what was coming down the pipeline, but a lot of the time it was common assessment discussions, timeline pacing, how our students sit on the different assessments, working towards future assessments.

Here, Cameron clearly asserts the shared responsibility between the administrator and the teachers for moving the team forward in both determining shared tasks and developing the assessments.

Later in the interview, Cameron further explained his role in the assessment development process:

When it came time to build a consensus, we kind of had to vote, so I worked to kind of figure out a voting process, accumulate it, all of the few differences and work to be the mediator in that sense.

Charlie, the supervisor, also described Cameron's role similarly. Charlie stated:

He would come into my office just to talk about like, "Here's what's going on? Is this the direction that we should be going? Is there anything?" And he was kind of like to some degree, intermediary to kind of keep things going.

Information from the interviews of Charlie and Cameron both described how they collaborated to develop and maintain the shared vision of assessments requiring students to demonstrate their reading and writing skills.

Carter also played a role in developing and maintaining the shared vision around assessments. Carter stated, with the world PLC, “I thought that was my role in it to consensus build.” Charlie confirmed his role as a consensus-builder by describing their conversations about the PLC when compared to those of Cameron:

He [Carter] and I talked more broadly about the whole department. Where you know, “If I say it this way, how is that going to go over at the time.” He helped kind of, here is what is occurring about what people are upset about. Is it general or about common assessment? And so we strategized kind of like messaging and communication where Cameron was more about the actual work of his specific PLC.

Cameron, Carter, and Charlie all discussed how the three of them worked together to promote the shared vision among other members of the PLC, providing an example of leadership shared across multiple participants.

Another way that teachers took on leadership roles in the PLC was in managing conflict by bringing the group back to the shared vision around which they had built consensus. One PLC member, Lena, talked about a disagreement about what to put on the midterm. She described how a teacher who only participated in the PLC in its first year and did not write the common assessments wanted to know why the PLC wasn’t putting more questions about genocide on the exam, such as questions about the Rwandan genocide. She then stated, “Carter spoke up to let him know that wasn’t a big part of our curriculum in world.” The curriculum had been written just prior to when the teachers created the initial set of common assessments for each unit, and served as a way to keep the PLC focused on the standards that they had to teach and assess.

Cara confirmed Lena’s memory of a teacher leader within the PLC referring back to the curriculum document. In describing the common assessment development process in the summer of 2012, Cara said:

We had lots of people. Lots of different opinions on where to go. What we ended up finally doing, and I don't even remember who proposed it, somebody said, "What if we take the curriculum, and we look at the central questions, and we work off of that." That was kind of how we figured out the direction we wanted to go.

According to Cara, the teachers discussed options and collaborated to the problem of how to direct their efforts in the assessment process.

To further support the perception of Carter as a discussion facilitator, Carter discussed an example of his response and Cameron's response to conflict occurring when members of the PLC went off on tangents. He described one of the group members rolling her eyes, and his response:

I would try to bring the group back together for consensus. A lot of times, to be honest with you, Cameron would just be like, "All right. Let's just do it this way. This is the way we're going to do it, and we have to get it done, so we got to do it."

This description of the focus on using the products they created and completing the tasks at hand showed that the PLC referred back to their shared vision outlined in the curriculum document. In addition, it showed the leadership roles of teachers rather than relying on the intervention of an administrator or avoiding the conflict.

Carter further explained how he functioned as a leader within the world PLC, sharing leadership both with Charlie and Cameron:

When I was in that English PLC, Cameron became the de facto leader and I know that he had a lot of problems with [one member of the PLC], and there was a lot of dysfunction and I know a couple of times Kelly had asked me to come, if I wasn't doing something with the English PLC, could I come over and sit in on the world PLC because it was getting a little bit dysfunctional.

Carter discussed how the world PLC was working and how to improve it with both Cameron and Kelly. The teachers worked together as leaders to improve the functioning of the PLC.

After the initial assessment development phase, teachers reported less conflict in the group. However, multiple teachers described how Cara facilitated discussions to address issues

as they arose. For example, Larry responded to the question about conflict in the PLC as follows:

People do talk out of turn sometimes. It can get all noisy. That's one of my pet peeves, when there are three people trying to talk. I have a high respect for the PLC but there are times when Cara says, "Okay, come on. Let's look at agenda point 3," then this couple of people will just chit chat. I'll go "Shh." I don't want to be the goody-goody but I like to just stay focused. I know what my goal is. It happens every now and then but for the most part, we just stay focused.

Again, the PLC used the tasks related to achieving their shared vision to address moments of conflict within the team.

Dara also described how Cara keeps the group working on their agreed-upon shared tasks. In describing how Cara contribute to the group, Dara told what would happen if the group got off task. She said, "It's usually Cara or we'll get back... to task eventually. Yeah, Cara's usually our bringer back in." Cara also described her role in response to a question about agreeing on discussion topics, to which she replied:

We just all get along. I mean seriously. It sounds crazy, but I think ... I mean when I was in the [other PLC] there was more bantering back and forth of, "No I want to do this, or I want to do that." I think we all for the most part have the same goals in mind. I think that really helps. When somebody proposes something we just go, "Okay, yeah, let's talk about that now." Which I think is kind of cool. I mean sometimes we'll get off on a tangent, and then we're like okay we need to get back to what our initial goal was. Somebody brings a concern up, and we just deal with it right away.

The key part of that statement is Cara's mention of the PLC members having the same goals in mind. From the analysis of the teachers' statements related to their vision of building reading and writing skills in social studies, the PLC continued to function so that the teachers could create and continue to implement common assessments that measured the student's progress towards the CCSS.

In addition to promoting the shared vision and managing conflict, teachers led in the PLC by providing resources relevant to the creation and implementation of common assessments. In

discussing the creation of a rubric to grade the document-based essay questions, Carter discussed how he and Charlie worked together:

As we were doing the common assessments, the PLC was a really good place for Charlie and I to figure out how we were going to do the writing rubric and the grading rubric for the common assessments. I don't know if you remember, or if you even still use it, there's the one that has the writing component which is basically taken from Common Core, and then there was the other part which is the historical analysis.

Charlie's collaboration with Carter and other teachers led to the pilot of a rubric in 2012-13, the year before the department implemented the common assessments. Carter's description of "figuring out" the rubric with Charlie shows that they made decisions and completed work towards the shared vision of literacy-based assessments together.

Charlie also provided resources that the teachers deemed helpful. Cameron, Carter, and Cara all mentioned using questions from the NY Regents exam, which Charlie mentioned as a model. In her response to who was helpful in developing the common assessments, Cara referenced both the Regents and the time together to work on the exam, stating,

If you want to count the Regents as a person, they were really helpful. I think what was more helpful was how it was done. When we had the failure with the midterm, we then had a pull out day for the final exam, and everybody that taught that class was at the board office. We were in a room, and we started to actually organize it there, and we started to pick questions. Did we have it all done? No, but I think it gave people a direction so when that when people did break off to find questions bring back to the PLC, it was more focused. People knew what they were looking for.

The Regents questions served as a clear model for the PLC in terms of questions that required reading and writing skills. This resource solidified their idea about how to create a product that would meet the shared vision the PLC.

Carter also explained how the Regents helped the PLC move forward with alignment to the Common Core:

I think the world PLC took the path of least resistance and said, "Hey. Let's look to other school districts, other states to see how they're doing it." We relied, initially, we relied

very heavily on the Regents, because they were using document based questions, so he said, "Why reinvent the wheel? Let's use some of these DBQs and let's find some others." I know that Charlie had purchased, I believe, some document based question books and ancillary materials that had DBQs in them, and we were looking to get the job done, but not reinvent everything. I think that those Regents tests really helped us out a lot.

The ancillary materials that Carter mentioned binders of DBQs from the DBQ Project, which Cara also has and shared with the PLC. The DBQ project provides sources for students to engage in the "process of close analysis, interrogation of documents, and argument writing," using the documents to prove their thesis statements ("DBQs," 2017). Having high-quality sample questions shared between the teachers as well as from the supervisor to the teachers factored into the development of their common assessments.

In their interviews, Diana, Larry, Cara, and Kelly reported appreciating the Choices resources from Brown University, which relate more to practicing reading and writing skills in class than the other two that served as examples for assessment writing. Diana explained why she liked the Choices resources as follows:

They're really helpful and they bring it [the content] down in a way that it doesn't seem as overwhelming as a teacher either. When you're trying to pick and choose the right sources, it's like, oh my God, I could choose all of these things. Where do I go? The Choices is awesome because it gives you that, here are good sources for this kind of perspective that I might not have even read about.

Here, Diana describes the challenge of selecting appropriate sources so that student can practice their reading, writing, analysis, and argumentation skills. The Choices website describes the culminating experience of their units grounded in primary sources as a discussion that "demands analysis, and evaluation of conflicting values, interests, and priorities" and requires students to "formulate persuasive arguments and express their own views." ("About the Choices program", 2017). These resources have the high level of rigor and literacy-focus that align with the PLC's shared vision for assessments.

After implementation of the document-based assessments, Cameron and Dara offered the PLC technology-related resources aimed at helping teachers continue to implement the types of questions that assess reading and writing skills on a regular basis. Cameron described finding and sharing a website that helps teachers easily search and edit questions based on historical sources:

We kind of broadcasted that on the screen, and we put in the different search terms, and we just went through and said, "Do we like that one? Everyone say yes? Okay, it's on there. Do we like that one? Yes or no? Yes or no? Yes, but let's change the wording in letter C," so we kind of took that process because [the site] has all of those [questions] already compiled for us, so it saved a step in the process.

The site compiles questions from the Regents exam and other standardized tests in social studies, which provides the teachers with example questions to use in their classrooms to help students build their reading and writing skills in preparation for the common assessments. Another example of a teacher taking a leadership role by sharing a resource related to the assessment process was when Dara shared a formative assessment website that helped teachers collect data about student responses. This website was so helpful to her PLC that she agreed to share it at a department meeting so teachers in other PLCs could learn about it. By sharing these resources that related to the PLC's vision for assessment, Cameron and Dara served as leaders.

Time to work on shared goals. Charlie also supported teachers by providing time to discuss and work on shared goals. Multiple teachers generally discussed how Charlie suggested tasks for collaboration and one particular instance of a release day (substitute teacher coverage) to work on an exam in 2012-13. One example of a general statement that showed Charlie's role in teachers working on shared goals was from Carter. He said:

There were very tight timeframes on it [common assessment development], and I don't know if that was coming from above him in terms of getting the common assessments, but, yes, he took no quarter. He said, "It has to be done," then gave us release time to do it, which was a show of, I think, good faith to say, "Look, this is really important. I'm

going to give you the time, and you need to create something good.”

Charlie organized teacher time with clear expectations to assist the PLC in the creation of common assessments aligned to the Common Core.

Other teachers agreed that Charlie helped elucidate shared tasks upon which he expected the PLC to work. Kelsey talked about how Charlie advocated for DBQs because they are rigorous, and how he encouraged the teachers to focus on reading and writing in their assessments. Specifically, in response to a question about how the PLC developed writing as a goal for common assessments to address, Kelsey said, “Charlie, to be completely honest. To be perfectly honest... definitely Charlie drove that as the goal to meet the Common Core Standards within social studies.” Kelsey credits Charlie for both his leadership in developing a shared vision for the PLC’s work and being specific about wanting the team to work on developing writing tasks.

One anecdote about a midterm exam issue showed how time together benefited the teachers’ development of assessments aligned to the Common Core. Multiple members of the PLC relayed a similar story. After reviewing an exam that did not have the caliber of questions that met his expectations for quality and alignment to literacy-related skills, Charlie called the teachers together to discuss and improve the exam. Of the teachers who were members of the PLC in 2012-13, all mentioned this incident, many with some language that indicated strong feelings about the experience. Kelsey referred to it as “our final exam debacle.” Kelly and Cara remember the issue being over a midterm, which they respectively described as “God awful” and “just this total disaster.” Kelly further explained,

One of our midterms was just colossally bad, and it wasn't that we didn't care about it. It was just too many questions that were a little redundant. The format, the quality and the integrity wasn't to where we could have had it.

Along the same vein of strong language to describe the faults of the exam, Lena described being “utterly horrified” at the conversation about the exam’s weaknesses. Cameron provided helpful details about the lack of quality of the early exams the World history teachers which were “errors in grammar and punctuation, spelling” that made it “embarrassing honestly to give it out.” Due to the problems with one particular exam during 2012-13, Charlie provided the teachers with time to work together on a better product based on his feedback.

Teachers had positive reactions to the time together to work on the shared goal of an exam more closely aligned to the vision of assessments that required students to demonstrate their reading and writing skills. Kelsey said, “Charlie really sat us down, and we ran through how we should be approaching things in the idea that he actually did get us time away, so it wasn't extra or out of our day, that kind of thing.” Similarly, Kelly expressed appreciation for the day when she said, “It's credit to Charlie because Charlie got us release time to actually go over and work together.” Carter referred to the group wanting to produce a good product with the time that Charlie provided. Larry characterized the day as “helpful” and stressed how much teachers need time to manage their work. Cameron gave the most specific description of the day in his statement:

Charlie kind of stepped in and challenged us in a manner where he said, "Your common assessment needs to reflect your curriculum, so the number of days you're spending on a particular unit should dictate number of questions that you have on your exam." And we took that to heart, and we followed it, and I thought that was great.

Multiple teachers confirmed that the time together Charlie provided helped the teachers create a high-quality assessment aligned to the curriculum and standards. His feedback and clear expectations spurred teacher reflection and action in terms of creating and implementing literacy-focused common assessments. In the future, more time to collaborate on a specific task like

using the critical friends protocol would assist the teachers in implementing the new practice of discussing student data.

Professional development. One of the factors that contributed to the teachers' creation and continued use of CCSS-aligned assessments was the professional development they experienced. One of the essential functions of the administrator was to provide multiple PD opportunities for teachers to learn about the CCSS and best practices in social studies assessment. The following section will describe the professional development that some participants received prior to assessment development. As an overview, the supervisor of the department described how he provided PD during department meetings, interdepartmental meetings, release days, the social studies program evaluation process, and the weeks of teacher work time during the school year and the summer of 2012. During the summer of 2012, teachers rewrote the curriculum for their courses and created the common assessments. The department supervisor reported that all teachers who volunteered participated in the program evaluation, which met multiple times throughout the year. Five people who participated in the program evaluation worked together on creating the world history assessments, along with another colleague.

The program evaluation was the most time intensive of the PD opportunities provided as it was five days spaced throughout the year. As part of the program evaluation, Cara reported that their conversations centered around the importance of assisting students in developing skills they needed to use in their lives, such as reading, writing, speaking, and critical thinking. She provided the binder of resources from those meetings, which showed that the teachers examined the CCSS as part of the program evaluation. According to the program evaluation report Charlie submitted to the district, four members of the World History PLC participated in the program

evaluation: Kelly, Carter, Cara, and Lena. Interestingly, the other two main PLCs had one and two representatives each. Since the teachers volunteered to participate, it would not be appropriate to infer any effects of participation. It suggests a high level of enthusiasm and interest among the World History teachers.

However, an exchange with a teacher, Kelly, who participated in both the program evaluation and the common assessment development, suggested that the members of the World PLC developed more understanding of the Common Core due to repeated opportunities to learn about it. The quote displayed the shared vision of instruction and assessment related to literacy skills in the World PLC. She stated, “I think that the world assessments in particular, there was just such a strong agreement amongst those that were present, especially since we also went right from curriculum writing into common assessment development.” In this exchange, I asked for clarification about how the World teachers learned about the CCSS and when they began designing assessments related to the CCSS:

Me: It was basically your second time around when Charlie did that common assessment ...

Kelly: Exactly.

Me: ... training.

Kelly: There's a lot more ownership and comfort ...

Me: ... with it because you guys already started practicing it with your final that year and done something, gotten feedback on it, and now you're moving to the second time around with these concepts and then ...

Kelly: World was more fanatic. It's not so content standard driven as [the other required courses], and so when we were trying to think and format an assessment that was a more reliable and appreciated approach, because looking at the Common Core, which we were exposed to earlier with training and such, we knew the methodology and ideology that was coming.

Me: Interesting. With the goals of the common assessments, having gone through the training with Charlie, what would you say that the goals were?

Kelly: Creating assessments that had integrity, that we had well-constructed questions. He was very big about having answers that had credibility, that there was no throwaway, and that was really hard when I went to [another PLC]. I was in the second year of it really coming around, but that was very hard for many people in the [other PLC] to come out and wrap their minds around.

Me: Yeah...

Kelly: I think knowing also that Common Core was also super helpful, just really and truly saying, ‘These are the skills that are supposed to be achieved by ninth and tenth grade and the mastery of eleventh and twelfth grade, that was helpful.’

In the conversation above, Kelly compared the level of agreement about document-based questions between the world history PLC and another group of teachers who were creating common assessments. She clearly stated that the training the teachers received and a growing familiarity with the CCSS assisted in the process of building consensus about the type of assessments the world history PLC created.

In addition to the program evaluation, other teachers recalled different PD opportunities like department meetings being particularly helpful. When asked about PD during the time of the adoption of the Common Core and assessment creation, Carter said,

I think that the PD that we had about those things were effective, and certainly Charlie, during our department meetings, we got a lot of that professional development from him, and he would relay things from the state and from the federal government and the direction that we were headed in our department meetings, probably more than district professional development.

Carter’s reference to the “direction that we were headed” speaks to both the development of a shared vision about best practices in the field. Cameron and Cara also shared about Charlie giving guidelines about the CCSS and assessment creation at a department meeting.

In addition to the department meetings, Kelsey remembered the benefits of clarity and learning from a PD session about the CCSS with English teachers. She said,

He definitely like was very clear about why we had to adopt the Common Core and that it was something that was going to happen and was not going to go away and that the approaches in order to meet the challenges set by the Common Core while still having a degree of freedom. It definitely helped us that he like, before the actual writing of the common assessments, had that meeting about Common Core... We had like a whole thing about Common Core, like what it was, how to approach it, what we should be doing with it, that type of thing. When we wrote the curriculum, we were able to do that and then write the common assessments. We like had a background knowledge of what we should be doing with the Common Core-type of things.

She remembered this PD as being a particularly helpful meeting, where the supervisors of both departments presented information about the CCSS. Kelly also mentioned a PD opportunity to learn about the CCSS with English teachers.

Charlie and Carter confirmed that English and social studies teachers participated in joint PD on the CCSS. Carter remembered PD with large number of language arts and social studies teachers specifically about the Common Core and creating common assessments that was repeated for some people in the summer right before common assessment writing. Charlie said that he remembered co-planning a presentation on the CCSS with Sheila. Between the program evaluation, exam release day, and department meetings, the presentation at the start of curriculum writing marked at least the fourth time that some participants experienced PD related to the CCSS and assessment creation. Teachers benefited from as much time as possible to learn, so continuing this level of intensive offerings would help the teachers continue their learning in the future.

Networking for Specific Expertise

Another factor that contributed to the teachers' creation and continued use of CCSS-aligned common assessments was that they were able to network for specific expertise among their colleagues. Teachers sought out colleagues they felt had expertise for specific types of assistance with content, interdisciplinary connections, and struggling students. Continued collaboration during and after the assessment development process helped the teachers continue to implement literacy-focused assessments in social studies. The first part of this section provides examples of teachers networking to meet their needs in three different areas. Specifically, multiple members of the PLC described relying on specific colleagues for expertise depending on whether they had questions about content, writing, or interventions to help students

succeed with writing. The second main point of this theme is that informal collaboration outside of PLC time spread instructional practices related to the shared vision and supported the teachers during their implementation of the CCSS.

Networking to meet needs. Two of the veteran teachers in the PLC were known as content experts who had been giving rigorous, written assessments and having students engage with primary sources throughout their teaching careers. Three other teachers in the median or top range of teaching experience cited the impact that those teachers, Lena and Larry, had on the PLC. Cameron described that their past practice helped the PLC move towards literacy-focused common assessments. He asked rhetorically, “Lena and Larry had been using written assessments for how long, so how do you tell someone to stop creating a written assessment and to go backwards and create a multiple choice one?” Cameron further added that these teachers knew how important writing was and “pushed the envelope.” He elaborated that it helped the PLC to see resources that Larry and Lena had used in the past to help students achieve these more rigorous expectations. Carter described how he and Lena developed a good relationship over time. He stated he “respected her knowledge.” Another teacher, Jennifer, described how Larry’s content knowledge helped her increase rigor in her classroom. She said,

I’ll turn to Larry and say, “How can I make this harder? How can I take something and for a student that can barely write a five paragraph essay, how can I integrate harder concepts in there? Larry, what would you do?” Larry will pull up 18 websites immediately.

In the quote above, Jennifer intimated that she showed Larry an assignment and Larry was able to pull up a large number of related resources for Jennifer to use about that particular content of the course. These three more experienced teachers valued and sought assistance from the expertise that Larry and Lena had with the content of the course, even after years of teaching the course themselves.

Newer teachers also described how they benefited from the content expertise that Larry and Lena provided within the PLC. When asked generally about people in the PLC who made helpful contributions, Diana said,

I admire Larry and Lena so much. They are so knowledgeable, they scare the heck out of me, in a good way. I know I can go to them with a content question and I wouldn't get totally judged. Maybe just a little in the back of their head. I wouldn't get this judgment stare, but I also think too they just know so much information about stuff that I would have never have even thought to bring up to the kids. Then I'm like, "Oh, you know what? Yeah, the Congo Free States is important," I didn't think to go into that much detail about though so I'm going to add more about it. That's something that they'll both be interested in but also get a lot more from than what I originally intended on.

Here, Diana gives a specific example of a topic she expanded upon in her teaching due to input from Larry and Lena. She also voiced appreciation for the opportunity to ask them questions about content.

Similarly, Dara benefited from the content expertise of Larry and Lena and wanted to visit their classrooms to increase her understanding of the time periods they all teach. She said,

Sometimes I just sit there and listen to them. They're like, "We talked about this and this and this and this." I'm like, "Did you? Can I sit in your class and listen? You can repeat it." They have so much knowledge.

She went on to describe what she had heard about Larry's use of a prop he created to teach about a certain period of history and how much she wanted to see the lesson where he used it. The quotes from both more experienced and newer teachers show that teachers collaborated to take advantage of the specific expertise of particular colleagues.

Another area in which teachers sought or desired expertise from colleagues was with teaching writing skills; in addition to formal meetings between the English and social studies departments, multiple teachers and the supervisor discussed the practice and idea of interdisciplinary collaboration in the humanities. Prior to the district officially adding PLC meetings into the contract and providing specific direction to teachers to meet in PLCs, Charlie

reported that he arranged teachers into less formal groups. One of those groups was an interdisciplinary PLC between a small group of English and social studies teachers. Carter described the exchange of ideas between teachers of the two departments:

We tried to say, "Hey. What rubrics are you using? This is what we're doing. Can we align some of the readings through the year? Can we align some of the assignments or writing assignments together and play off of each other?" I thought it was pretty neat.

Given that the English teachers had more experience grading written assessments based on texts, it makes sense that Carter would request to see what they were doing. Charlie confirmed the existence of this PLC during his interview.

Cameron also discussed networking with English teachers about aligning both the curriculum and methods of both departments. Cameron said,

Language arts took our curriculum and took their books and paired it with our units, so, as we talk about the unit in social studies, students are reading the book in language arts, and it's all making sense in two content areas. It kind of happens I think inherently.

The coordination that Cameron describes is considered a best practice in the field. Increasing students' exposure to texts about a particular subject and requiring them to think critically about what they read served the purposes of both departments during the implementation of the CCSS.

While Cara did not participate in the interdisciplinary PLC or the curriculum writing week, she talked in the abstract about her desire to connect more with English teachers. She stated,

One of the things we are running into this year is the writing with the kids. I struggle when I try to show the kids how to write something for History. They go, "Well, in English we do this." I would love to then have something where maybe it's the ninth grade World History teachers, and the ninth grade English teachers meeting together, and going, "How can we supplement what each other's doing? How can they give the kids writing skills that we can use in history class, and how can we help give them skills they can use in that?"

Here, Cara mentions her frustration at her lack of knowledge of how English teachers are teaching the same skills that the PLC has chosen to address through their instruction and assessments. Her interest in collaborating with the English teachers provides another example of the teachers in the World PLC wanting to seek expertise from particular colleagues to assist in the implementation of the CCSS-aligned assessments.

Finally, teachers in the World PLC sought expertise from special educators during the implementation of more rigorous reading and writing assessment to help struggling students succeed. As I interviewed regular education teachers, Lena and Diana both talked about how they benefited from the expertise of their special education colleagues. When asked about contributions to the PLC, Lena replied, “One example of others’ contributions is how to communicate with lower kids. I can show Jennifer an example of a student’s writing and she can help with ideas for that student.” Jennifer confirmed an example of when she provided this specific type of assistance to Lena and one of her students, who was dyslexic:

Lena would take the time and work with the student, and give 200% extra time, and let the kid shoot an essay to me. I would just revise it for grammar and spelling, not content. Shoot it back to her, no problem. We worked collaboratively that way.

While Lena helped Jennifer with content, Jennifer helped Lena work with students who needed particular assistance based on a learning disability. Jennifer confirmed her role in assisting her colleagues with struggling students in her statement, “I want to say I’m the special ed facilitator. They come to me and I diagnose what I think it might be and then try to refer them to someone who can give them a more accurate diagnosis.” Both of these teachers recognize how Jennifer’s expertise supports the implementation of rigorous reading and writing assessments.

Diana also echoed her appreciation for Jennifer’s contributions related to Jennifer’s expertise in supporting students who struggle to process language. In particular, Jennifer helps

the PLC clarify wording in materials they create to help students with language processing issues. Jennifer also recalled times when she advised the PLC to simplify the wording of a student task. For example, the PLC created and used a number of products in their instruction about common assessments, including a reflection sheet and a DBQ writing guide for students. While the PLC worked on a resource for students to reference about DBQ writing, Diana reported that Jennifer and Dara helped clarify the language. She said,

Jennifer's great. I mean, she works with the special ed department so she and Dara both have awesome things to contribute in terms of wording. Jennifer will be like, "No, just make it easier," and I'm like, "Oh, okay." To me, I'm like blah, blah, blah, blah. She's like, "No, no, no. Simplify it. The simpler it is, the easier it is to understand for everybody." Then when you simplify it, it's like, "Oh yeah, that is a lot easier."

Diana, her colleagues, and students benefitted from the expertise of special educators to make the phrasing of materials appropriate and clear for the widest range of learners.

As another example, the other special education teacher, Dara, recalled an anecdote about a colleague she assisted with a struggling student. She told,

I had one of my PLC members email me and ask about ... She had a student, who she's not sure. He's been struggling with reading, with taking notes. She wasn't sure. Maybe he has ... This is something you need [assistance from the special education department] with, or he's just disinterested. She asked me for specifically some ways to help him figure out if it really is a reading struggle, or if it's just disinterest. I was able to give her a few tips about how she can work with him individually for having him read aloud, listening to his fluency, listening to his speed, testing him after a page, a paragraph, a sentence, for comprehension, being able to see if he's actually understanding what he's reading, or if it's just he just doesn't care that's why he's doing poorly.

Dara applied her expertise to a colleague's problem of practice and collaborated to identify the root cause of a student's reading and writing challenges. The contributions of the special education teachers shows how teachers relied on different members of their network for assistance related to their area of expertise. As teachers implemented challenging assessments

tied to reading and writing with a diverse population of students, the availability of support from teachers trained in intervention strategies provided needed assistance.

Informal collaboration. During interviews, eight participants explicitly talked about ways the PLC communicated outside of formal meeting time despite the lack of a question about informal collaboration in the interview protocol. This collaboration occurred both in person and electronically. For example, Carter said, “People that work in the PLC have said, things like, ‘We collaborate outside of PLC time. I’m always getting ideas from them. They’re taking ideas from me.’ I think that there’s a lot of openness.” This free exchange of ideas provided support for the teachers as they continued to implement the common assessments over time.

Larry, Kelly, and Cara cited the workroom as a place where world history teachers frequently discussed instruction. Also, Kelsey is in the workroom every day and mentioned collaborating with Kelly, another frequent fixture in the workroom, “all the time.” Cara elaborated on what this informal collaboration looked like in her statement,

A lot of it’s just in the work room. Some of us, it’s just handing stuff back and forth, emailing or the big joke was my mailbox, Larry would always leave stuff on my chair so I always knew when he was by. Even getting a message from Diana like, “Hey, this is what I’m going to try, do you want to stop by, and see what you think?”

This organic exchange of ideas showed that teachers in the PLC both shared and received suggestions from colleagues about how to improve their practice. Cara also cited examples of visiting Diana’s classroom to see a lesson related to DBQs and creating a list of codes to help students understand feedback on written work.

Other teachers also reported informal collaboration. Lena described how she, Cara, and Larry are similar in what they teach. Carter explained that he and Lena collaborated due to the location of their classrooms near each other. He said,

Most of the times it would just be proximity because I would be right next door, and we could certainly hear each other, and she would stop in. She would come by and say, "Hey. I need to use the bathroom. Can you watch my class." She would come into my room and see some of the stuff on the walls and say, "Oh, what is that? I heard you do this. I heard you play this song." I'd go, "Yeah." She goes, "Well, I do it this way." I said, "Well, that's cool too." I think we had a good respect for each other. I necessarily couldn't teach the way that she teaches, nor could she teach the way I teach, but there was a respect there which was hard earned I think.

A common thread through the comments from Cara and Carter is that collaboration happened when teachers saw seeing each other throughout the day and visited each other's classrooms. The degrees of collaboration ranged; while regular and special education teachers co-taught, even some regular education teachers like Cara and Diana combined their classes for special activities. Given the number of participants who mentioned in person information collaboration, it happened frequently.

In addition to communicating in person through impromptu meetings in the workroom and classroom visits, teachers also described communicating electronically. Cameron and Larry both mentioned a lot of conversations happening over email. Cara told about how she walked the PLC through setting up a group in their Gmail contacts to facilitate a quick way to email everyone in the PLC. She also stated that teachers often use the chat feature on Gmail for quick questions and blind carbon copy each other on emails that may be useful, such as those to parents about class occurrences. Kelsey mentioned that she shared a folder of all of her electronic materials with another teacher who was teaching the class. Many of the teachers have detailed websites they use with students to post all their materials, and they share these sites with each other giving their colleagues full access to all of their ideas.

Diana gave a specific example of electronic communication related to the continued implementation of DBQs. She had chaperoned an evening event with a veteran teacher outside of the PLC who taught grades 10 and 11, where the two spoke about ways to help students

analyze documents. That particular veteran teacher had provided professional development seminars on preparing students to analyze documents and write arguments at the request of the state social studies organization. The teacher emailed Diana her materials. Diana recounted sharing those resources on document analysis with her PLC and the conversation that ensued.

I sent it out to everybody and I was like, "Here is the document that [the tenth and eleventh grade teacher] uses. How can we incorporate that now that they've gotten a little bit more comfortable with documents. How do we take it a step further?" It was cool to hear Larry say something like, "Oh yeah, I've heard about that. That would be a great thing." Then other people were like, "Oh, well what is it?" Then you talk about it and it makes it a lot easier to sort of... It's sort of like you're not doing it alone.

One reason that this quote is notable because of Larry's positive response. Diana was able to support the work of this veteran teacher who was considered a content expert even among those who have taught the course for a long time. In addition, Diana recounted the reassurance she felt after hearing positive feedback from her colleagues about using this new strategy to prepare students for DBQs.

The evidence provided in this section shows the frequency and value of informal communication between teachers through different channels. Both the benefits of physical proximity and the ease of electronic communication helped the teachers exchange ideas and resources. All of the teachers quoted in this section had a positive tone about the communication and appreciated the connection with their colleagues. A few examples of this communication specifically related to teaching strategies for DBQs, including the document analysis strategy, classroom visit to see a lesson about DBQs, and creating a system to help students understand feedback on their written work. During the second round of interviews, Charlie and Cara both confirmed frequent informal communication between members of the world PLC.

Summary of Findings

Many factors contributed to the world history PLC teachers' development and continued use of assessments aligned to the CCSS, including developing a shared vision of assessments, receiving various forms of support from a school leader, and networking among their colleagues to meet specific needs. The leadership roles of particular teachers, including Carter, Cameron, and Cara, emerged across these three themes. For example, those three teachers actively advocated for the shared vision of common assessments that required students to show their reading and writing skills. They also addressed conflict within the group and collaborated with the administrator to share resources relevant to the PLC's work together. These teacher leaders encouraged communication between teachers and built relationships that helped the PLC achieve its shared vision for assessment development and continued implementation over time.

An interesting finding about the shared vision of the teachers was that the members of PLC all had similar beliefs in the importance of skills-based instruction, yet mixed familiarity with the CCSS and the purpose of PLCs. Multiple teachers, both novice and veteran, did not clearly see the connection between the CCSS and their collaboration or assessments they created. The teachers also varied in their concept of the purpose of a PLC; according to the PLC notes and interview data, the teachers focused on assessment creation and implementation, but did not spend much PLC meeting time on analyzing the results of those assessments or planning instruction to address those results. Providing additional time and specific examples of analyzing student data may assist the teachers in following the best practice of focusing on evidence of student learning during their PLC discussions.

In terms of the administrative support from which the PLC benefited, the supervisor shared leadership roles with teachers, afforded the teachers the opportunity of time to work on

specific tasks, and provided professional development over time. Multiple teachers in the world PLC participated in numerous PD sessions about the CCSS and assessment development prior to curriculum and common assessment writing. One of the important examples of shared leadership was providing resources. Both the supervisor and teachers located and distributed resources among PLC members that assisted in assessment creation and continued use. These resources gave specific examples of exactly what best practices looked like in the case of social studies assessments. According to the interviews, these resources benefited both novice and veteran teachers during the transition to implementing CCSS-aligned assessments. At this point of the PLC's development, resources like discussion protocols could provide teachers with a better idea of best practices in the use of PLC time to improve student achievement. Time to use these resources collaboratively on a regular basis will also be necessary; teachers would benefit from more than one or two 45-minute meetings per month to do this type of work.

Finally, the last theme described how teachers leveraged the expertise of particular colleagues to meet specific needs during the change process. Two veteran teachers served as content experts, English teachers collaborated on ideas to build literacy skills, and special education teachers provided assistance to teachers related to addressing the wide variety of needs in their classrooms. For example, the content experts offered ideas of primary sources for students to read. English and social studies teachers discussed rubric development and coordinating units. Special educators assisted in simplifying wording on teacher-created materials and provided intervention ideas for particular struggling students upon request. These exchanges of information happened both at PLC meetings and informally throughout the teachers' work days. The existence of a shared vision for skills-based instruction combined with

support from the administrator and other colleagues with expertise assisted the PLC in developing and continuing to use CCSS-aligned common assessments.

Chapter 5. Conclusion and Discussion

This study investigated a high school social studies PLC's development and continued use of assessments related to the CCSS, which focused on students' reading and writing skills. Interviews of ten teachers and a curriculum supervisor who were involved in the PLC over a three year period combined with an analysis of related documents demonstrated the relative quality of the skills-based assessments that the PLC created. In addition, the data suggested a number of factors that assisted the teachers in this joint work of implementing CCSS-aligned assessments. This chapter explains the findings in light of related literature, suggests areas for further research, discusses possible implications for practice, and outlines impacts this research has already had within Valleyview School District.

Literature about effective PLCs has shown the importance of developing a shared vision in terms of improving student achievement (Fullan, 2001; Kise, 2012; Leclerc et al., 2012; Supovitz, 2006; Wells & Feun, 2012). Teachers in the world PLC believed in the importance of skills-based instruction and assessment, even though they did not all associate creating common assessments that required students to read and write with the CCSS. The PLC notes bear out that teachers worked toward their shared vision of creating and revising their literacy skills-based common assessments often during PLC meetings. However, multiple teachers described confusion about the CCSS and a lack of learning about them. Examples included a teacher directly stating she tried to learn as little about the CCSS as possible and another teacher who was unsure if he was citing the CCSS in his plans. Yet, teachers who described confusion about or avoidance of the CCSS implemented and assessed the standards. This suggests that the teachers created and continued to use the assessments because the CCSS aligned with their already-existing beliefs and practices. Literature about educational change posits that teachers

are more likely to adopt changes that agree with their previous ideas (Hall & Hord, 2001; Spillane, 2000). The teachers in the world PLC believed that social studies instruction and assessment should address literacy skills, so the PLC worked from that common vision and implemented the CCSS given that it aligned to their beliefs.

This study offers a contribution to the field specifically about the implementation of the CCSS. The comparison of exams showed that some teachers have been relatively slow to implement assessments aligned to the rigor of the CCSS for their grade level, even three years after the standards were written into the district curriculum that teachers were mandated to teach. Even among teachers whose assessments aligned to the CCSS, a lack of fluency about what the standards meant shows the challenge of implementing widespread policy change in the field. Given the slow pace of change (Fullan, 2001), it's not necessarily a surprise that some teachers were not able to describe the CCSS four years after NJ adopted them.

Regarding questions related to teachers' understanding of the purpose of a PLC, the teachers focused on common assessment development much more frequently than analyzing student data and collaborative planning. According to the interviews and PLC notes, the common goals and actions of teachers in the world PLC demonstrated that teachers very rarely analyzed student data. Literature suggests that the collaborative use of data improves student achievement (Saunders et al., 2009; Odden & Archibald, 2009; Wells & Feun, 2012), so this is an area to which I would like to direct teachers' attention in the future to increase their PLC's effectiveness. On a positive note, looking specifically at the PLC notes by year suggests that teachers are moving away from assessment writing and towards more discussions about instruction. This finding does align with authors who have written about educational change,

and particularly PLCs, taking years to implement to full effectiveness (Fullan, 2001; DuFour et al., 2006; Hall & Hord, 2006).

The vision of the teachers matched their actions at their meetings, which relates to the literature on discussion norms and agendas. The topics of the PLC notes showed that the teachers consistently planned out advanced agendas and discussed their norms. While the teachers in the PLC did not use the best practice of specific discussion protocols (Curry, 2008; Horn & Little, 2010; Saunders et al., 2009), they did develop and discuss their norms over a period of multiple years. In addition, agenda-setting has been shown as a tool to help teachers collaboratively improve instruction, especially if the agenda involves analyzing student data or engaging in an inquiry cycle (Nelson, 2007; Spillane, Halverson & Diamond, 2004). While the teachers of this PLC regularly set agendas in advance, most of the agendas involved working on their common assessments. Again, hopefully that habit will end and the increase in meetings discussing instruction that occurred in 2015-16 will continue.

This case study contributed to the literature in the field of educational leadership by providing thick, rich description of what leadership in the PLC looked like during the implementation of change. The findings about how the supervisor involved with the PLC collaborated with teacher leaders aligned closely with ideas from the relevant literature that suggests teachers take responsibility for a range of leadership roles and tasks (Spillane, Halverson, & Diamond, 2004; Supovitz, Sirinides, & May, 2010). Specifically, the supervisor shared leadership with the teachers, provided time for teachers to work on specific goals, facilitated relevant PD over time, and worked with the teachers to supply the PLC with resources. In regards to sharing leadership, interview data provides specific statements from teachers regarding how they took leadership roles in building consensus in the PLC for literacy

skill-related assessments, managing conflict, and distributing resources. The supervisor confirmed the leadership roles of these teachers during his interview.

Research on educational leadership related to teacher collaboration has suggested the benefits of an inclusive style among school leaders, where responsibilities are shared widely; assisting teachers in taking on leadership roles positively affects both teacher collaboration and students (Bryk et al., 1999; DeMatthews, 2014; Marks & Printy, 2003). Teachers and the supervisor specifically discussed how teacher leaders contributed to the PLC, especially regarding developing a shared vision during the process of common assessment development and managing conflict. Since the teachers had to create common assessments, dissent in the group served to deepen understanding of the shared vision for assessments during the change process; literature about teacher conflict during collaboration suggests the positive effects of dealing with controversy openly (Nelson et al., 2010; Uline et al., 2003). Examples of teacher leadership during moments of conflict were quotes about asking for input from each teacher and referring back to the established curriculum document. Teacher leaders also discussed how to manage discussions actively. Both the teachers and supervisor acknowledged the active role that teachers played in leading the creation of CCSS-aligned assessments among their colleagues.

In addition to building a shared vision and addressing conflict, teacher leaders and Charlie supported the development and continued use of literacy-based assessments through the provision of resources. Relevant materials that teachers can use to instruct and assess students improves teacher learning and collaboration (Darling-Hammond & McLaughlin, 2000; Printy, 2008). During interviews, the teachers named specific resources that assisted them in developing assessment questions and providing instruction to prepare students for the rigorous reading and writing that the assessments required. The interview data included examples of how Charlie and

teachers found and shared the resources, which showed the shared leadership toward achieving the PLC's vision for teaching and assessing students' skills in social studies.

Another key area of administrative support was time, both to learn about current best practices in the field and work on specific goals related to them. The Valleyview district, largely through Charlie, provided social studies teachers with ongoing professional development opportunities that related to teachers' daily work, which is essential for teacher learning and changing practices (Elmore, 2002; Fullan, 2001; Hall & Hord, 2006; Supovitz, 2006). Professional development included PLC meetings, department meetings, release days, workshops, and one-to-one conversations. In addition, he carved out time for teachers to work on very specific tasks related to their shared vision. For example, he specified concerns about an exam that teachers were giving and provided them with a day to collaborate on creating a new exam. The exam revision release day was an example of joint work that leads to authentic teacher learning, collaboration, and goal achievement (Coburn, 2001; Leithwood, Leonard, & Sharratt, 1998; Little, 1990).

Another finding that both confirms and adds to the available literature was that teachers sought out specific expertise from colleagues, including assistance with teaching content, writing skills, and students who struggled possibly due to special needs. Regarding teacher leaders, research shows that their assistance of colleagues can assist with goal setting, implementation, and interventions to help innovation succeed (Borko, 2004; Hall & Hord, 2006; Printy, 2008). The interview data on shared leadership and teacher networking gave multiple examples of teachers giving, seeking, and receiving supports from their colleagues. The specifics of this study can add to the literature specifically about networking to teach literacy skills in heterogeneous high school social studies classes. Teachers recognized for outstanding content

knowledge and their counterparts in the English department helped with implementing plans of creating assessments that incorporated historical sources and required students to make an argument. Special education teachers provided ideas of how to work with struggling students generally and how to provide increasingly supportive interventions as needed.

Along the lines of networking, teachers stated appreciation for colleagues who were experts in different areas participate in the PLC. Distributed leadership theory promotes the idea that change can multiply in its effects through the efforts of formal and informal leaders; the more people working on an innovation causes the change to grow more exponentially than additively (DuFour et al., 2006; Spillane et al., 2004; Supovitz et al, 2010; Vescio et al., 2008). For teachers developing and integrating social studies assessments that addressed literacy skills, teachers found it helpful to have access to people who could identify relevant primary sources, give advice about rubrics, and offer strategies to work with students who did not meet success on the assignments, among other supports. The cumulation of these efforts led to more change than any one of the teachers could make on their own.

Future Research

This case study addressed the implementation of assessments related to the CCSS in social studies. Teaching social studies content served as the backdrop for analyzing teacher collaboration around changes to assessment practices, yet the questions did not lend themselves to investigating the more general challenges teachers faced with implementing the CCSS. One such challenge was that the literacy standards for history/social studies were added on to all of the content standards for social studies that NJ already required schools to teach. Social studies content standards are often hotly contested in the political arena as people of different political perspectives strive to influence what students learn. For example, much debate ensued

nationally about the revised standards for AP United States History (Turner, 2015). An area for future research is the optimal level of specificity for standards to guide assessment and instruction; this could help other teams of teachers develop a more clear shared vision for their instruction and assessment.

Further explanation of the social studies standards in NJ will show why more research is needed to study the effects of standard specificity. In some of the quotes shared, teachers referenced their desire to have some flexibility within the assessments because of having to make decisions about which content to use to practice the skills required by the assessments. The NJ social studies standards for world history content contain over ninety standards at the high school level, some requiring comparison across countries and regions (New Jersey Student Learning Standards, 2014). Teachers are charged with teaching these 93 standards over the course of 180 school days, as there is one year of World History required for high school students. For United States history at the high school level, there are 192 standards that are taught over the two years of required United States history (Rock, 2016). The sheer number of topics in these standards is a challenge to integrate while also teaching reading and writing skills. The organization of the NJ standards begs inquiry into how to best create standards to support teachers in maximizing the learning of students; research on the effect of standard specificity on teaching social studies could address the common concern about the number of social studies standards.

To compound the issue of the number of topics the state world history teachers to address, individual standards can be overwhelming in their scope; the number and scope of the standards show the need for further information to assist practitioners. To give an example of the breadth and depth of learning required by one standard, here is an example: “6.2.12.C.6.d. Determine how the availability of scientific, technological, and medical advances impacts the

quality of life in different countries” (New Jersey Student Learning Standards, 2014, p. 47). As Appendix D shows with examples from each of the four strands in the standards, other standards are similarly complex and would require a large amount of time to teach thoroughly. Some of these standards could serve as the topic for an entire month or course rather than the average of two approximately fifty-minute periods that teachers have to teach them in addition to all the skills required by the CCSS. Given the depth and breadth of content and skill standards required by the state, a number of questions arise. How does the specificity of the standards affect student achievement? Are there certain standards or content that lend themselves best to teaching reading and writing skills? Which standards deserve the most focus to best prepare students with the knowledge and skills they need to serve as critically-thinking global citizens?

Along the vein of integrating both the content standards and the CCSS into instruction to create a more clear vision for social studies education, another area for researchers that would help practitioners is specific studies on the use of ancillary materials and assessments. Teachers mentioned the DBQ Project and Choices resources as helpful; both relate to teaching and assessing the skills required by the CCSS. Are the teaching strategies one set of materials more effective than the other overall? For example, Choices requires students to fill in graphic organizers that look like tables to prepare for a class discussion while the DBQ Project uses the visual of bucketing to label sources prior to writing an essay. Does one of these approaches help students learn more? This question could also be broken down to particular subject areas in social studies. For example, which ancillary materials are most effective in developing students’ literacy skills using a topic related to the content standards about India? Which are best for comparing independence movements over time?

As a separate but related strand of inquiry, researchers could examine how implementation of using these materials and/or approaches affects student achievement. If one set of materials is shown to be more effective, to what level of fidelity did teachers use the suggested activities in the resources compared to teacher-created lessons? What assessments accurately measured students' mastery of the standards in those studies? Prospective teachers learn about how to create assessments in college, yet many in this study reported that they wanted to learn more about how to create effective assessments. Research to this level of specificity about materials, assessments, and more generally about the implementation of changes in different contexts would be directly applicable to social studies teachers throughout the country.

While researching the effectiveness of available, content-specific resources could assist practitioners in implementing a shared vision of teaching literacy skills in social studies, seeing comparisons of strategies for teaching literacy skills to heterogeneous groups of high school social studies students would also assist practitioners; these strategies would need to address learning both the content and skills required of students. In a What Works Clearinghouse report on improving adolescent literacy, suggestions included providing repeated exposure to vocabulary words, carefully selecting texts to teach a specific reading/writing strategy, using texts that will have a high interest level for students, and creating content learning goals related to the ideas of the discipline (Kamil et al., 2008). Teachers need specific research-based suggestions to meet this level of sophistication in selecting sources and designing engaging instruction for the number of topics in the curriculum standards.

Related to the second and third themes of this case study, school leaders could benefit from more research on how to organize the most effective teams for teacher collaboration.

Evidence from this study suggests that having a mix of general education teachers with outstanding content knowledge and special education teachers benefitted all participants and their students. In particular, special education coteachers participated in the World PLC, which put them in the position to assist their social studies colleagues and therefore students. These secondary social studies teachers also reported wanting to work with their English colleagues. Is it effective to structure high school teachers into interdisciplinary teams in the humanities for the purpose of improving literacy skills? Do other content areas like high school math and science benefit from interdisciplinary PLCs and/or including special education teachers with general education teachers? Some research exists on the benefits and challenges of interdisciplinary teaching at the high school level (Chang & Lee, 2010; DeCamillo, 2015; Murata, 2002), but further research into these questions could help administrators connect teachers to maximize productivity towards specific goals.

An additional area for study related to organizing PLCs is whether having formal leadership roles for teachers affects teacher learning and student achievement; this research should also examine the nature of that role. On one hand, a formal role recognizes expertise and may motivate contributions from the teacher in that role; conversely, it could discourage others from contributing. In this study, three teachers who gave the most clear examples of how they led in the PLC had the role of “department liaison.” This role is mostly a logistical one, including tasks like coordinating orders for supplies, verifying that students met requirements for future courses, and grading exams for students who take online courses. However, these three teachers had increased communication with the supervisor and took on PLC leadership roles in all three cases. While teacher leadership assisted with the creation and continued use of the

assessments, this study did not go so far as to investigate the effects of the teacher leadership on student achievement.

While teacher leadership may assist in collaborative change efforts, labeling some teachers as leaders may somewhat inhibit others from sharing their own expertise. DuFour et al. (2006) suggest alternating roles among participants, and other researchers stress the reality that teacher collaboration often happens informally (Spillane et al., 2004; Supovitz et al., 2010). Studies addressing the impact of formal roles within PLCs would help to either discourage or encourage the practice of formal roles depending on their effectiveness in improving teacher learning and student achievement.

Implications

While the design and research questions of this case study somewhat limit its applicability to other settings, the detail of some findings may assist school leaders looking to improve teacher collaboration. According to evidence from this study, the importance of a shared vision cannot be overstated, including the value of providing very specific examples of what instruction and assessment should look like. For secondary social studies teachers, providing concrete and content-specific examples of ideal multiple choice and essay questions helped solidify the shared vision of assessment for teachers. In addition, multiple exposures to professional development about changes that relate closely to teacher practice are recommended help teachers understand and work toward an innovation. The teachers who spoke with the most confidence and understanding about the CCSS had attended some combination of program evaluation meetings, department meetings, workshops, and PLC meetings where they learned about and/or worked on the idea of assessing literacy skills in social studies. Leaders can use

these examples to work with teachers to figure out the very specific supports they need to implement change.

In addition to providing professional development, school leaders can facilitate teacher networking during formal and informal learning experiences. Giving teachers specific tasks authentic to their work and giving feedback on the quality of their completion of those tasks can help teachers learn and implement change. For example, the exam release day described in this study gave teachers time to work on an assessment that addressed the CCSS appropriately after feedback from the supervisor. In this example of a formal learning experience, leaders can include special educators and literacy teachers alongside social studies teachers during release time to encourage their networking and use of each others' expertise. Leaders also often determine the structure of PLCs and can include a variety of teachers in a PLC to facilitate networking within each team. As for an example of a leader facilitating networking more informally, he or she could suggest that a teacher visits another teacher's classroom to see the implementation of an activity related to the common assessment. By helping teachers network beyond their department walls, secondary leaders can increase teachers' knowledge and skills through collaboration.

It may also assist school leaders interested in improving teacher collaboration to consider the recommendations that the evidence in this study suggest. A main concern for any school leader should be how to help teachers learn how to improve student learning. Research about teacher learning, grounded in sociocultural learning theory, suggests situating professional learning experiences for teachers in terms of problems of practice they experience and collaborate to address (Hall & Hord, 2006; Little, 1990; Palinscar, 1998). In the context of this study, the mandate to create common assessments aligned to the CCSS could be viewed as a

problem of practice since it focused teachers' attention on a clear goal. Moving forward, I consider the factors that sociocultural learning theory suggests as I make conclusions and recommendations related to this study. Specifically, I will consider how I can assist teachers in light of their understanding of the content, their content-specific instructional strategies, related resources available, and the context of the school (Coburn, 2001; Feiman-Nemser, 2001; Palinscar, 1998; Putnam & Borko, 2000; Supovitz, Sirinides & May, 2010).

Taking an indepth look at how one PLC functioned showed the importance of finding ways to support teachers on their journey to collaborate around instructional improvement and student learning. To improve the function of social studies PLCs in Valleyview, I am making recommendations in three areas: encouraging the use of discussion protocols, providing specific task suggestions in consultation with the teachers, and offering additional dedicated time to collaborate. These all relate to sociocultural learning theory because they are situated in the context in which the teachers work. Discussion protocols that require teachers to look at examples of student work will make their conversations specific to their content and the best ways to teach it.

Discussion protocols also fit with the sociocultural theory of teacher learning because they require teachers to talk about what has happened in their classrooms. Using a set of steps or questions to review instruction and student data could assist teachers as they shift from assessment writing to the next stages of PLC work. DuFour et al. (2006) suggest four questions for a PLC to consider: What do we want students to know? How will we know when they know it? What will we do when they struggle? What do we do if they already know it before we teach it? Considering these four questions and evidence from the study, world history teachers are on the point of their PLC journey where they have reached some consensus about their instructional

objectives and assessments (DuFour's Question 1 and 2). Using a critical friends group protocol (Curry, 2008) or engaging in an inquiry cycle (Nelson, 2007) would focus teacher attention on the last two questions. Following the best practice of talking more about student data could help the teachers identify and share best practices for their context, thereby improving student learning.

Another recommendation is to work with each PLC to identify a specific task related to their implementation of change and create a timeline to complete that task. The finding about the value of the exam revision release day suggests that having a clear task to complete within a specific timeframe can help develop the shared vision and build teacher understanding of recommended changes. Teachers, like learners, function best when a task relates directly to their lives; the exam revision release day was timely and related to the teachers' classroom practice. Specific goals can mean the difference between story swapping during collaborative time and true joint work (Little, 1990). By observing teacher progress on a task and the related discussions, school leaders can ascertain the information, expertise, and/or resources needed to help teachers complete the task.

Again related to the exam release day, teachers benefited from collaborative learning and work time with as many colleagues as possible. The World PLC had more teachers participate in professional learning opportunities related to the CCSS than other PLCs that ended up creating exams that were less aligned to the CCSS. Many of these professional learning opportunities happened on release days when teachers had coverage and spent the whole day with the supervisor discussing and implementing recommended changes. PLC meetings at the high school in Valleyview are at best 45 minutes twice a month after a full day of teaching, and anyone who coaches a sport may not be present. Some months, there is only one meeting due to

an inservice day often devoted to topics other than PLC work. For most PLCs, teachers did not implement as much of the innovation as the world history PLC given the limited time to collaborate. When facilitating professional development, curriculum writing, and drafting assessments, the evidence from this study suggests including as many teachers as possible.

Impact

It is appropriate to take caution with generalizing findings for a case study; however, this research project reinforces ideas in the field about the importance of a shared vision, teacher leadership, and supports relevant to teachers' daily practice. I endeavored to provide a rich picture of teacher collaboration and the role of the educational leader in the change process related to implementing the CCSS. Suggestions to help teachers with change included providing resources, time to work on specific tasks related to the innovation, and facilitating teachers' access to colleagues with a variety of expertises; this section will describe some actions I took at Valleyview based on what I learned from this study.

Through this research project, I examined the interactions of one particular PLC that created assessments more closely aligned to the CCSS than others. While this was one group of unique teachers, my exam analysis and evidence from interviews with them has informed the teachers and my support of other PLCs. I have already begun steps towards implementing the recommendations contained in the section above, so I believe this study has impacted and will continue to affect the learning of teachers and students in Valleyview.

Regarding my first recommendation about discussion protocols, I have shared lists of discussion protocols with various teachers. The School Reform Initiative maintains a number of lists of protocols for different purposes, including examining student work and patterns of achievement ("Protocols," 2017). This was not an effective strategy, as I have not seen any

teachers actually select and use a specific protocol. Most likely, the list was overwhelming because it contains folders upon folders of possible protocols. In the future, I will ask teachers to use a specific protocol in a PLC meeting or choose from a small number closely related to data analysis. I may also ask to observe a meeting at which they use the protocol and collect anonymous feedback about its usefulness to reflect on which protocols I should promote widely.

I have reflected about some possible reasons why teachers rarely look at data about students, which led me to identify that it was not convenient for them to do so. By nature of how complicated it is to grade written work and the number of students that secondary social studies teachers have, they did not have easy access to meaningful data. For example, take a teacher with over 100 students who grades a piece of student writing using a rubric. Prior to my time at Valleyview, teachers circled boxes on a piece of paper, calculated the overall grade, and put the overall grade into the student information system (SIS). This did not allow teachers to see if any patterns existed in terms of achievement in specific areas of writing. In addition, teachers could not identify specific needs of individual or small groups of students by looking at an overall grade in their gradebooks.

Over my time at Valleyview, we have implemented digital rubrics, where teachers select rubric indicators on a screen of the SIS. Parents and students can view specific feedback on student writing from the SIS. For example, now everyone can see whether a student is better at citing textual evidence than organizing an argument. When we first began implementing the digital rubrics, we did not have the reporting features through our SIS for teachers to easily create a report of data about their students for a specific assessment. The report took an average of twenty minutes to run and provided all of the data for a particular course if the teacher correctly inputted the required search fields, including the numerous course codes associated

with any one particular class. I suggested features to our SIS company and worked with technical staff in the district to streamline the report.

Now, teachers are beginning to use the report and only have to enter their name and the assignment name in order to receive an Excel file of their students' scores on each criteria measured by the rubric. I am continuing to press for a feature that will allow teachers to easily compare students' scores on each rubric criteria over multiple assessments. The district is also in the process of rolling out a data management platform called Performance Matters. I reached out to other colleagues in the field and had Performance Matters recommended as a tool to help teachers view and discuss data about students. Having actionable student data in an easily viewable format is critical to teacher data analysis, both logically and from research on the topic (Wells & Feun, 2012). Both the improved reporting features of our SIS and the Performance Matters platform give teachers easier access to a larger variety of specific student data to discuss in their PLCs than they have ever had before.

Regarding providing teachers time to work on very clear tasks, I have evaluated my role as a support for the ten PLCs with which I work. Since undertaking this study, I have increased regular contact with all PLCs to discuss the tasks upon which they are working. I have also selected a PLC a year for more specific supports, either based on my observations of a need to improve or the teachers' interest in making changes. In 2015-16, I used the exam analysis I did for this dissertation to provide a high school PLC with data about the difference between their exams and those of other courses. I provided specific examples of DBQs that related to the content they teach from which they created an improved set of exams. In 2016-17, I focused on a PLC at another school in which the teachers were interested in incorporating more primary sources into their instruction and assessment. Many of the teachers in this PLC had more of an

elementary education focus in their preparation, so I identified that they needed content area expertise and resources. Again, the provision of resources that matched specific units of study as teachers worked on revising those assessments led to a high quality final product. At my suggestion, the teachers also used some of the primary sources I shared in their instruction to prepare students for the reading and writing demands of the assessment they created.

Finally, I have advocated for release time for teachers as much as possible. This can be a touchy subject with colleagues and budget constraints. Many teachers would like a day provided to work on exam revisions rather than being expected to complete the same work during preparation periods and/or outside of working hours. I shared a very clear rationale for the time with other administrators that helped build agreement to provide coverage for teachers. The PLCs that have benefitted from this time have been productive with it and created assessments aligned to the CCSS and best practices in social studies during those sessions.

Another way I have increased teacher time to collaborate about specific tasks is to be creative with asking for coverage for teacher duties. At the high school, teachers have a period in their schedule where they monitor a bathroom or students in the cafeteria. A very helpful administrative assistant will provide duty coverage upon request for teachers so that PLC members can meet together when they need additional time for a specific task. The teachers appreciate this additional time to meet, so they are flexible with switching their lunch, preparation, and duty periods so they can meet with as many members of the PLC as possible during the day when provided with duty coverage. As the district moves forward in its current strategic planning process, some schools may have schedule changes to provide time for student support. I will advocate for increased collaboration time among teachers to factor into any new

schedule created. In sum, this dissertation research has already created and will continue to influence changes aimed at improving student learning.

References

- “About the Choices program.” (2017, February 25). Retrieved from <http://www.choices.edu/about/>.
- Achinstein, B. (2002). Conflict amid community: The micropolitics of teacher collaboration. *Teachers College Record*, 104(3), 421-455.
- Amore, A. Hoeflich, N. M., & Pennington, K. (2015). Teacher leadership: The pathway to Common Core success. Washington, D.C.: Center for American Progress. Retrieved 27 June 2016, from <https://cdn.americanprogress.org/wp-content/uploads/2015/04/CCTeacherVoiceFinal.pdf>
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Bryk, A., Camburn, E., & Louis, K. (1999). Professional community in Chicago elementary schools: Facilitating factors and organizational consequences. *Educational Administration Quarterly*, 35(5), 751-781.
- Bryk, A., & Driscoll, M. E. (1988). The high school as community: Contextual influences and consequences for students and teachers. Office of Educational Research and Improvement (ED), Washington, DC. (ERIC Document Reproduction Service No. ED302539).
- Carmichael, D. & Martens, R. (2012). Midwestern magic: Iowa's statewide initiative engages teachers, encourages leadership, and energizes student learning. *Journal of Staff Development*, 33(3), 22-26.

- Chang, L., & Lee, G. (2010). A team-teaching model for practicing project-based learning in high school: Collaboration between computer and subject teachers. *Computers & Education*, 55(3), 961-969. <http://dx.doi.org/10.1016/j.compedu.2010.04.007>
- Choi, Y. & Wegner, K. (2015). Subject matters of social studies. In M. He, B. Schultz, & W. Schubert (Eds.), *The SAGE guide to curriculum in education* (pp. 36-44). Thousand Oaks, CA: Sage Publications.
- Clark, A. (2016). N.J. revises, renames Common Core academic standards. *NJ.com*. Retrieved from http://www.nj.com/education/2016/05/nj_common_core_standards_christie.html
- Coburn, C. E. (2001). Collective sensemaking about reading: How teachers mediate reading policy in their professional communities. *Educational Evaluation and Policy Analysis*, 23(1), 145-170.
- Coffey, A., & Atkinson, P. (1996). *Making sense of qualitative data*. Thousand Oaks: Sage Publications.
- Cogan, J. J. (1976). Social studies: Past, present and future. *Educational Leadership*, 33(4), 293-295.
- Common Core State Standards Initiative. (2016). Development process. *Corestandards.org*. Retrieved from <http://www.corestandards.org/about-the-standards/development-process/>.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed-methods approaches*. Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. (2013). *Qualitative inquiry & research design*. Thousand Oaks, CA: Sage Publications.
- Creswell, J., & Miller, D. (2000). Determining validity in qualitative inquiry. *Theory into*

Practice, 39(3), 124-130.

Curry, M. (2008). Critical Friends Groups: The possibilities and limitations embedded in teacher professional communities aimed at instructional improvement and school reform.

Teachers College Record, 110(4), 733-774.

Darling-Hammond, L. & McLaughlin, M. W. (1999). Investing in teaching as a learning profession. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice*. San Francisco: Jossey-Bass.

Darling-Hammond, L., & Sykes, G. (1999). *Teaching as the learning profession: Handbook of policy and practice*. San Francisco, Jossey-Bass Inc.

“DBQs.” (2017, February 25). Retrieved from <http://www.dbqproject.com/about-dbqs-and-mini-qs.php>.

De Dreu, C. K. (1997). Productive conflict: The importance of conflict management and conflict issue. In C.K. De Dreu & E. Vliert (Eds.), *Using conflict in organizations*, (pp. 9-22). London: Sage.

DeMatthews, D. E. (2014). Principal and teacher collaboration: An exploration of distributed leadership in professional learning communities. *International Journal of Educational Leadership and Management*, 2(2), 176-206.

DiCamillo, L. (2015). Exploring an interdisciplinary expedition in a global history class. *The Journal of Social Studies Research*, 39(3), 151-162.

<http://dx.doi.org/10.1016/j.jssr.2014.12.001>

DuFour, R. (1999). Help wanted: Principals who can lead professional learning communities. *NASSP Bulletin*, 83(604), 12-17.

DuFour, R. (2007). Professional learning communities: A bandwagon, an idea worth

considering, or our best hope for high levels of learning?. *Middle School Journal*, 39(1), 4.

DuFour, R. DuFour, R., Eaker, R. & Many, T. (2006). *Learning by doing*. Bloomington, Ind.: Solution Tree.

DuFour, R., DuFour, R., Lopez, D. & Muhammad, A. (2006). Practices kept: Collective commitments to students become a catalyst for improved professional practice. *Journal of Staff Development*, 27(3), 53-56.

Elmore, R. F. (2002). Bridging the gap between standards and achievement: The imperative for professional development in education. Albert Shanker Institute. Retrieved from http://nuatc.org/articles/pdf/Bridging_Gap.pdf

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055.

Firestone, W. A., Mangin, M. M., Martinez, M. C., & Polovsky, T. (2005). Leading coherent professional development: A comparison of three districts. *Educational Administration Quarterly*, 41(3), 413-448.

Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.

Gallucci, C. (2008). Districtwide instructional reform: Using sociocultural theory to link professional learning to organizational support. *American Journal of Education*, 114(4), 541-581.

Grossman, P., Wineburg, S., & Woolworth, S. (2001). Toward a theory of teacher community. *Teachers College Record*, 103(6), 942-1012.

Hall, G. E. & Hord, S. M. (2006). *Implementing change: Patterns, principles and potholes*. New York: Pearson.

- Hargreaves, E. (2013). Assessment for learning and teacher learning communities: UK teachers' experiences. *Teaching Education*, 24(3), 327-344.
- Hipp, K., Huffman, J., Pankake, A. & Olivier, D. (2008). Sustaining professional learning communities: Case studies. *Journal of Educational Change*, 9(2), 173-195.
- Hollingworth, L. (2012). Why leadership matters: Empowering teachers to implement formative assessment. *Journal of Educational Administration*, 50(3), 365-379.
- Hord, S. M. (2004). *Learning together, leading together: Changing schools through professional learning communities*. New York: Teachers College Press.
- Horn, I. & Little, J. (2010). Attending to problems of practice: routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, 47(1), 181-217.
- Huffman, J. B., Hipp, K. A., Pankake, A. M., & Moller, G. (2001). Professional learning communities: Leadership, purposeful decision making, and job-embedded staff development. *Journal of School Leadership*, 11(5), 448-463.
- Leithwood, K., Leonard, L., & Sharratt, L. (1998). Conditions fostering organizational learning in schools. *Educational Administration Quarterly*, 34(2), 243-276.
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage handbook of qualitative research*, 4, 97-128.
- Kamil, M.L., Borman, G.D., Dole, J., Kral, C.C., Salinger, T. & Torgesen, J. (2008). Improving adolescent literacy: Effective classroom and intervention practices. Washington, DC: U.S. Department of Education. Retrieved from https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/adlit_pg_082608.pdf.

- Karabulut, Ü.S. (2012). How to teach critical-thinking in social studies education: An examination of three NCSS journals. *Egitim Arastirmalar - Eurasian Journal of Educational Research*, 49, 197-214.
- Kerr, K. A., Marsh, J.A., Ikemoto, G. S., Darilek, H., Barney, H. (2006). Strategies to promote data use for instructional improvement: Actions, outcomes, and lessons from three urban districts. *American Journal of Education*, 112(4), 496-520.
- King, M. B., Newmann, F. M., & Carmichael, D. L. (2010). Authentic intellectual work. In W. C. Parker (Ed.), *Social studies today: Research and practice* (pp. 53-64). New York, NY: Routledge.
- Kise, J. (2012). Give teams a running start: take steps to build shared vision, trust, and collaboration skills. *Journal of Staff Development*, 33(3), 38-42.
- Knapp, M. S., Copland, M. A., Ford, B., Markholt, A., McLaughlin, M. W., Milliken, M., & Talbert, J. E. (2003). Leading for learning sourcebook: Concepts and examples. Center for the Study of Teaching and Policy. Retrieved from <http://depts.washington.edu/ctpmail/PDFs/LforLSourcebook-02-03.pdf>.
- Leclerc, M., Moreau, A., Dumouchel, C. and Sallafranque-St-Louis, F. (2012). Factors that promote progression in schools functioning as a professional learning community. *International Journal of Education Policy and Leadership*, 7(7), 1-14.
- Levine, T. (2011). Experienced teachers and school reform: Exploring how two different professional communities facilitated and complicated change. *Improving Schools*, 14(1), 30-47.

- Levine, T., & Marcus, A. (2010). How the structure and focus of teachers' collaborative activities facilitate and constrain teacher learning. *Teaching and Teacher Education*, 26(3), 389-398.
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, 91(4), 509-536.
- Loveless, T. (2014). Implementing the Common Core: A look at curriculum. The Brookings Institution. Retrieved 27 June 2016, from <http://www.brookings.edu/research/papers/2014/05/15-implementing-common-core-curriculum>
- Magdola, P. (2000). Being at the wrong place, wrong time: Rethinking trust in qualitative inquiry. *Theory into Practice*, 39(3), 138-145.
- Mathison, S. (1988). Why triangulate?. *Educational Researcher*, 17(2), 13-17.
- Massialas, B. (1992). The “new social studies” — retrospect and prospect. *The Social Studies*, 83(3), 120-124.
- Meijer, P. C., Verloop, N. & Beijaard, D. (2002). Multi-method triangulation in a qualitative study on teachers' practical knowledge: An attempt to increase internal validity. *Quality & Quantity*, 36, 145–167.
- MetaMetrics. (2016). “What is a Lexile measure?.” Retrieved from <https://lexile.com/about-lexile/lexile-overview/>.
- Merriam, S. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Merriam, S., Caffarella, R. & Baumgartner, L. (2007). *Learning in adulthood*. San Francisco: Jossey-Bass.

Mezirow, J. (2000). *Learning as transformation*. San Francisco: Jossey-Bass.

Mooney, J. (2010). NJ Board of Education adopts Common Core Standards - NJ spotlight.

Njspotlight.com. Retrieved from <http://www.njspotlight.com/stories/10/0616/2136/>.

Murata, R. (2002). What does team teaching mean? A case study of interdisciplinary teaming.

The Journal of Educational Research, 96(2), 67-77.

<http://dx.doi.org/10.1080/00220670209598794>

National Council for the Social Studies. (2013). *The college, career, and civic life (C3)*

framework for social studies state standards: Guidance for enhancing the rigor of K-12 civics, economics, geography, and history. NCSS: Silver Spring, MD.

National Council for the Social Studies. (2003). *Promoting fair and equitable assessments: A position statement of the National Council for Social Studies*. *Social Education*, 68(4), 290.

National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010a). *Common core state standards for English language arts & literacy in history/social studies, science, and technical subjects appendix A: Research supporting key elements of the standards & glossary of key terms*. National Governors Association Center for Best Practices, Council of Chief State School Officers: Washington D.C.

National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010b). *Common core state standards for history/social studies*. National Governors Association Center for Best Practices, Council of Chief State School Officers: Washington D.C.

- Nelson, T. (2009). Teachers' collaborative inquiry and professional growth: Should we be optimistic?. *Science Education*, 93(3), 548-580.
- Nelson, T., Deuel, A., Slavit, D., & Kennedy, A. (2010). Leading deep conversations in collaborative inquiry groups. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(5), 175-179.
- New Jersey Department of Education. (2012). NJ school performance report. Retrieved from <http://education.state.nj.us/pr/>.
- New Jersey Department of Education. (2013a). Planning guide for choosing or developing a quality assessment. Retrieved from <http://www.state.nj.us/education/AchieveNJ/teacher/SGO%20Form%201-5%20Planning%20Guide%20for%20Choosing%20or%20Developing%20a%20Quality%20Assessment.pdf>.
- New Jersey Department of Education. (2013b). Standards alignment and coverage check. Retrieved from <http://www.state.nj.us/education/AchieveNJ/teacher/forms/SGO1-2.pdf>.
- New Jersey Department of Education. (2014). 2014 special education data. Retrieved from <http://www.nj.gov/education/specialed/data/2014.htm>
- New Jersey Department of Education. (2015). AchieveNJ: Student growth objective quick start guide. Retrieved from <http://www.state.nj.us/education/AchieveNJ/teacher/SGOQuickStartGuide.pdf>.
- New Jersey Student Learning Standards. (2014). Retrieved from <http://www.nj.gov/education/cccs/2014/ss/>.
- Odden, A. R. & Archibald, S. J. (2009). *Doubling student performance... And finding the resources to do it*. Thousand Oaks, CA: Corwin Press.

- Olivier, D.F., Hipp, K.K, and Litke, B. (2010). Professional learning communities assessment-revised. Southwest Educational Development Laboratory. Retrieved from <http://www.sedl.org/pubs/catalog/items/plc01.html>.
- Palinscar, A.S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology*, 49, 345-375.
- Patton, M. Q. (2008). *Utilization-focused evaluation*. Thousand Oaks, CA: Sage Publications.
- Pearson. (2015a). Grade 10 English/language arts literacy performance-based assessment practice test. Retrieved from http://parcc.pearson.com/resources/practice-tests/english/grade-10/pba/PC194831-001_10ELATB_PT.pdf.
- Pearson. (2015b). Grade 11 English/language arts literacy performance-based assessment practice test. Retrieved from http://parcc.pearson.com/resources/practice-tests/english/grade-11/pba/PC194889-001_11ELATB_PT.pdf
- Pine, C. & Dougherty, C. (2013). Professional learning for NJ educators: An overview of NJ policies, research and best practices. *state.nj.us*. Retrieved 27 June 2016, from <http://www.state.nj.us/education/profdev/regs/2013RegionalRegsTraining.pdf>
- Printy, S. (2008). Leadership for teacher learning: A community of practice perspective. *Educational Administration*, 44(2), 187-226.
- “Protocols.” (2017). School Reform Initiative. Retrieved from <http://www.schoolreforminitiative.org/protocols/>.
- Putnam, R. T. & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1), 4-15.
- Renshaw, J. (2012). Gov. Christie signs teacher tenure overhaul bill. *NJ.com*. Retrieved from

- http://www.nj.com/news/index.ssf/2012/08/gov_christie_signs_teacher_ten.html
- Rentner, D.S., Kober, N., McMurrer, J., Yoshioka, N., Frizzell, M., & M. Ferguson. (2013). Year 3 of implementing the Common Core State Standards: An overview of states' progress and challenges. Washington, D.C., Center on Education Policy.
- Richmond, G. & Manokore, V. (2011). Identifying elements critical for functional and sustainable professional learning communities. *Science Education*, 95(3), 543-570.
- Rock, B. (2016, December 23). "Fix NJ's social studies standards, let history take a backseat." *NJ Spotlight*. Retrieved from <http://www.njspotlight.com/stories/16/03/23/op-ed-fix-nj-social-studies-standards-let-history-take-a-backseat/>.
- Rothschild, E. (2000). The impact of the document-based question on the teaching of United States history. *The History Teacher*, 33(4), 495-500. Rothschild, E. (2000). The impact of the document-based question on the teaching of United States history. *The History Teacher*, 33(4), 495-500.
- Santelises, S., & Dabrowski, J. (2015). *Checking in: Do classroom assignments reflect today's higher standards?*. Education Trust. Retrieved from http://edtrust.org/wp-content/uploads/2014/09/CheckingIn_TheEducationTrust_Sept20152.pdf.
- Saunders, W., Goldenberg, C. & Gallimore, R. (2009). Increasing achievement by focusing grade-level teams on improving classroom learning: A prospective, quasi-experimental study of Title I schools. *American Educational Research Journal*, 46(4), 1006-1033.
- Schachter, R. (2009). Social studies for the 21st century. *District Administration*, Jan 2009, p 81-31.
- Schneider, D. (1994). *Expectations of excellence: Curriculum standards for social studies*. Washington, DC: National Council for the Social Studies.

- Scribner, J., Hager, D., & Warne, T. (2002). The paradox of professional community: Tales from two high schools. *Educational Administration Quarterly*, 38(1), 45-76.
- Shermis, S., & Barth, J. (1978). Social studies and the problem of knowledge: A re-examination of Edgar Bruce Wesley's classic definition of the social studies. *Theory & Research in Social Education*, 6(1), 31-43. <http://dx.doi.org/10.1080/00933104.1978.10506022>
- Skrla, L., Scheurich, J.J., Garcia, J. & Nolly, G. (2004). Equity audits: A practical leadership tool for developing equitable and excellent schools. *Educational Administration Quarterly*, 40(133), 133-161.
- Smylie, M., & Hart, A.W. (2000). School leadership for teacher learning and change: A human and social capital development perspective. In J. Murphy & K. S. Louis (Eds.), *Handbook of research on educational administration* (pp. 421-441). San Francisco: Jossey-Bass.
- Spillane, J. P., Halverson, R. & Diamond, J.B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies*, 36(1), 3-34.
- Stein, M. K. & Nelson, B. S. (2003). Leadership content knowledge. *Educational Evaluation and Policy Analysis*, 25(4), 423-448.
- Supovitz, J. A. (2006). *The case for district-based reform*. Cambridge, MA: Harvard Education Press.
- Supovitz, J. A., Sirinides, P. & May, H. (2010). How principals and peers can influence teaching and learning. *Educational Administration Quarterly*, 46(1), 31-56.
- The White House. (2009). Fact sheet: The race to the top. Retrieved from <https://www.whitehouse.gov/the-press-office/fact-sheet-race-top>.
- Thorton, K. & Cherrington, S. (2014) Leadership in professional learning communities. *Australasian Journal of Early Childhood*, 39(3):119-132.

- Turner, C. (2015). The great U.S. history battle. *NPR*. Retrieved from <http://www.npr.org/sections/ed/2015/02/24/388443955/the-great-u-s-history-battle>.
- Uline, C., Tschannen-Moran, M., & Perez, L. (2003). Constructive conflict: How controversy can contribute to school improvement. *Teachers College Record*, 105(5), 782-815.
- U.S. Census Bureau. (2014). QuickFacts. Retrieved from <http://www.census.gov/quickfacts/>.
- U.S. Department of Education, Institute of Education Sciences. (2016). What Works Clearinghouse. Retrieved from <http://ies.ed.gov/ncee/wwc/>.
- van Hover, S. (2008). The professional development of social studies teachers. In L.S. Levstik & C. A. Tyson (Eds.), *Handbook of Research in Social Studies Education* (352-372). New York, NY: Routledge.
- Vescio, V., Ross, D. & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80-91.
- Waters, J. T., & Marzano, R. J. (2006). *School district leadership that works: The effect of superintendent leadership on student achievement*. Denver, CO: Mid-continent Research for Education and Learning.
- Wells, C., & Feun, L. (2007). Implementation of learning community principles: A study of six high schools. *NASSP Bulletin*, 91(2), 141-160.
- Wells, C. & Feun, L. (2013). Educational change and professional learning communities: A study of two districts. *Journal of Educational Change*, 14(2), 1-25.
- Wesley, E. (1942). *Teaching the social studies* (2nd ed., pp. 3-5). Boston: D. C. Heath and Company. Retrieved from [http://hdl.handle.net/2027/uc1.\\$b169235](http://hdl.handle.net/2027/uc1.$b169235).

- Whittemore, R., Chase, S., & Mandle, C. (2001). Validity in Qualitative Research. *Qualitative Health Research*, 11(4), 522-537.
- Wiggins, G., & McTighe, J. (2005). *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Will, M. (2016). *As teachers tackle new student-writing expectations, support is lacking*. *Education Week Teacher*. Retrieved from <http://www.edweek.org/tm/articles/2016/06/20/as-teachers-tackle-new-student-writing-expectations-support.html>
- Wineberg, S., & Grossman, P. (1998). Creating a community of learners among high school teachers. *Phi Delta Kappan*, 79(5), 350-354.
- Yin, R.K. (2013). *Case study research: design and methods*. Thousand Oaks, CA: Sage Publications.
- Young, V. M. (2006). Teachers' use of data: Loose coupling, agenda setting, and team norms. *American Journal of Education*, 112(4), 521-548.
- Zemelman, S., Daniels, H., & Hyde, A. (2012). *Best practice*. Portsmouth, NH: Heinemann.
- Zemke, R. & Zemke, S. (1995). Adult learning: What do we know for sure?. *Training*, 32(6), 31-40.
- Zepeda, S. (2008). *Professional development*. Larchmont, NY: Eye on Education.

Appendix A. Semi-Structured Interview Protocol

First Round Interview Questions - Regarding Participation in WH PLC

Vision

1. What is the purpose of teaching social studies?
2. What is the purpose of a PLC?
3. How well does your PLC compare to an ideal PLC?
4. How did the world history teachers become a PLC?

Roles

1. What have been your contributions to the PLC?
2. Describe examples of ways others have contributed to your PLC.
3. How do you think the roles in your PLC developed?

Agendas

1. Tell me about your last PLC meeting.
2. How did the group determine what would be discussed or done at that meeting?
3. Is that typical for how you decide discussion topics?

Norms

1. What is your understanding of your PLC's norms, off the top of your head?
2. How did your PLC develop its norms? Did they change them over time?

Assessments

1. Talk to me about the work of your PLC in designing common assessments.
 - a. Describe the discussions you had around assessing the Common Core.
 - b. Describe the discussions you had about what type of assessment to create.
2. What were your goals in creating common assessments?

Conflict

1. Describe a recent disagreement in your PLC.
2. What concerns have come up about common assessments?
3. Describe a discussion that ensued after someone brought up a concern about the common assessments.

Professional Development

1. Are there additional opportunities that you take to collaborate with colleagues outside of PLC time? How useful has this been?
2. In your opinion, what supports and/or collaboration has been most beneficial to you as the department has implemented the Common Core? Why?
3. What supports and/or professional development would you like to see put into place?

Is there anything else you would like me to know?

Second Round Interview Questions - Regarding Leadership Roles

Questions for Participants who Changed PLCs

1. Describe a recent disagreement in your PLC.
2. Compare your two PLCs in terms of what happens when people disagree.
3. Compare your two PLCs in terms of how they decide discussion topics or tasks.
4. What concerns do members of your current PLC bring up about writing-focused common assessments?
5. Start member-checking findings from first round.

Second Round Questions for Participants Identified as PLC Leaders

1. Explain how you assisted your teammates in the common assessment development process.
2. Why do you think your PLC members reported you as particularly helpful to the team's successes?
3. Possible follow-up questions about assistance.
4. Start member-checking findings from first round.

Appendix B. Table of Relationships between Interview Questions and Literature

Part of Interview Protocol	Question	Literature Review Section
Vision	What is the purpose of teaching social studies?	Social Studies Education
	What is the purpose of a PLC?	Vision
	How well does your PLC compare to an ideal PLC?	Vision
	How did the world history teachers become a PLC?	Vision, PD
Roles	What have been your contributions to the PLC?	Agendas, Roles
	Describe examples of ways others have contributed to your PLC.	Roles
	How do you think the roles in your PLC developed?	Roles
Agendas	Tell me about your last PLC meeting.	Agendas
	How did the group determine what would be discussed or done at that meeting?	Agendas
	Is that typical for how you decide discussion topics?	Agendas
Norms	What is your understanding of your PLC's norms, off the top of your head?	Norms
	How did your PLC develop its norms? Did they change them over time?	Norms
Assessments	Talk to me about the work of your PLC in designing common assessments. <ul style="list-style-type: none"> Describe discussions about assessing the Common Core. Describe discussions about types of assessments. 	Social Studies Education
	What were your goals in creating common assessments?	Social Studies Education
Conflict	Describe a recent disagreement in your PLC.	Conflict
	What concerns have come up about common assessments?	Conflict
	Describe a discussion that ensued after someone brought up a concern about the common assessments.	Conflict
Professional Development	Are there additional opportunities that you take to collaborate with colleagues outside of PLC time? How useful has this been?	PD
	In your opinion, what supports and/or collaboration has been most beneficial to you as the department has implemented the Common Core? Why?	PD
	What supports and/or professional development would you like to see put into place?	PD

Appendix C. Coding Scheme and Definitions

- Vision - guiding purpose to attain future goals
 - PLC purpose - reason for teacher collaboration
 - SS ed - ideal of discipline
 - CCSS - references to the Common Core State Standards
 - Unsure - confused about the CCSS
- Administrative Leadership
 - Resources - tools to find questions or documents
 - Exam - referencing exam release day
 - Time - opportunity to be paid for collaboration
 - Shared leadership - teacher and administrator working jointly on tasks
- PD - professional learning opportunity
- Networking - example of teacher wanting to or actually seeking out learning from a peer
- Agency - desire for specific learning conditions or information
- Interdisciplinary - desired or actual connections with teachers in other disciplines
- Roles - example of how a teacher contributed to the PLC
- Agenda - example of item discussed at a PLC meeting
- Norms - description of typical interactions
- Conflict - description of disagreement

Appendix D. Sample of NJ Student Learning Standards for Social Studies

From Strand A (Civics, Government, and Human Rights)

6.2.12.A.6.d. Assess the effectiveness of responses by governments and international organizations to tensions resulting from ethnic, territorial, religious, and/or nationalist differences.

From Strand B (Geography, People, and the Environment)

6.2.12.B.6.a. Determine the global impact of increased population growth, migration, and changes in urban-rural populations on natural resources and land use.

From Strand C (Economics, Innovation, and Technology)

6.2.12.C.6.d. Determine how the availability of scientific, technological, and medical advances impacts the quality of life in different countries.

From Strand D (History, Culture, and Perspectives)

6.2.12.D.6.a. Assess the role of increased personal and business electronic communications in creating a “global” culture, and evaluate the impact on traditional cultures and values.