Impact of Professional Learning Community Practices on Morale of Urban High School Teachers

by

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Acknowledgments

This study was possible due to the help I received from my wife Soiree Almanzar who, over the course of 5 years, endured me sitting in front of a computer to complete class assignments, research information from libraries, implement my study, and write the dissertation. I recognize that it was a true sacrifice for her, and for that I am very grateful.

I will forever remember Dr. Harry Bowman, my dissertation chair, as a compassionate, understanding, and effective teacher. During 3 years he coached me and helped me to understand research processes from different perspectives. Dr. Bowman and I communicated very frequently; his responses where always on time; and he never made me feel I was a bother. His support was a big pillar in my doctoral accomplishment.

I also thank the teachers and administrator at the research site who worked with me to complete this study. Their dedication to education was evident in every meeting and every plan that we discussed, developed, and implemented. Thanks to all of them, this study was possible.

Lastly, I thank myself. During my doctoral study, I was the principal of the lowest-performing school in my school district. My school was always an “F” and “D” school, and only during two separate years was it rated a “C” school. During my doctoral studies, I increased my school’s letter grade to “B,” decreased the student suspension rate by 75 percent, eliminated internal suspension, doubled parental involvement, and increased the Black male graduation rate from 73 to 84%.
Abstract


This applied dissertation was designed to determine the impact a planned intervention, or participants’ engagement in lesson study practices, had on teacher morale and professional learning communities within a public high school located in the Southeastern part of the United States. A review of a yearly teacher survey conducted by the district’s school board to determine teacher, parent, and student perceptions about their school demonstrated that teachers at the research site felt that morale was low. A literature review indicated that, in effective schools, teachers have a sense of belonging by having ownership of their institutional goals.

The researcher invited 93 teachers to complete the Staff Morale Questionnaire (Smith, 1971), and the Hipp and Huffman (2010) Professional Learning Communities Assessment-Revised to identify their work-site morale and Professional Learning Communities perceptions. Forty-two teachers volunteered to complete both instruments. Over the course of 4 months, teachers met once every 2 weeks for 30 minutes to develop lessons, teach lessons, observe each other, offer each other feedback, reteach the lessons, and identify the best practices as described by Stepanek, Appel, Leong, Mangan, & Mitchell (2007). At the end of the intervention, the researcher readministered the Staff Morale Questionnaire (Smith, 1971), and the Hipp and Huffman (2010) Professional Learning Communities Assessment-Revised to all participating teachers. The completed instruments were then collected and the data analyzed to determine the impact of the intervention designed to improve the morale and professional community practices of these urban high school teachers.

This results of this study show that when teachers are given the opportunity and time to work together to develop their professional learning activities and share best practices, their morale increases. The t test results for the six subscales of the Teachers’ Professional Learning Community Assessment showed that participants scored significantly higher at post than at pretest on shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions – relationships, and supportive conditions – structure. Similarly, the t test results for the three subscales of the Teachers’ Morale Questionnaire subscales mean showed that participants scored significantly higher at posttest than at pretest on leadership synergy, cohesive pride, and personal challenge. These results indicated that the intervention increased participants’ professional learning practices and teachers’ morale.
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Chapter 1: Introduction

Statement of the Problem

Finnigan and Gross (2007) stated that the No Child Left Behind Act of 2001 was based on the assumptions sanctions will motivate school staffs to improve students’ academic performance, and that most researchers have centered their studies on the effect of school reforms on student performance. Lumsden (1998) concluded that high levels of teacher morale could have a positive effect on teachers, students, and learning. Lumsden also concluded that stress could result in emotional and physical fatigue, and that new educational mandates stretch teachers to the limit. During the last three decades, the U.S. educational system has experienced revolutionary changes intended to improve student achievement levels. Legislative mandates placed increased attention on teacher performance, standardized assessments, and school ratings.

Low teacher morale is not confined to any particular state, district, or school. A 1993-1994 job-satisfaction survey among U.S. teachers conducted by the U.S. Department of Education found that secondary school teachers were least satisfied because of a lack of cooperative effort among teachers, a dearth of necessary materials, interference with teaching by routine duties and paperwork, and student apathy (Perie & Baker, 1997).

In a study that measured teacher morale in the Atlanta Public Schools, 39% of the teachers felt unsupported and unencouraged by their principals (Fraser, 1991). According to a 1996 survey of teachers in all public schools in Texas, 44% of the teachers were seriously considering leaving the profession (Lumsden, 1998). A study of North
Carolina’s school system by Cozart and Gerstl-Pepin (2002) found that teachers’ morale improved when teachers were involved in professional development and decisions.

**The topic.** Researchers (Bishay, 1996; Black, 2001; Ganihar & Hurakadli, 2005; Hipp & Huffman, 2010; Johnsrud & Rosser, 2002; Jones, 1997; Protheroe, 2006) found that teacher morale is a useful indicator of effective schools. The present study focused on developing and assessing the effectiveness of a strategy to improve teacher morale. The research site was one of the high schools with the lowest morale in the local school district, as indicated by Broward Schools Sixteenth Annual Customer Survey (2010).

The school served 1,775 students, most of whom lived in nearby neighborhoods and walked to school. Seventy-four percent of the students received free or reduced-price lunch. Students attended seven 50-minute class periods daily. Classes began at 7:30 a.m. and ended at 2:30 p.m. Parental attendance at school advisory meetings and other parental or school activities was minimal.

**Research problem.** Teacher morale was low at the research site, as evidenced by data from the school’s 2009-2010 customer survey of teachers, parents, and students. The school improvement plan indicated that the teachers lacked the necessary skills to deliver direct and explicit instruction; in addition, more than one-third of all teachers indicated that the principal did not respond to their concerns. A review of faculty council records indicated that teachers expressed their concerns about last-minute notifications and lack of support to administrators.

**Background and justification.** The researcher was an assistant principal for 6 years and was responsible for the coordination of teachers’ professional development. He
supervised professional learning communities, offered support to professional learning, attended several professional development conferences and training, developed and spearheaded a small learning community for teachers, and worked with teachers to develop lesson-study cycles.

Historically, politicians, educators, and the public tried several methods to improve the learning environment in public schools. In this process, teacher morale appears to be a constant factor that directly affects the learning environment (Black, 2001). Due to the need to redesign education, teacher morale studies have shown the importance of teacher participation in the decision-making process (Smylie, 1992). A study by Whitaker, Whitaker, and Lumpa (2000) noted that teachers’ levels of morale bring to or take from classrooms, hallways, and teachers’ planning areas a sense of energy and excitement, directly affecting how teachers feel.

**Deficiencies in the evidence.** The literature indicates neither how frequently morale should be measured to determine the progress of a plan nor for how long a plan should be implemented to produce change. There is a need for further studies focused on what specific steps (blueprints) can be applied to improve teachers’ morale.

**Subjects.** The subjects of this study were 93 teachers in a public high school in an urban area in the Southeastern United States. Table 1 provides the percentages of participants’ responses to selected questions from the school’s 2009-2010 customer survey.
Table 1

Percentages of 93 Teachers Who Supplied Each Answer in Response to Selected Questions of the 2009-2010 Customer Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you feel proud about your school?</td>
<td>42</td>
<td>58</td>
</tr>
<tr>
<td>Is your input on school decisions solicited and valued?</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>Are you satisfied with the learning environment?</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>Does the training you receive through staff-development activities help you become a better teacher?</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>Are you satisfied with work conditions?</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Does the principal respond to your concerns?</td>
<td>41</td>
<td>59</td>
</tr>
</tbody>
</table>

**Purpose of the Study**

Within the framework of Whitaker et al.’s (2000) *Motivating and Inspiring Teachers*, the purpose of this study was to assess the effectiveness of a researcher-developed intervention to improve teacher morale and to encourage a professional learning community. Data from the Staff Morale Questionnaire (Smith, 1971) and the Hipp and Huffman Professional Learning Community Assessment-Revised (2010) were used as pretests and posttests to measure teachers’ morale and the practices of professional learning communities at the research site.

**Definition of Terms**

*Morale* is the degree to which teachers feel satisfied with the opportunities given to them for shared decision making, appropriate resources for lesson studies and
professional development, and rewards they receive for their work.

*Professional learning communities* are small groups of teachers who meet frequently to identify students’ learning needs and develop strategies to improve student learning.
Chapter 2: Literature Review

Teacher Morale and Effective Schools

Mifflin (1988) described teacher morale as “a strong sense of enthusiasm and dedication to a commonly shared goal that unifies a group” (p. 769). Similarly, Bentley and Rempel (1970) stated the following:

The level of morale is then determined by the extent to which an individual’s needs are satisfied and the extent to which the individual perceives satisfaction as stemming from the total job situation. High morale is evident when there is interest in and enthusiasm for the job. What is important in morale is what the person believes and feels rather than the conditions that may exist as perceived by others. (p. D-2)

Andrew, Parks, Nelson, and The Phi Delta Kappa Commission on Teacher/Faculty Morale (1985) theorized that morale is manifested by an individual’s eagerness to pursue organizational goals and that it pervades a room similar to the way the fragrance of flowers diffuses throughout a room. Morale is not permanent, but is the result of a complex set of environmental conditions. It is a group’s confident state of mind that progressively looks to achieve an essential and shared function (Andrew et al., 1985).

The Phi Delta Kappa Commission on Teacher/Faculty Morale (Andrew et al., 1985) was established to identify internal and external school elements that successfully achieved and maintained high morale, and to identify instruments that effectively measure teacher and faculty morale. The commission reviewed approximately 300 research reports on teacher morale, surveyed 315 schools to determine their morale, and conducted case studies in 10 schools. It could be inferred from Andrew et al. (1985) that, for an organization to be effective, the members must experience a sense of belonging by
having ownership of institutional goals. In an effective organization, teachers and administrators plan faculty meetings together and share goals and values.

The Phi Delta Kappa Commission on Teacher/Faculty Morale proposed that organizations could improve morale by not interrupting their own functions (Andrew et al., 1985). According to Andrew et al. (1985), positions of absent staff members should be filled to continue normal and regular operations, and decisions should be shared and made at the lowest level possible. In an educational setting, administrators should facilitate formal and informal communication among administrators, teachers, and board members; and administrators should view themselves as assistants rather than supervisors of the teaching staff. The Phi Delta Kappa Commission on Teacher/Faculty Morale (as cited in Andrew et al., 1985) indicated that, in schools with good teacher morale, administrators promote a sense of belonging among staff, offer opportunities for teacher professional development, and maintain open and continuous organizational communication.

The Phi Delta Kappa Commission on Teacher/Faculty Morale proposed that the most successful companies have organizational structures, management styles, and service philosophies that boost morale (Andrew et al., 1985). Excellent companies give employees responsibilities, praise, and respect, and promote a sense of belongingness, togetherness, achievement, self-esteem, and group esteem (Andrew et al., 1985). Kinsey (2006) theorized that, if teacher attitude is not positive and morale is low, student achievement could be affected negatively. The most prevalent predictor of student success is teacher attitude, and teachers who feel connected to their school remain
dynamic and contributing members of the school. According to Black (as quoted in Kinsey, 2006),

Where teacher morale is high, students typically show high achievement, researchers have found. But when teacher morale sinks, achievement drops, and other problems come to the surface. Low teacher morale usually leads to indifference toward others; cynical attitudes toward students; little initiative when it comes to preparing lessons and other classroom activities; preoccupation with leaving teaching for a better job; increased use of sick leave; and bouts of depression. (p. 149)

McLaughlin, Watts, and Beard (2000) suggested that, when teachers participate in research teams, they support changes, engage in action research, and analyze student work. Their study examined how student learning could improve as teachers engaged in analyzing student work, brainstorming possible research questions, and sharing results of data analysis. McLaughlin et al. study found that the efforts of the team studying classroom practice eventually lead to the entire school becoming more dynamically involved. McLaughlin et al. concluded that for action research to be successful, participants need to identify the parts they would play in the collaborative process and need to be honest about the help they do or do not need from one another.

Willis and Varner (2010) argued that teachers are more productive when they are provided opportunities to participate in the decision-making process and when they are praised for jobs well done. They indicated that teacher morale could be an important factor for student academic success, and that a lack of teacher participation in making decisions and a lack of recognition could decrease teachers’ motivation, thus affecting their professional performance. Similarly, Huysman (2008) indicated that motivation, effort, and job satisfaction can be linked to teacher morale.
In a study that analyzed teachers as change agents and teacher morale in high school, Chirayath (2009) offered a theoretical framework of the conceptual dimensions of school climate and teacher morale. She indicated that a school’s overall performance is determined by its organizational climate and that climate is a concomitant of interpersonal interactions. Chirayath also stated that school climate is inherent in the esprit de corps of a group, the sense of meaningfulness of the group, and the kind of interpersonal interaction in the group.

Chirayath (2009) identified hindrances to teacher morale as burdening teachers with routine duties, administrative requirements teachers consider unnecessary, dictatorial management style, and administrators who do not value teachers’ feedback. Her study found that the success of a school depends upon the morale of the teachers and that high morale is found in teachers who are secure, productive, and cooperative; who take part in staff meetings; and who have a positive attitude toward problems. Teachers who have low morale tend to be absent from work, committee meetings, and seminars. They leave the school campus during free periods and seldom give assignments and homework to students.

In another study, Tye and O’Brien (2002) found that teacher morale suffers when teachers are required to administer unnecessary tests, when public announcements over the school intercom interrupt instruction, and when students are removed from class during instructional time for various reasons. They also found that a lack of trust in the professionalism of teachers and anxiety about national educational standards have serious
implications for the nation, as talented teachers leave the classroom and those who remain feel worn and discouraged.

Maintaining teacher morale is important because it can have a positive effect on students. Learning and morale can have implications for the health of the organization and the health of the teacher (Lumsden, 1998). According to McKnight, Ahmad, and Schroeder (2001), morale is the degree to which an employee feels good about his or her work environment. McKnight et al. distinguished morale from motivation: *Motivation* refers to readiness to work; *morale* is a broad term that includes intrinsic motivation, job satisfaction, organizational commitment, and pride in one’s work. Their morale model theorized that employee-manager closeness is a determining factor of the degree of employee morale and perceived harmonious teamwork. McKnight et al. offered three hypotheses:

Employee-management relationship closeness will moderate the linkage between management controls and employee morale. Employee and supervisor relationship closeness directly affected employee morale.

Employee-management relationship closeness will be positively related to employee morale. Relationship closeness serves as a morale moderator.

Employee morale and employee-management relationship closeness will each be positively related to perceived harmonious teamwork. (p. 2)

In an article that addressed student achievement, teacher attitudes, and an environment that fosters learning, Miller (1981) suggested the social climate of the school and morale of the staff can have a positive effect on students’ attitudes and learning. He stated that groups that exhibit a high degree of cohesiveness, think well of their leaders, and agree on their objectives are manifesting high morale. Miller identified
a school with high morale as one in which the staff looked forward to going to work, showed concern for the direction of the school and program, actively participated in school functions, and willingly performed various school tasks. Staff members supported the school goals and were actively engaged in improving school-community relations.

Miller stated,

Administrative behavior can contribute to staff morale by praising and giving credit when it is warranted, supporting the teacher in conflicts with students and parents, giving special attention to the teacher’s physical comfort, assuming responsibility for their actions, [and] demonstrating that they are knowledgeable about current school methods, materials, strategies, and practices. (p. 1)

In a study of 400 teachers to determine teacher morale, Hand (1948) found that about 50% of the teachers reported “high” or “very high” morale (p. 279). Those who reported high morale felt included in the school team, while more than half of those with low morale reported that they were not wanted in the school and did not feel that they were part of the school team. According to Hand, two-thirds of the teachers with high morale said they were frequently consulted regarding school policies, and four-fifths of the teachers with high morale felt free to utilize teaching methods and materials they believed to be most beneficial to students’ learning.

According to Andrew et al. (1985), a school with high morale engaged teachers in professional development and had a system for recognizing teachers during faculty meetings, parent-teacher meetings, and graduation exercises. Andrew et al. associated low morale with frustration, alienation, and powerlessness. Cliques create low morale because they are groups that create divisiveness and communicate only with certain groups rather than the entire staff.
Each response that Andrew et al. (1985) recommended as a solution to low teacher morale had a sequence of actions a staff could implement to improve morale. The school leader—a key factor in determining the morale of the organization—should develop interpersonal relationships by taking necessary steps to secure teachers’ jobs, establish mutual confidence and trust, and open channels of communication (Andrew et al., 1985). Ensuring that teachers have the required supplies to teach could minimize their frustration. Leaders in schools with good morale have a clear vision and provide feedback on progress toward the attainment of goals.

Current educational reforms hold school administrators and teachers accountable for each student’s academic performance. Standardized assessments and data-driven learning practices serve as tools for principals to use to monitor teachers’ performance microscopically. This monitoring could result in a deterioration of principals’ and teachers’ relationships and of organizational morale. According to Johnsrud and Rosser (2002), researchers agree that “in general, maintaining high levels of morale is considered vital for optimum performance” (p. 525). The findings of Jones (1997), Johnsrud and Rosser, and Protheroe (2006) demonstrated that specific environmental conditions and faculty practices increase or decrease teachers’ job satisfaction.

In a construct validation of their Staff Morale Questionnaire, Williams and Lane (1975) described morale as a persistent, ever-elusive, chameleon-like concept inseparable from its environment. According to Johnsrud and Rosser (2002),

... in an examination of 10 college campuses with the highest morale, high morale was attributed to (a) distinctive organizational cultures, (b) participatory
leadership (greater involvement of faculty in decision making), (c) a sense of organizational momentum, and (d) faculty identification with the institution. (p. 525)

Schmoker (2006) outlined professional practices commonly found in effective schools. He indicated that teachers maintain grade books with evidence that essential standards are being taught and team lesson logs or learning logs that describe lesson processes, units, and assessments used and refined to improve learning. He posited that, in effective schools, leaders improve morale by recognizing and praising teachers’ willingness to work effectively in teams, develop team norms and protocols, focus team meetings on instruction, and celebrate measurable success in assessments or single lessons.

Marzano (2007) indicated that, in effective schools, teachers establish and communicate learning goals, track student progress, and celebrate success. They also utilize formative and summative assessments to help their students master specific standards. Marzano demonstrated achievement gains that were based on the number of assessments students completed over a 15-week period. Marzanot (2007) found that “providing one assessment in 15 weeks resulted in an effect of 34% learning gain. On the contrary, providing 15 assessments in the same period of time resulted in an effect of 66% learning gain” (p. 13).

Teacher Morale and Professional Learning Communities

Protheroe (2006) noted that principals can build teacher morale by providing teachers with continual feedback, facilitating meaningful professional development, giving teachers the opportunity to work collaboratively with peers, involving teachers
meaningfully in decision making, providing resources, keeping the assignment of extra duties to a minimum, and publicly supporting and recognizing teachers’ hard work. Postell (2004) found that monthly parent-teacher activities, frequent time off for teachers to observe other teachers, and sharing best practices by teachers during planning days improved morale.

Hipp and Huffman’s study (2010) of professional learning communities found a crucial relationship between collective learning and application, and shared personal practice. Collective learning and application pertain to the following:

1. Sharing information.
2. Seeking new knowledge, skills, and strategies.
3. Working collaboratively to plan, solve problems, and improve learning opportunities.

Through shared personal practice, peers offer knowledge, skills, and encouragement, as well as providing feedback to improve instructional practices, sharing outcomes of instructional practices, and coaching and mentoring. Hipp and Huffman (2010) found that, without supportive conditions, it is impossible to build a professional learning community.

Hipp and Huffman (2010) stated that the primary reason school reforms don’t work is due to the failure to create a school vision that supports teachers’ development and professional learning communities, both of which are critical to the success of school reforms. Lumpe (2007) noted that collaboration is at the center of professional learning communities; however, teachers normally work in isolation. Faculty meetings usually
center on disseminating information to teachers. In professional learning communities, teachers develop a sense of collegiality and learn from each other.

To determine the effect teacher morale had on the learning environment of schools in India, Ganihar and Hurakadli (2005) studied 56 schools. They found that there was a positive relationship between teacher morale and a productive organizational environment. In order to improve the organizational climate, all individuals should center their efforts on promoting the morale of the teachers (Ganihar & Hurakadli, 2005).

**Working Conditions Affecting Teacher Morale**

Sylvia and Hutchinson (as cited in Bishay, 1996) focused their study of 167 teachers on the teachers’ motivation. According to Bishay (1996), they found that, when teachers had the freedom to try new ideas, their motivation and degree of responsibility increased. Teachers can change morale by discontinuing routines and doing the unusual, such as planning for next steps in professional development, developing a network of individuals, and investing fully in tasks at hand as a route to renewing their professional focus (Berman, 1987).

Studies by Black (2001) and Vail (2005) identified work conditions that teachers described as detrimental to their work satisfaction. Extrinsic rewards are less satisfying than intrinsic rewards (Black, 2001). Reporting on her analysis of 88 high school teachers’ feedback, Vail found that shortage of paper, lack of copy machines, and lack of instructional materials demoralize teachers. She posited that teachers who are satisfied with their work conditions would do a better job of teaching than their dissatisfied colleagues. Previous research (Finnigan & Gross, 2007; Johnsrud & Rosser, 2002;
Lumsden, 1998; Miller, 1981; White & Stevens, 1988) suggested a strong link between student achievement and teachers’ morale.

Finnigan and Gross (2007) noted that accountability policies and tangible rewards had only a mild influence on teacher motivation. Teachers felt better when students’ data demonstrated learning. Teachers perceived teacher support, professional development, and teamwork as more rewarding and helpful than other variables specified in the No Child Left Behind Act of 2001.

Researchers found that administrators have a direct effect on staff morale. As cited by Jones (1997), Maslow’s theory of motivation and Argyris’ theory of the restraints of bureaucracy on individuals indicate a connectedness between participation in decisions and an individual’s morale. Other researchers (Berman, 1987; Smylie, 1992; Vail, 2005; Young, 1998) noted that administrators play a major role in staff morale. Hernandez and Seem (2004) reported on teacher morale and school violence. They found that schools where faculty members do not communicate, and that have administrators who do not work together with teachers to solve problems in the learning environment, have lower teacher morale and higher student disorder than schools in which faculty members communicate and administrators work with teachers to solve problems.

**Teacher Morale and Making Decisions**

Jones (1997), who designed a study to investigate the relationships among teacher morale, participative decision making, and student achievement, found that individual teachers in schools that embraced participative decision making reported higher morale than teachers in schools that did not. Jones suggested a link between
participative decision making and morale. Hoy and Tarter (2010), in a study that identified and examined a set of heuristics that worked for school decision makers, indicated that, regardless of the nature of the organization, decision-making processes are generally similar and that successful decision making is based on matching the correct model of decision making with the appropriate situation.

Weiss (1992) conducted a study in which six schools that had a group decision-making process were compared with six schools that did not have a group decision-making process. The study found that, when teams engaged in decision making, staff morale improved, interaction between teachers and principal improved, and opportunities for teachers to share knowledge increased. Researchers (Ellis & Fisher, 1994; Harvey, Bearley, & Corkrum, 1997) described six core steps in decision making that Hill et al. (1986) identified as the ideal decision-making process. They agreed that, to solve problems, a group works collaboratively to (a) think and define the problem; (b) create a statement of the problem; (c) clarify, combine, and document possible solutions; (d) choose from among possible solutions; (e) choose a solution; and (f) implement and review the solution.

The Ellis and Fisher (1994) model does not require the participation of an organizational leader. Ellis and Fisher indicated that many groups have a leader who is determined by the group members themselves and not imposed by an authority outside the group. Additionally, the Ellis and Fisher model offers groups directions to improve group cohesiveness and productivity. It also offers comprehensive group activities that include guiding directions and questions the group can use for generating ideas, defining
and limiting the problem, analyzing and gathering information, establishing decision criteria, discussing possible solutions, determining the best solution, implementing a solution, and reviewing the solutions.

Fox et al.’s study to compare the climates of four Japanese high schools (as cited in Hattler & Taylor, 1992) found that respect, trust, high morale, opportunities for input, continuous academic and social growth, cohesiveness, and school renewal determined the quality of school climate. Treating teachers in ways that empower them (e.g., involving them in decisions about policies and practices) and acknowledging their expertise can sustain teacher morale (Hattler & Taylor, 1992).

Hart, Wearing, Conn, Carter, and Dingle (2000) developed the School Organizational Health Questionnaire, an instrument that measures teacher morale and organizational climate. Hart et al. administered the instrument to 615 teachers in 18 primary and 26 secondary rural Australian schools. Hart et al. suggested that, in order to identify the causes of teacher morale, it is necessary to assess morale and its determinants. Organizational leadership and communication are important components of teacher morale that affect teachers’ psychological condition (Hart et al., 2000). Hart et al. argued that schools are formal organizations and, as such, must be concerned with human resource management issues, such as decisions, provision of feedback to staff, goal congruence, peer and leadership support, policy formation, professional development, and role clarity. According to Hart et al., “the correlations between morale and organizational climate range from .48 to .85, suggesting that there was a moderate to
strong relationship between morale and the various dimensions of organizational climate” (p. 8).

In another study that examined the association between the school and staff, Bevans, Bradshaw, Miech, and Leaf (2007) theorized that staff members’ perceptions of the school environment could influence their behavior and that staff members who perceive their school to be more organizationally healthy commit to work harder. Bevans et al. found that “collegial leadership, staff affiliation, academic emphasis, and student performance are predictive factors of staff and school level correlates of organizational health” (p. 297).

Warren and Wait (2001) posited that first-year teachers face many challenges, first-year teachers could be overwhelmed, and words of encouragement from administrators could boost new teachers’ morale and motivation. They recommended that teachers be complimented for incorporating specific technology resources. School leaders should identify specific areas in which new teachers have made improvements while reassuring them that they can do the job, offering them the opportunity to reflect and learn from their mistakes, reinforcing the importance of continuing to try and not giving up, offering unsolicited assistance, and reminding them that they are appreciated and important to the school team (Warren & Wait, 2001). The praise should be honest and based on observations of what the teacher is doing well (Warren & Wait, 2001).

Purkey and Smith (1983) conducted a study to identify effective schools’ components and found that, in effective schools, teachers share a sense of collegiality and a sense of community experimentation with teaching. In effective schools, teachers are
involved in decisions, and they participate in professional development (Purkey & Smith, 1983). Coyle and Witcher (1992) indicated that, in effective schools, teachers are satisfied with their jobs. Effective schools have high teacher morale (Coyle & Witcher, 1992). In effective schools, teachers experience a collegial atmosphere, are involved in decisions, and experiment with teaching (Coyle & Witcher, 1992). Downer (1991) found that, in effective schools, teachers get involved in designing instructional strategies and participate in making decisions and in collaboration.

In a study that assessed teacher satisfaction, dissatisfaction, morale, and retention in an English education system, Rhodes, Nevill, and Allen (2004) indicated that motivation and morale are different. Morale was described by Rhodes et al. as a state of mind that is based on things an individual perceives as significant and that affect working conditions. Ormrod (2012) noted that “motivation revolves around the accomplishment of certain goals, with such goals influencing both the choices people make and the consequences they find reinforcing” (p. 466). According to Rhodes et al., job experiences that are satisfying or dissatisfying to an individual affect both morale and motivation.

**Teacher Morale and Professional Development**

DuFour and Eaker (1998) noted that, in effective schools, the principal is not dictatorial. Instead, he or she is someone who works collaboratively with the faculty to create a shared vision, involves the faculty in the school’s shared decision process, empowers individuals to act, and offers faculty members professional development to master their teaching skills to help the school reach its goals and objectives.
Changing a school culture is not an easy task. Huffman (2003) stated that changing a school culture can be difficult and that second-order organizational change, unlike first-order or surface change, requires all stakeholders to work cohesively to alter the school’s structures, goals, and roles. She noted that it is important to create a vision that is based on (a) people’s continual expansion of their capacity to create desired results, (b) collaboration, and (c) teachers’ pursuit of clear and shared purposes.

Lee (2007) noted that professional development programs share a common goal and that teachers work collaboratively to increase their teaching skills to improve student learning. DuFour and Eaker (1998) identified lack of time for collaboration as a barrier to teacher collaboration. Administrators can secure substitute teachers to facilitate teachers’ collaboration and can allocate funds to send teachers to workshops. Lee (2007) noted that, in a culture that nurtures effective teaching, teachers are given opportunities to deepen teaching skills.

Hipp and Huffman (2010) indicated that the professional teaching and learning cycle is an effective strategy by which to develop professional learning communities. The cycle consists of six steps:

1. Teachers work in teams to examine and discuss student achievement data and learning expectations.

2. Teams investigate research-based strategies and necessary resources to promote student mastery.

3. Teachers work collaboratively to develop a research-based lesson.
4. Teachers teach the planned lesson, note success and challenges, and collect evidence of student work.

5. Teachers examine the standards and analyze student work.

6. Teachers reflect on the student work and discuss alternative instructional strategies or modifications to the original instructional strategies.

According to Stepanek, Appel, Leong, Mangan, and Mitchell (2007), lesson study is a powerful professional experience that helps teachers design student-centered lessons and encourage students to share, discuss, and debate their solutions and errors while transforming student learning. Teachers also develop a shared vision of what good teaching is and begin to develop consistency in teaching throughout the school. Lesson study is a professional learning practice gaining momentum in the United States.

Stepanek et al. (2007) described a systematic approach that teachers and administrators can follow to develop and implement lesson studies. The activities of this approach involve small groups of teachers who meet to make a case for lesson study, lay the ground work for lesson study, start the lesson-study cycle, plan the research lesson, teach, observe, debrief, revise, reteach the lesson, reflect, and share results (Stepanek et al., 2007).

**Effective Professional Development Practices**

Lesson study is a school-based, collaborative, professional development process. Japanese teachers meet regularly over long periods of time to work on the design, implementation, testing, and improvement of a specific lesson (Stigler & Hiebert, 1999). The long-term results of lesson study are relatively frequent teacher collaboration,
improvement of student achievement, and teachers’ use of relatively high levels of teaching and learning strategies (Campbell, 2002). According to Chassels and Melville (2009), lesson study has grown rapidly in the United States since 1999 and became the focus of conferences, reports, and published articles.

Berry, Daughtrey, and Wieder (2010) conducted a study of professional development through the Center for Teaching Quality Network, which had previously undertaken a national survey of teacher leaders. According to Berry et al., “researchers have found that teachers who participated in structured dialogues to analyze student work and solve problems in their schools are more likely to change their teaching practices and improve student achievement” (p. 10).

Berry et al. (2010) also found that interactive professional development produces gains in teachers’ effectiveness, including gains in the areas of collaboration and social support. Knowles, Holton, and Swanson (1998) noted six important rules for supporting professional development:

1. Learner’s need to know: why, what, and how.
3. Prior experience of the learner: mental model.
4. Readiness to learn: life related.
5. Orientation to learning: problem centered
6. Motivation to learn: intrinsic value, personal payoff (p.149).

Byrum, Jarrell, and Munoz (2002) indicated that lessons could be evaluated through an observation instrument that offers participants opportunities to critique the
lesson and give feedback. Each observation of 55 minutes in duration offers direction for subsequent observations. The observer collects notes about the instructional activities, student and teacher interactions, and the implementation of the lesson plan. Byrum et al. found that teachers learn management techniques, teaching strategies, and learning practices by observing each other. According to Young (1998), “teacher morale is most correlated with professional interest, affiliation, and school mission consensus” (p. 8).

In a study centered on evaluating the effectiveness of a two-year reading-professional development program at elementary schools located in a high-poverty area of the southeastern United States, Gilrane, Russell, and Roberts (2008) noted that teachers need support to design effective instruction strategies. They found that the most powerful way to reduce learning gaps is to provide teachers with access to highly effective classrooms. Effective teachers thematically design their teaching process and implement teaching strategies, such as read out-loud, independent, shared, guided reading, writing, and chant (Gilrane et al., 2008).

Hall and Williams (2000) indicated that teachers utilized assessment results to offer students enrichment in areas identified as deficient. The participants were given the necessary funds and time to attend training, and were offered the necessary resources and time to collaborate. The participants attended a literacy institute to create a common focus and, throughout the school year, they were given additional time off to attend professional development sessions. Rhodes et al. (2004) theorized that “professional development is widely thought to offer opportunity to teachers and in so doing is likely to result in greater job satisfaction” (p. 73).
Gilrane et al. (2008) collected data by interviewing teachers, recording and transcribing discussions, observing teachers, scoring student achievement, questioning teachers, and surveying teachers. Their study found that teachers valued having a voice in their own professional development; having structure; having materials, resources, time, and space for collaboration; feeling supported by leaders; having time to discuss students’ assessment data; and celebrating good news about learning and teaching. According to Gilrane et al., these results were achieved by giving teachers flexibility in designing their professional development. Teachers attended workshops, observed classes, read professional development books, video recorded teaching sessions, and attended teaching conferences (Gilrane et al., 2008).

In another study, Kratzer and Teplin (2007) stated that, although national efforts have been dedicated to improving student achievement, only 35% of fourth-grade students and 29% of eighth-grade students achieved at grade-level proficiency in 2005 as determined by Perie, Grigg, and Dion’s (2005) National Assessment of Educational Progress. Kratzer and Teplin’s study was conducted over a two-year period in southern California. Twenty-seven teachers from the central office of a school district served as facilitators during Year 1; and during Year 2, teachers who were trained during Year 1 facilitated 28 teams. Jones (1997) wrote, “The weight of the evidence tends to support the notion of a link between professional development and morale” (p. 77).

In a review of several literature reviews focused on professional development, Kratzer and Teplin (2007) determined that the single greatest determinant of learning is instruction and that raising the level of classroom instruction directly affects student
learning. Consequently, teachers’ knowledge and skill are fundamental to students’ learning. Educators need to observe new strategies in action in order to make them applicable and practical for classroom use (Elmore, 2000).

Kratzer and Teplin (2007) noted that their study was initiated on the basis of observations of a lack of curricular articulation, provision of limited opportunities for teachers’ collaboration, and a dearth of opportunities for teachers to study effective learning practices. Jones (1997) found that teachers with the most experience in the classroom, teachers with the most seniority on campus, and teachers working in a large school reported the highest morale. Tallerico (2005) asserted that instilling the desire to observe oneself through reflection or watch others model through experimentation led to the most effective action research and assessment models linked to professional development.

O’Hara and Pritchard (2008) posited that professional development practices should be guided by interactive sessions, opportunities to connect new information to subject content, opportunities to share examples, and online sessions that simulate face-to-face interaction. They concluded that successful professional development depends on the participants’ ownership of their own learning. Tallerico (2005) indicated that active engagement alone does not result in learning. According to Tallerico, “Adults are most interested in learning when the activities are relevant to concerns, challenges and solving work related problems” (p. 56).

According to Tallerico (2005) and O’Hara and Pritchard (2008), learning improves when educators engage in effective professional development. Byrum et al.
(2002) indicated that administrative support is imperative to successful professional
development. Administrators and teachers need to receive professional development and
training to meet the needs of both students and teachers effectively. Stoelinga (2010)
stated that principals who have effective professional development systems in place have
the potential to improve students’ efforts. Tallerico indicated that, during professional
development, participants must actively engage in hands-on activities, the activities must
be relevant to their curriculum, and teachers must be offered the necessary support, such
as time to collaborate, space, and resources. Teachers enjoy directing their own
professional development (Byrum et al., 2002).

**Motivation and Morale**

Teacher motivation appears to be the fabric that supports effective teaching and
learning practices. According to Ormrod (2012), “motivation is an internal state that
arouses an individual to action, pushes in a particular direction, and keeps an individual
engaged in certain activities” (p. 426). Similarly, Chen, Chen, and Zhu (2012) found that
motivation sustains and instigates goal-directed activities involving certain behavior,
energy, and direction.

Maslow’s (1943) theory of human motivation characterized motivation as the
state of human satisfaction of hunger, safety, love, esteem, and self-actualization.
However, according to Maslow, these factors are partial and superficial answers to
motivation. Maslow indicated that what people desire to know and understand are
personality needs as much as physiological needs. He suggested that motivation varies
depending on individual preferences. To some individuals, self-esteem seems to be more
important than love; to others, creativity is more important than anything else. Others could give up achievement of goals in the absence of success. People who attempt to be loved by others or to obtain employment but continuously fail to be successful could give up their expectations.

In a study to determine learner motivation as an academic enabler for school success, Linnenbrink and Pintrich (2002) stated that cognitive models of motivation identify several types of motivation, such as self-efficacy, attribution, intrinsic motivation, and goal orientation. They suggested that people who expect success in completing a task work harder than those who do not.

Linnenbrink and Pintrich (2002) stated that attribution is the attempt to understand why events occur. For instance, failing a test could be attributed to failure to study. Attribution is useful for teachers because their perceptions of the causes of events can be changed through feedback. According to Linnenbrink and Pintrich, intrinsic motivation—engagement in tasks for their own sake—prevails over extrinsic motivation. By contrast, “extrinsic motivation is to engage in activities as a means to an end” (Linnenbrink & Pintrich, 2002, p. 314).

Seyler, Holton, Bates, Burnett, and Carvalho (1998) conducted a study to examine the relationship of motivation to the transfer of skills and information received during professional development. They made two assumptions:

1. Training is intended to change behavior or teach new behavior to individual trainees.
2. From a cognitive perspective, individuals base behavioral choices on whether they perceive the training to be helpful to them in doing a better job.

Individuals also perceive motivation on the basis of the organizational climate and supervisor support (Seyler et al., 1998). Seyler et al. (1998) found that motivation is directed toward pleasure and away from pain. They indicated that individuals who enjoy learning are motivated to attend and participate in training and to practice what they learn. Seyler et al. found correlations between motivation to transfer new learning and opportunity to perform, between motivation to transfer new learning and peer support, and between motivation to transfer new learning and organizational commitment.

Finnigan and Gross (2007) implied that the value teachers place on their professional goals for student achievement increases teachers’ efforts, motivation, and morale. They indicated that teacher performance in an organization is a multiplicative function of ability and teacher motivation. In low-performing schools, the importance of motivation is due to its connection to school improvement. Finnigan and Gross indicated that Vroom’s expectancy theory (1964) is a valence-centered, cognitive model of motivation. The degree of attraction to, or interest in, a particular outcome plays an important role in motivation.

Transfer Learning

The objective of professional development is for teachers to transfer learning with the expectation that the more knowledgeable they are, the better they can assist students with mastering the intended curriculum. Schools, districts, and states spend a large amount of money to offer educators professional development. If a trainee is not
motivated to transfer learning, his or her professional development cannot be productive. The trainee’s attitudes, interests, values, and expectations can affect training effectiveness (Seyler et al., 1998).

A common expectation of trainers is that trainees will transfer new information to improve performance and contribute to the organizational goals and objectives (Nelson & Dufour, 2002). Nelson and Dufour (2002) posited that the transfer of learning ensures that the knowledge and skills acquired during learning interventions are applied on the job. They stated that humans learn by getting engaged in psychomotor activities, observing others, and simulating what they observe to develop new skills.

In a study focused on identifying the motivational dimensions of teacher performance, Mustafa (1996) found that, in the past, teachers attributed more importance to intrinsic motivation and less to extrinsic motivation. He stated that two teacher surveys that were conducted independently—one in 1964 and the other in 1984—found that teachers place more importance on intrinsic reward than on extrinsic reward. Mustafa posited that teachers’ occupational rewards—among them income, prestige, and power over others—should be classified as extrinsic. On the contrary, intrinsic rewards are psychological and vary from person to person. Mustafa stated that fewer teachers place high value on income than identify opportunities to study, plan, master classroom management, and associate with colleagues and students. Similarly, “the respect teachers perceived to receive from others and the opportunity to wield some influence over the organizational decisions were identified as more important than economic income” (Mustafa, 1996, p. 58).
Meaningful Learning

According to Bretz (2001), meaningful learning occurs when new information is purposefully connected to the learner’s existing knowledge. He stated that in order for meaningful learning to take place, three conditions must be satisfied:

1. The learner must have some prior knowledge relevant to the new information.
2. The content to be learned must consist of important concepts relative to existing knowledge.
3. The learner must elect to incorporate the new learning into his or her existing knowledge.

Schellings and Broekkamp (2009) indicated self-regulated learning is an adaptive process that requires the learner to adapt learning strategies for attaining different learning goals. Schellings and Broekkamp stated that teachers who demonstrate self-regulated learning prepare for future performance. During planning time, they analyze student-learning data, identify specific benchmarks students must master to be successful in class, and use the information fellow teachers have identified as best practice.

Learning Styles

The term learning style refers to different people’s learning of information in different ways (Pashler, McDaniel, Rohrer, & Bjork, 2008). Pashler et al. (2008) suggested that learning occurs if instruction is designed to meet individual needs and learning styles. Instructional design should address each of Gardner’s (1983) multiple intelligences (as cited in Pashler et al., 2008): visual-spatial, bodily kinesthetic, musical, interpersonal, intrapersonal, linguistic, and logical-mathematical.
Kolb (1981) theorized that learners need four different kinds of abilities. First, Concrete Experience (CE) abilities are based on observations and reflections. The learner must be able to involve themselves in experiences fully, openly, and without bias in new experiences. Second, the Reflective Observation (RO) learner must observe and reflect on experiences from different perspectives. Third, the Abstract Conceptualization (AC) learner must be able to create concepts that integrate their observations. Fourth, the Active Experimentation (AE) learner must be able to use theories to make decisions and solve problems.

In a study to analyze the dimensions of learning styles, Felder and Silverman (1988) stated that when learner’s style is not addressed, the student becomes disengaged and gets bored. Gregorc (2009) developed the Style Delineator, which is a research-based, self-analysis instrument designed to help reveal a special set of mental qualities. Gregorc identified four learning styles: (1) Concrete Sequential (practical, concrete world); (2) Abstract Sequential (probable, abstract world); (3) Abstract Random (potential, abstract world of feelings); and (4) Concrete Random (possible, concrete world, activities viewed through insight). The instrument requires respondents to rank a series of words in order to assess their capacity in each of the four learning styles.

In a literature review focused on learning styles, O’Neal (1990) stated that when instructors match learning activities to students’ learning styles, students’ achievement increases. Guild (1990) stated, “we know that learning styles exist and we know that it’s possible to apply it to all areas of education-curriculum, instruction, leadership, staff development, and counseling.” (p.11)
Motivation Theory Framework

The literature reviewed based on motivation demonstrated that Maslow’s theory of motivation is centered in the human physiological aspect of satisfying individual needs, such as safety, survival, affection, relationships with others, need to feel good about oneself, and need to learn new things for self actualization (Maslow, 1943). Contrarily, Whitaker et al. (2000) theorized that individuals could be intrinsically motivated by complimenting them, allowing someone to have autonomy in their duties, and providing recognition. Whitaker et al. also suggested that motivating people intrinsically promotes morale. He also stated that the greater impact on morale is achieved with things educators have the ability to control, such as recognition for a job well done. Educational leaders have less control on tangible matters such as salaries and, according to Whitaker et al., tangible matters have a lesser impact on morale (p. 11).

According to Ryan and Deci (2000), self-determination theory supports the proposition that all human beings have a fundamental psychological need to be competent, autonomous, and related to others. Satisfying these needs is imperative to facilitate optimal performance, social development, and well-being. Ryan and Deci posited that competence facilitates internalization; relatedness is the need to feel belongingness and connectedness with others; and autonomy predicts more exploratory behavior.

Ryan and Deci (2000) argued that motivation could be extinguished when people are subjected to controlling social conditions. Conversely, motivation could be enhanced when conditions foster autonomy and self-regulation. “The fullest representations of
humanity show people to be curious, vital, and self-motivated. At their best, they aspire to learn” (Ryan & Deci, 2000, p. 68).

Ormrod (2012) stated that self-determination theory supports the idea that people naturally want to feel competent, and that they want to have autonomy regarding the things they do and the direction their life takes. Ormrod also indicated that learners are intrinsically motivated when they have a sense of self-determination and when conditions support the learners’ feelings of self-determination. Under these circumstances, learners engage in activities for longer periods of time, think creatively about tasks, take on challenges that support long-term learning, and achieve at higher levels. On the other hand, Ormrod said that “when environmental circumstances limit people in their decisions, and when their choices are limited, people may comply with external demands, but are not intrinsically motivated” (p. 437). Motivation projects energy, direction, and persistence (Ryan & Deci, 2000, p. 69).

According to another study by Deci and Ryan (2008), the most central distinction in the self-determination theory is between autonomous motivation and controlled motivation. Deci and Ryan stated that when people experience:

autonomous motivation they experience a sense of self-endorsement of their actions. On the contrary, controlled motivation consists of both external regulations, in which behavior is influenced by reward or punishment, and introjected regulation, in which actions are internalized and motivated by approval motive, avoidance, shame, self-esteem, and ego-involvement. (p. 182)

Deci, Vallerand, Pelletier, and Ryan (1991) found a connectedness between self-determination and education. The authors stated that when students learned text material in order to put it to use, they reported higher intrinsic motivation for learning and
demonstrated higher learning levels than students who learned the content to be tested.

Similarly, Whitaker (2000) stated that motivational factors such as achievement, responsibility, positive reinforcement, and autonomy promote teacher’s job satisfaction.

**Research Questions**

- **Research Question 1.** What are the effects of a researcher-developed intervention on high school teachers’ morale?

- **Research Question 2.** What are the effects of a researcher-developed intervention on high school teachers’ professional learning community practices?
Chapter 3: Methodology

Participants

The researcher reviewed the 2009-2010 district schools customer survey results and randomly selected the research site at which to conduct the study. The target subjects for this study were 93 high school teachers who worked at the research site. All teachers were state certified, with 14 holding a master’s degree and two having attained doctoral degrees. The teachers’ demographics demonstrated that 15% had taught at the research site for less than 5 years, 50% between 5 and 10 years, and 35% had been teaching there for more than 10 years. The teachers’ age distribution demonstrated that 10% were between the ages of 25 and 35, while 60% were between 35 and 45, and 20% were between 45 and 55; the remaining 10% were 55 and older. Additionally, 50% of the teachers were White, 35% were Black, and 15% were Hispanic.

Most of the teachers lived in nearby neighborhoods. Teachers’ work hours were from 7:15 a.m. to 2:45 p.m. A pretest asked participants to identify their gender, age, years of experience teaching, number of years working at the research site, degree level, subject matter taught, and race. To protect the privacy of the human research subjects, the researcher issued each participant who agreed to participate in the study a code to complete the instruments. The codes and the data collected were kept in an encrypted, password-protected portable hard drive. The codes and the instruments were kept in separate files. Subjects were also supplied with the researcher’s work phone number and email address for them to use if they had questions about the study. The school administrator did not have access to participants’ test responses. Classapps Professional
Survey required an administrative password to access participants’ responses. The researcher was the only individual to know the Classapps Professional Survey administrative password. To anonymize the pretests and posttests, the school administrator and the researcher used a shredding machine to destroy all identifiers after the study was completed. A participant’s responses to the pretests and posttests were not exposed to other participants or the administrator. The superstar teachers were considered to be administrators and were not included in the number of participants. Superstar teachers are those who willingly conduct professional development activities, coach new teachers, report the least amount of student misbehavior in their particular classroom, and are requested most often by parents and students. According to Whitaker et al. (2000), the superstar teachers are those who represent the top 3% to 10% of teachers in a school. Many schools only have one or two and a few schools have eight to 10 people who fall into a superstar category. Whitaker et al. (2000) also indicated that superstar teachers are the students’ favorites and parents often ask that their children be placed in the superstars’ classroom. The researcher utilized the participants’ test identifier codes to compare the pretests and posttests responses.

**Instruments**

The Staff Morale Questionnaire (Smith, 1971) was used to measure teacher morale (see Appendices A and B). It was used to evaluate three factors of morale:

1. Cohesive pride: staff sense of cooperativeness and working together.

2. Personal challenge: a group’s incentive derived from utilizing potentiality for freedom.
3. Synergy: a group’s energy generated and released by leaders.

The instrument used a 4-point scale ranging from 1 to 4. The synergy subscale had 10 items, the cohesive-pride subscale had nine items, and the personal-challenge subscale had five items. The instrument’s reliability was reported by Williams and Lane (1975) to be .71. Responses on each of the three subscales were scored to derive three distinct subscale scores. The researcher analyzed the scores on each subscale to determine participants’ morale as measured by the respective subscales.

Hipp and Huffman’s (2010) Professional Learning Community Assessment-Revised instrument was used to measure professional learning communities’ practices at the research site (see Appendices C and D). The instrument had 52 questions in six subscales that evaluated staff participation in shared and supportive leadership, shared values and vision, collective learning and application, shared personal practices, relationships in supportive leadership, and structure of supportive leadership. The instrument used a 4-point Likert scale ranging from strongly disagree to strongly agree. Hipp and Huffman found an essential connectedness between collective learning and application, and shared personal practice. According to Hipp and Huffman, “the two elements could not be separated, and supportive conditions encompass the other four elements” (p. 27). The Cronbach’s alpha reliability coefficients for factored subscales are as shown in Table 2.
Table 2

*Cronbach’s Reliability Coefficients for Factored Subscales of Hipp and Huffman’s Professional Learning Community Assessment-Revised*

<table>
<thead>
<tr>
<th>Factored subscales</th>
<th>Reliability coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>A One-Factor Solution</td>
<td>0.97</td>
</tr>
<tr>
<td>Supportive Conditions-Structure</td>
<td>0.88</td>
</tr>
<tr>
<td>Supportive Conditions-Relationships</td>
<td>0.82</td>
</tr>
<tr>
<td>Shared Personal Practice</td>
<td>0.87</td>
</tr>
<tr>
<td>Collective Learning and Application</td>
<td>0.91</td>
</tr>
<tr>
<td>Shared Values and Vision</td>
<td>0.92</td>
</tr>
<tr>
<td>Share and Supportive Leadership</td>
<td>0.94</td>
</tr>
</tbody>
</table>


**Intervention Evaluation**

The independent variable for this study was the intervention, and the dependent variables were morale and professional learning community practices. Knowles et al. (1998) identified five principals essential for evaluating effective professional learning. They stated that adult learners prefer active engagement, relevance to current challenges, integration of experience, learning style variation, and choice and self-direction. Morrison et al. (2011) stated that professional development participants could evaluate their learning by reflecting on whether or not the objectives were met. Was the time sufficient to conduct the lesson? How did they feel about the group project? How useful was the format used in the training? What was their general reaction to lesson study?

**Study Procedures**

For the purpose of this study, the researcher worked with research-site administrators and teachers to create and implement a lesson-study action plan as described by Stepanek et al. (2007). The teachers administered the plan as part of their
daily job responsibilities. The researcher did not observe teachers or students. The researcher used a quasi-experimental pretest-posttest design. The researcher obtained permission from the research-site principal, the appropriate school board, and the Institutional Review Board of Nova Southeastern University to apply the Staff Morale Questionnaire (Smith, 1971) to participants to measure participants’ morale and the Professional Learning Practices Assessment-Revised (Hipp & Huffman, 2010) to measure participants’ professional-learning perceptions (see Appendix E).

**Sequence.** The researcher obtained permission from the Copyright Clearance Center to use the Staff Morale Questionnaire (Smith, 1971), and from Hipp and Huffman to use the Professional Learning Community Assessment-Revised. Then, the researcher obtained permission from the site principal to conduct the study. Subsequently, he obtained permission from the district school board.

The researcher wrote and placed in each potential participant’s mailbox a letter that explained the purpose of the study, the expected uses of its results, and the importance of the study (see Appendix F). During a faculty meeting, the researcher explained the study to potential participants. The researcher then placed in teachers’ mailboxes a consent letter to participate in the study. The consent letter asked that teachers who agreed to participate in the study sign the consent letter, place the consent letter in an envelope, and return it to the researcher. The consent letter included a link that willing participants could use to complete the instruments. Completing the Staff Morale Questionnaire (Smith, 1971) took about 5 minutes, and completing the Hipp and Huffman (2010) Professional Learning Community-Revised took about 7 minutes, for a
total time commitment of 12 minutes. To promote participation, when a participant completed both instruments, the researcher placed in the participant’s mailbox a movie ticket as a token of appreciation. After a potential participant read the consent letter, he or she had two options:

1. If he or she agreed to participate in this study, he or she signed the consent form.

2. If he or she did not wish to participate in this study, he or she was asked not to complete the instruments.

Participants who agreed to participate in the study and complete the instruments signed the consent letter, placed the consent letter in an envelope, and gave it to the researcher. The participants were also informed that by agreeing to complete the instrument they gave the researcher permission to collect and analyze the data. During a teacher-planning day, the researcher was available at the research site for 3 hours for teachers to return the signed consent form and to ask questions about the study. The researcher issued to each participant who returned a signed consent letter a code to use in order to complete the instruments. Teachers were advised that the codes were confidential and they were not to share their code with anyone. The codes were kept separate from the instruments. The codes and the data collected were kept in an encrypted password-protected portable hard drive. The identifiers were deleted after the study was completed.

Participants were informed that, in about 4 months, they would be asked to complete a posttest and that the researcher would compare their first set of responses to
their second set of responses. Both times, they were asked to complete the instrument using the specific code assigned to them. Pretest and posttest data that did not contain matching identifiers were not included in the study.

The researcher used Classapps (an online survey developer) to send the Teacher Morale Questionnaire (Smith, 1971) and the Professional Learning Community Assessment – Revised (Hipp & Huffman, 2010) to the study participants. Classapps Professional Survey is a Web-based system that enables individuals and companies to create surveys and collect data using e-mail or a particular website. Data were collected in numerical form and could be depicted graphically. The participants’ responses were downloaded for further analyses.

Classapps organized the instruments’ data in a format suitable for SPSS analyses. The data from both instruments were analyzed using a quasi-experimental $t$ test to determine whether or not there were significant differences between the pretest means and the posttest means. Both instruments were administered as pretests and posttests. The data was collected and analyzed to answer the two research questions.

**Staff morale plan.** Whitaker et al. (2000) stated, “If the emotional needs of the teacher are not met, there is little chance that the needs of the students will be either” (p. xix). They identified interventions that, when implemented, could improve staff morale. They also identified three kinds of teachers: the superstar, the backbone, and the mediocre. Whitaker et al. noted that almost all faculty members respect superstars, and that effective principals identify superstars and use them to assist with the change process. Whitaker et al. believed “superstar teachers” (p. 18) to be instrumental in
improving teacher morale.

Using face-to-face communication or e-mail, the researcher communicated with the site administrator to discuss, develop, and implement a plan to improve teacher morale. The teachers, superstar teachers, and administrator implemented the intervention plan as part of their daily job responsibilities.

**Superstar teachers.** The principal selected three “superstar” teachers (Whitaker et al., 2000, p. 18). The superstar teachers used the lesson-study process described in Stepanek et al. (2007) to develop the professional learning communities’ teams, organize professional development activities, and to open up their classrooms for peer observations. The superstar teachers developed an agenda to meet with other teachers to lay the groundwork for lesson study as described by Stepanek et al. The agenda included teachers’ concerns about participating in lesson study, time for collaboration, administrator support, and an action plan. The superstar teachers wrote down the teachers’ comments and reactions for each of the agenda items in order to offer them support.

**Guided goal-setting for groups.** Whitaker et al. (2000) wrote that setting goals is an important component of organizational decision making. A school administrator made a presentation to identified superstar teachers (Whitaker et al. 2000, p. 53) on how to implement Whitaker et al.’s guided goal-setting for groups. Whitaker et al. provided a step-by-step approach that can be accomplished in two hours. All members of the organization were divided into groups of four or six. Each group member was provided with flipcharts, markers, and Post-It Notes. The groups were given 20 minutes for each
individual to brainstorm what they believed the goals of the organization should be and to write their ideas on Post-It Notes. The Post-It Notes were then placed on a wall in clusters. Participants walked around the room to read each Post-It Note. After reading all of the posted Post-It Notes, the group members were then allowed to write down any new goals they thought of that were not already on the wall. Those new goals were then included in the group goal clusters. The group then sorted the Post-It Notes into common themes. Each group member selected three notes as his or her most important goals by placing a star on each. The group member then combined the three notes into one goal. The teams wrote the themes that received at least one vote into goal statements and taped the goal statement to a wall. Group representatives compiled the goals into a list, sorted them into short-term and long-term goals, and developed an action plan for each goal. The administrator developed and presented to participants a PowerPoint presentation that described how to work in teams to set organizational goals. The administrator gathered and shared with the researcher participants’ sign-in sheets.

**Professional learning communities plan.** After obtaining the approval of the site principal, the school board, and Nova Southeastern University, the researcher and the research-site administrators met to develop and implement a lesson-study plan (as suggested by Stepanek et al., 2007) for the explicit purpose of increasing participants’ morale and professional learning practices. When the plan was developed, the teachers guided the lesson study action plan. The teachers used the Stepanek et al. (2007) lesson study action plan which consisted of expected outcomes, team members, time needed, administrator support, sources of external support, documentation, and compensation.
The plan consisted of teachers’ working in grade-level or departmental teams to examine student-achievement data based on state standards. The teams set goals relevant to Common Core standards, investigated research-based teaching and learning strategies, and agreed on assessment techniques that provided evidence of student learning. The teacher teams used the Team Member Log – Planning Meeting (Stepanek et al., 2007) to collaborate and develop a lesson aligned with state standards and to identify student work that demonstrated student learning. The Team Member Log – Planning Meeting asked participants to reflect on the meeting objects, describe what happened during the meeting, and describe discussions about content, instruction, student learning, and short- and long-term goals (p. 79).

Yoshida, Chokshi, and Fernandez (2001) of the Columbia University Lesson Study Research Group developed a lesson-study lesson-plan template that consists of lesson-study team name, title, goals, standards addressed in the lesson, sequence of the unit (Unit Map), background information, lesson process, and evaluation. Participants developed a lesson plan as described by Yoshida et al. In the background section of the lesson-plan template, participants explained why they chose the topic for the lesson study, why was the lesson important at that particular time, the reason for the activities, and the necessary instructional strategies.

Stepanek et al. (2007) suggested that during the research lesson, observers can gather specific data by writing down the questions the students ask, and how frequently students responded to teacher questions. The teachers agreed to increase student participation in class discussion. A teacher volunteered to teach the lesson. The observing
teachers followed the Guidelines for Observing Research Lessons (Stepanek et al., 2007) to record the lesson data. The guidelines for each lesson observation consisted of:

1. Taking notes on student responses.
2. Recording how students began their work and approached the tasks.
3. Recording interactions between students, and between students and the teacher.
4. Documenting common misunderstandings the students had, and how and when their understanding changed.
5. Indicating how individual students constructed their understanding through activities and discussions.
6. Documenting the variety of methods that individual students used to solve problems, including errors.

Subsequently, teachers met to examine the lesson effectiveness. They used the Team Member Log-Post-debriefing (Stepanek et al., 2007) to describe observations of student learning, unanticipated student responses, whether or not the goals of the lesson were achieved, instructional decisions that could have improved the lesson, which goals were not reached, and which aspects of the lesson should be reconsidered.

The Staff Morale Questionnaire (Smith, 1971) was readministered to all participants 5 months after the initiation of their plan. The Professional Learning Communities Survey (Hipp & Huffman, 2010) posttest was also administered to all participants 5 months after the initiation of their plan.

**Specific Procedures for Answering Research Questions**

**Research Question 1.** What are the effects of a researcher-developed intervention
on high school teachers’ morale? The Staff Morale Questionnaire (Smith, 1971) was used to collect pretest and posttest data. Classapps Professional Survey was used to collect the data in a suitable format for SPSS analysis. A t-test was used to determine whether or not there were significant differences between the pretest and posttest means on the three sub-scales of the instrument. This study was quasi-experimental because the participants were not randomly assigned to treatment conditions and no control group was used.

**Research Question 2.** What are the effects of a researcher-developed intervention on high school teachers’ professional learning community practices? The Professional Learning Community Assessment – Revised (Hipp & Huffman, 2010) was used to collect pretest and posttest data. Classapps Professional Survey was used to collect the data in a format suitable for SPSS analysis. A t-test was used to determine whether or not there were significant differences between the pretest and posttest means on the six sub-scales of the instrument.

**First Month of Intervention**

**Data collection.** The researcher met with the school administrator and three superstar teachers to develop a professional development plan. The regular participant teachers administered the plan as part of their daily job responsibilities. The researcher did not observe teachers or students.

A school administrator assisted the researcher with identifying a location, dates, and time for the researcher and the superstar teachers to meet. The administrator facilitated providing the superstar teachers with the necessary resources to complete their activities. The researcher met with the superstar teachers every 2 weeks to discuss the
intervention and to collect copies of the teacher activities. The participants’ names were not used in the reporting of information, publications, or conference presentations.

The school administrator developed a PowerPoint presentation and presented to the superstar teachers a Guided Goal Setting for Groups (Whitaker et al., 2000; see Appendix G). The teachers signed in, and the researcher obtained a copy of the sign-in sheet. The researcher purchased and issued to each participating group leader and administrator a copy of Leading Lesson Study: A Practical Guide for Teachers and Facilitators (Stepanek et al., 2007). They signed a document acknowledging receiving a copy of the lesson study guide.

**Instructional design.** Each team selected a team leader who developed the meetings agendas and conducted the meetings. The team leader developed an agenda that consisted of guiding questions (Stepanek et al., 2007; see Appendix H). The agenda items included the concerns teachers had, how those concerns were addressed, how many meetings were needed to give teachers enough time to plan the lesson, what were the options for creating time to meet, what were the preferences of the team members, when were the teacher’s observation to be held, how did teachers cover classes or bring students in, and who had the authority to help teachers find or create time for lesson study (Stepanek et al., 2007). The team leader wrote notes to follow up and communicate the group needs with the administrator, and collected and filed the teacher sign-in sheets. The researcher obtained from the superstar teachers a copy of the completed agendas to analyze progressive changes.

The teachers:
1. Used Lesson Study Action Plan: Team Responsibilities (Stepanek et al., 2007) to map the lesson study action plan (see Appendix I). The plan consisted of identifying the person responsible for facilitation, coordination, communication, and record keeping.

2. Used the form Lesson Study Action Plan: Schedule (Stepanek et al., 2007) to map the lesson study cycle (see Appendix J).

3. Read *Leading Lesson Study: A Practical Guide for Teachers and Facilitator* (Stepanek et al. 2007) and explained to each other their new knowledge about lesson studies (see Appendix K).

**Staff morale.** Willis and Varner (2010) found that student achievement is correlated with teacher morale, and that teachers with high morale put more effort into their jobs and student instruction. Time for professional development and collaboration improves teacher morale (Vail, 2005).

The superstar teachers maintained a log to include (see Appendix L):

1. The time offered to teachers for lesson study activities;
2. Resources offered to teachers for lesson study activities;
3. Recognition of teachers for observable practices that improve student learning;
4. Celebration of success relevant to best practices;
5. The researcher obtained a copy of the log to analyze best practices.

**Second Month of Intervention**

**Data collection.** Ertle, Chokshi, and Fernandez (2002) of the Columbia University Lesson Study Research Group developed a Goal Setting Worksheet Guide to
help lesson-study groups through the goal-selection process. The worksheet helps lesson study groups to identify present student qualities and teacher-desired student qualities; to identify student learning gaps; and to develop a group goal that states the qualities teachers want to develop in students. The groups:

1. Used the Ertle et al. (2002) Group Goal Setting Worksheet to establish the students’ learning goals and identify student-learning gaps (see Appendix M).

2. Used the Lesson Study Action Plan (Stepanek et al., 2007) to align the student-learning goal with school vision and mission, identify the students expected outcomes, time needed, administrator’s support, sources of external support, documentation, and compensation (p. 21; see Appendix N).

3. Used the Yoshiwa et al. (2001) Lesson Study Lesson Plan format to develop a lesson plan (see Appendix O).

**Instructional design.** The participants read and discussed Tyler’s (1949) Instructional Design Model. He identified four essential steps in the process of designing curriculum. First, curriculum must be based on objectives that represent the kinds of changes in behavior that an educational institution seeks to bring about in the students. Second, objectives must be focused in data that identifies students learning gaps between present status of the student and acceptable norms. Third, the selection of learning experiences should engage students in active behaviors that stimulate a desire to learn. Fourth, learning activities must be organized in a coherent program that changes thinking, habits, and attitudes (Tyler, 1949, p. 110).

For the purpose of this study, Tyler’s (1949) instructional design model offered a
learning process that other reviewed models did not. The model helped the participants to develop learning that was based in objectives, data, learning gaps, and learning evaluation. Teachers:

1. Discussed their understanding of Tyler’s (1949) Instructional Model to plan a lesson (see Appendix N).

2. Used the Stepanek et al. (2007) Lesson Study Action Plan Schedule to identify the resources needed to develop the plan such as time to meet, meeting location, and necessary teaching resources (see Appendix J).

3. Used the Yoshida et al. (2001) Lesson Study Lesson Plan format to design a lesson that included specific learning Common Core standards and students’ learning goals (see Appendix O).

4. The team leader secured and filed a copy of the lesson plan.

**Staff morale.** Miller (1981) stated that raising staff morale makes teaching more pleasant for teachers and learning more pleasant for students. Teacher morale improves when they are empowered to make decisions that affect their profession, and when their expertise is acknowledged (Lumsden, 1998). Administrators and superstar teachers ensured that:

1. English teachers asked senior students to write letter of appreciation to particular teachers.

2. The researcher obtained a copy of the students’ letter to teachers. The researcher used Smith’s (1971) item number 24 to compare pretest and posttest results to determine if teachers felt they are an important part of their school.
Third Month of Intervention

Data collection. Teachers finalized a lesson plan; taught the lesson within 50 minutes; and wrote student-learning observations.

Instructional design. The National Staff Development Council stated, “The most powerful forms of staff development occur in ongoing learning communities that meet on a regular basis” (n.d., p. 1). “Teacher professional learning activities include discussing students’ portfolios, grades, scores on particular tests, projects of particular kinds, student interviews, parent surveys, and other teacher or student records” (Tallerico, 2005, p. 23). Teachers:

1. Used the Yoshida et al. (2001) Lesson Study Lesson Plan format to finalize a lesson plan (see Appendix O).

2. Followed the Lesson Study Action Plan: Schedule to teach the lesson (Stepanek et al., 2007, p. 41; see Appendix J).

3. The teachers used the Team Member Log-Post-debriefing (Stepanek et al., 2007; see Appendix P) to write observations of student leaning and answer the following questions: “were there any unanticipated student responses; were the goals of the lesson achieved; which instructional decisions contributed to helping students meet the goals; what aspect of the goals were not met; and which aspect of the lessons should be reconsidered based on the observed evidence” (p. 100).

Staff morale. Bishay (1996) found that students seemed to recognize the effectiveness of teachers who were satisfied with their job performance, and that there is a correlation between teacher motivation and student self-esteem. Johnson and Holdaway
(1991) found a connection between job satisfaction and effectiveness. Superstar teachers supported teacher teams by ensuring that:

1. To increase communication the school, administrators received input from teachers to develop faculty-meeting agendas for monthly faculty meetings. Teachers were asked to volunteer to share best practices during faculty meetings.

2. The researcher compiled and compared teachers’ responses between pretest and posttest to questions number two and number 10 of the Smith’s (1971) Staff Morale Questionnaire. Question number two states, “In this school teachers have a sense of belonging and of being needed,” and question number ten states “How well are you kept informed about what is going on in your school?”

Fourth Month of Intervention

Data collection. The superstar teachers used Guskey’s (2000) professional learning evaluation template to record the team’s reflections pertaining to the impact of the lesson on the students, whether students were more confident as learners, whether the lesson affected student performance or achievement, and did the lesson affect organizational climate and procedures (see Appendix Q).

Instructional design. Taylor et al. (2005) found that teachers improved their teaching skills by meeting regularly to plan and teach lessons. They also stated that teachers shared, interacted, and reassessed common practices. Observing each other and discussing lessons enabled them to shift their thinking from a “teaching” to a “learning” focus.

Teachers worked in teams to complete a formative evaluation of the lesson by:
1. Revising the lesson (Stepanek et al., 2007; see Appendix R).

2. Scheduling another teacher to reteach the lesson.

3. Observing teachers using Stepanek et al. (2007) Team Member Log-Post-debriefing (see Appendix P) to write down observed student learning practices.

4. Reflecting on the lesson study cycle by completing Lesson Study Report Guidelines (Stepanek et al., 2007) to write down what they learned through the cycle of lesson study (see Appendix S).

**Staff morale.** Various methods were used to impact staff morale, including:

1. To improve parent and teacher communication the school signed up for “Remind101,” which is a free website teachers can use to text one-way messages to students and parents. The website keeps all phone numbers private, schedules texts to be sent at a later date, and routes messages as one-way communications. Parents and students thus received immediate notification from teachers and administrators.

2. To promote teachers’ well-being, a teacher invited a local chiropractor to visit the school during a teacher-planning day to offer teachers methods that could physically and mentally relax their body.

3. The researcher used Hipp and Huffman (2010) Item Number 38 to compare pretests and posttests to identify the level of teacher perception of caring relationships that existed among staff and students built on trust and respect.

During 4 months of intervention, teachers were required to meet for 30 minutes every 2 weeks during common planning to participate in professional learning communities. Yearly, the school board schedules 27 hours that teachers must use during
early-release and planning days for professional learning. For the purpose of this study, teachers met solely to participate in lesson study activities during the 4 months of intervention for 30 minutes every 2 weeks, on two early release days for 2 hours on each day, and on two planning days for 2 hours on each day, for a total of 12 hours.

During professional learning communities, the participants discussed student-learning gaps, used the Common Core standards to develop a lesson, taught the lesson, made changes to the lesson based on feedback from observing teachers, and re-taught the lesson. The school administrator provided release time for the participants to observe each other teach the lesson and offer each other feedback.

**Fifth Month of Intervention**

**Posttest.** During the fifth month, the researcher readministered the Staff Morale Questionnaire (Smith, 1971) and Hipp and Huffman’s (2010) Professional Learning Community Assessment-Revised, and gathered and compared data from the pretest with the two instruments.
Chapter 4: Results

Introduction

According to Stepanek et al. (2007), a lesson study action plan is a professional development practice during which teachers collaboratively develop a lesson based on student learning needs, teach and observe the lesson, and then edit and reteach the lesson. Stepanek et al. also stated that lesson study originated in Japan and is rapidly gaining momentum in the American education system, and that lesson study is known for changing teaching practice and improving student learning. Similarly, Lewis and Hurd (2011) stated that lesson study efforts in the United States of America is a decade old, can improve both teachers’ and students’ learning, and that, based on new American education reforms, lesson study is a perfect tool to change “professional learning communities practices and schools as learning communities” (p. v). Lewis and Hurd stated that a lesson study action plan is a process that challenges teachers to learn from one another and focus on student thinking rather than on teaching maneuvers.

To unfold the lesson study concept to participants, the researcher reviewed the school board’s 2009-2010 customer survey and, based on resulting data, selected the research site at which to conduct this study. He met with the school principal and three superstar teachers to discuss a lesson study action plan and the impact lesson study could have on teachers’ morale and professional learning practices. The principal and the superstar teachers agreed to implement a lesson study action plan as a school professional development practice. The researcher worked with the superstar teachers to develop a
lesson study action plan, and the superstar teachers implemented the lesson study action plan.

This study is different than other reviewed lesson study action plans in that the participants learned about lesson study action plan by reading, discussing, and developing a plan. A lesson study expert was not used to conduct a presentation. The researcher reviewed other lesson study action plans (Lewis & Hurd, 2011; Stepanek et al., 2007) and found that, in each instance, an expert was invited to give a presentation to participants on lesson study. Another difference was that participants developed and implemented a lesson study action plan within 4 months. In the reviewed literature, the researcher did not find a time frame to complete a lesson study action plan cycle.

The purpose of this study was to assess the effectiveness of a researcher-developed intervention to improve teacher morale and to increase professional learning community activities. The Program for International Student Assessment (2012) found that, in the United States, “teacher morale is high where teachers value academic achievement, teachers take pride in their school, and teachers work with enthusiasm” (p. 177). Similarly, the Organization for Economic Co-operation and Development (OECD) (2012) stated, that “in the United States, teacher morale is below the average of the 34 countries studied by the OECD” (p. 35).

The literature indicates neither the frequency with which morale should be measured to determine progress, nor for how long a plan should be implemented to produce changes in morale. There is a need for further studies focused on what specific steps (blueprints) can be applied to improve teachers’ morale.
A 4-month intervention using lesson study action plan was implemented, and posttest measures were taken at the end. The subjects of this study were 93 teachers in a public high school in an urban area in the southeastern United States. Forty-two participants signed and returned to the researcher a consent form for participation in this research study. Data from the Staff Morale Questionnaire (Smith, 1971) and the Hipp and Huffman (2010) Professional Learning Community Assessment-Revised were used as pretests and posttests to measure the morale of teachers and the practices of professional learning communities at the research site. Data were analyzed using SPSS for Windows. A quasi-experimental $t$ test was used to determine the differences between the pretest and posttest means. These results will be reported later in this chapter.

This chapter contains a summary of notes written by three teams of teachers who met over the course of 4 months during the implementation of a lesson study plan to learn about lesson study, identify a student learning problem, develop a lesson, teach the lesson, edit the lesson based on observed student learning needs, and then reteach the lesson. The process of participants developing and completing a lesson study plan contributed to the assessment of the effectiveness of a researcher-developed intervention to improve teacher morale and increase professional learning community activities. The researcher collected and summarized copies of the following: Group Goal Setting Worksheet; Lesson Study Action Plan: Schedule; Lesson Plan; Team Member Log-Post-debriefing; Process for Revising the Lesson; Student Learning Outcome; and Lesson Study Report Guidelines from three superstar teachers. The teacher teams consisted of three groups of three teachers in the areas of Earth/space science, language arts, and
math.

This chapter also contains the sample demographics, the descriptive statistics, data screening, reliability analysis, research questions, and a summary of the results.

Group 1

The goal of three ninth-grade Earth/space science teachers was to help their students learn life cycles of stars using reading strategies. The teachers used the Common Core Standards to develop a lesson that asked a group of 23 students to predict how the initial mass of a star determines its evolution. To help the students improve their reading skills, the teachers engaged the students in reading an article, finding the meanings of unfamiliar words, and writing summaries. Schmoker (2006) advocated that purposeful reading, writing, and talking are the essence of authentic literacy. He also indicated that a student’s professional prospects depend greatly on how much reading, writing, and talking they do during their K-12 years.

During the first lesson, the teachers noticed that the majority of the students had difficulties answering the sample questions, needed more work with active reading, and needed more explanation about the content follow-up questions. Some students became disruptive because they did not want to complete the reading assignment. The team of teachers then edited the lesson by organizing students to work in groups. The teachers re-explained the star-cycle concept, students were then timed to answer the questions, and teachers decreased the time students had to complete the assignment from 20 to 10 minutes.

During the second lesson, the teachers found that the students stayed on task,
completed the assignment, and completed the presentation. Overall, teachers found the revised lesson to be more conducive to student learning than the first lesson. The students responded positively to the activities, and the teachers felt pleased that their team was able to improve the lesson. Gregory and Chapman (2007) stated that cooperative group learning is one of the most researched instructional strategies, and that by working in cooperative groups, students learn valuable social skills, use higher-order thinking, and rehearse and practice new concepts, processes, and information. Cooperative learning supports interpersonal intelligence and facilitates the different ways in which students think and learn (Bennett & Rolheiser, 2001).

**Group 2**

Three twelfth-grade Language Arts teachers stated in a lesson plan that their students’ ability to analyze literature was low. The teachers’ goal was to use the Common Core Standards to engage students in literature analysis. Students were expected to learn how to incorporate symbols, themes, organization, progression, atmosphere, diction, figurative language, imagery, and tone to analyze literature. According to Morrison, Ross, Kalman, and Kemp (2011), the highest mental ability levels (in increasing order) are: comprehension, application, analysis, synthesis, and evaluation.

In the Team Member Log-Post Debriefing, teachers stated that during the first lesson, the students appeared to be interested in the assignment and their roles, students asked questions, and the technology-savvy students were pleased to be able to use their electronics in class. However, the teacher encountered difficulties keeping the students focused on the lesson, some students did not understand the story, and others did not
complete the reading.

The teachers edited the lesson and another teacher taught the lesson. The students selected a poem, read a poem, and engaged in a literature circle. Stein and Beed (2004) stated that during literature circles, students in heterogeneous groups choose to read and discuss the same text, agree on the amount of reading, discuss what is important, and use the teacher as a facilitator. Teachers of all grade levels regularly use literature circles to engage students in thinking critically about literature, thus enabling them to express their ideas in oral and written forms (Lin, 2002).

In the Team Member Log-Post-debriefing for the revised lesson, the teachers stated that the students were excited about the assignment and wanted to know when the next literary novel study would occur. The students told other students about the lesson and stressed that they were in control of their learning. Based on teacher observation, the students’ abilities to analyze poetry incorporating symbols, theme, organization, progression, atmosphere, diction, figurative language, imagery, and tone increased. The teachers found that their goal was achieved because the students were enthusiastic about the literature circle, and at the end of the lesson the students wanted to know when the next literary novel study would take place.

**Group 3**

A group of four tenth- and eleventh-grade geometry teachers stated that the learning gap of their low-achieving students was the result of the students’ inability to perform basic mathematical functions and not listening to specific instructions. Students were required to pass the End-Of-Course Exam to graduate from high school. Jalongo
(1995) stated that one of the most effective ways to ensure that students listen to directions is to make the directions very clear, to ask students to rephrase the instructions, and to explain each step.

The teachers developed a lesson objective that “Students will be able to use the Pythagorean Theorem and its converse to solve problems with 90% accuracy.”

During the first lesson, student sample work revealed that most of the students had difficulties applying the Pythagorean Theorem in the converse. The teachers determined that students were not following instructions.

During the second lesson, the team helped students to re-identify the parts of the triangle and ensured that the students knew how to use a calculator to perform tasks needed for the assignment. To improve student listening, the teachers randomly selected students during the lesson delivery to repeat the teacher’s explanation of how to solve a problem, and provided more information if the statement was correct or required clarification. Teachers grouped students and offered them opportunities to earn participation points. Teachers found that students were able to complete more problems correctly and stated that regardless of the situation, students working in groups achieved the best results.

Teachers noted in the final report that the feedback they received from colleagues helped them make adjustments to their teaching process, improved student learning with the lesson study process, increased their understanding about lesson study, and enlightened them on the importance of reinforcing basic skills and manipulatives prior to teaching a concept.
Sample Demographics

The sample consisted of 42 teachers; 52.4% \((n = 22)\) were female and 47.6% \((n = 20)\) were male. The largest age group of respondents \((35.7\%, n = 15)\) was 40 to 49 years of age; whereas 31% \((n = 13)\) were 30 to 39; and the smallest group 4.8% \((n = 2)\) were older than 55. These age distributions are presented in Table 3.

Table 3

*Distribution of Subjects by Age in Years*

<table>
<thead>
<tr>
<th>Age in years</th>
<th>N</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 to 49</td>
<td>13</td>
<td>35.7</td>
<td>35.7</td>
</tr>
<tr>
<td>30 to 39</td>
<td>13</td>
<td>31.0</td>
<td>66.7</td>
</tr>
<tr>
<td>50 to 55</td>
<td>6</td>
<td>14.3</td>
<td>81.0</td>
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<tr>
<td>23 to 39</td>
<td>6</td>
<td>14.3</td>
<td>95.3</td>
</tr>
<tr>
<td>Older than 55</td>
<td>2</td>
<td>4.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The largest group of participants \((47.6\%, n = 20)\) had been teachers between 3 and 10 years; another 35.7% \((n = 15)\) had been teachers 10 years or more; and 16.7% \((n = 7)\) had been teachers for between 1 and 3 years. Two teachers had less than 1 year of teaching experience, as shown in Table 4.

Table 4

*Distribution of Subjects by Years of Teaching Experience*

<table>
<thead>
<tr>
<th>Years</th>
<th>N</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 or more</td>
<td>13</td>
<td>30.9</td>
<td>30.9</td>
</tr>
<tr>
<td>3 to 10</td>
<td>20</td>
<td>47.6</td>
<td>78.5</td>
</tr>
<tr>
<td>1 to 3</td>
<td>7</td>
<td>16.7</td>
<td>95.2</td>
</tr>
<tr>
<td>Less than one</td>
<td>2</td>
<td>4.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Likewise, the largest group of participants (45.2%, \( n = 19 \)) had been teaching in their school from 5 and 10 years; whereas 26.1% (\( n = 11 \)) had been teaching in the school from 1 to 4 years; and 4.8% (\( n = 2 \)) had been teaching in this school less than 1 year as indicated in Table 5.

Table 5

_Distribution of Subjects by Years of Teaching at Research Site_

<table>
<thead>
<tr>
<th>Years</th>
<th>N</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 or more</td>
<td>10</td>
<td>23.8</td>
<td>23.8</td>
</tr>
<tr>
<td>5 to 10</td>
<td>19</td>
<td>45.2</td>
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<td>1 to 4</td>
<td>11</td>
<td>26.1</td>
<td>95.2</td>
</tr>
<tr>
<td>Under 1</td>
<td>2</td>
<td>4.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 6 shows that nearly 48% (\( n = 20 \)) of the participants were White non-Hispanic; another 31% (\( n = 13 \)) were Hispanic; and about 21% (\( n = 9 \)) were African American. The number of participants reflects the research site’s overall teacher population with White teachers being the majority and Black and Hispanic teachers sharing similar percentages.

Table 6

_Distribution of Subjects by Ethnicity_

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>20</td>
<td>47.6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>13</td>
<td>31.0</td>
</tr>
<tr>
<td>Black</td>
<td>9</td>
<td>21.4</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 7 shows that the majority of teachers (59.5%, \( n = 25 \)) held bachelor’s degrees; some 26.2% (\( n = 11 \)) had master’s degrees; and 7.1% (\( n = 3 \)) had doctoral
degrees. The distribution of teachers by level of educational attainment is presented in Table 7.

Table 7

*Distribution of Subjects by Level of Education Attainment*

<table>
<thead>
<tr>
<th>Highest degree</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor</td>
<td>25</td>
<td>59.5</td>
</tr>
<tr>
<td>Master</td>
<td>11</td>
<td>26.2</td>
</tr>
<tr>
<td>Doctorate</td>
<td>3</td>
<td>7.1</td>
</tr>
<tr>
<td>National Board Certified</td>
<td>2</td>
<td>4.8</td>
</tr>
<tr>
<td>Specialty</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>42</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The subjects taught were tied between Language Arts (14.3%, $n = 6$), Math (14.3%, $n = 6$), and Science (14.3%, $n = 6$), whereas Reading was the fourth most frequent subject teachers taught. The distribution of teachers by subject taught is presented in Table 8.

Table 8

*Distribution of Subjects by Subject Taught*

<table>
<thead>
<tr>
<th>Subject taught</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts</td>
<td>3</td>
<td>7.1</td>
</tr>
<tr>
<td>Language Arts</td>
<td>6</td>
<td>14.3</td>
</tr>
<tr>
<td>Math</td>
<td>6</td>
<td>14.3</td>
</tr>
<tr>
<td>Reading</td>
<td>5</td>
<td>11.9</td>
</tr>
<tr>
<td>Science</td>
<td>6</td>
<td>14.3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>4</td>
<td>9.5</td>
</tr>
<tr>
<td>World Languages</td>
<td>3</td>
<td>7.1</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>21.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>42</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note.* Other includes Physical Education, Health, JROTC, etc.
Descriptive Statistics

Descriptive statistics for the subscales of The Staff Morale Questionnaire (Smith, 1971) and Hipp and Huffman’s (2010) Professional Learning Community Assessment-Revised instruments are presented in Table 9. The data demonstrates the instrument’s six subscale results.

Table 9

<table>
<thead>
<tr>
<th>Subscale grouping for the Staff Morale Questionnaire (Smith, 1971), and Hipp and Huffman’s (2010) Professional Learning Community Assessment- Revised instruments</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Synergy (Pretest)</td>
<td>42</td>
<td>18.00</td>
<td>37.00</td>
<td>26.83</td>
<td>3.68</td>
</tr>
<tr>
<td>Leadership Synergy (Posttest)</td>
<td>42</td>
<td>22.00</td>
<td>40.00</td>
<td>30.38</td>
<td>3.25</td>
</tr>
<tr>
<td>Cohesive Pride (Pretest)</td>
<td>42</td>
<td>14.00</td>
<td>36.00</td>
<td>24.62</td>
<td>4.24</td>
</tr>
<tr>
<td>Cohesive Pride (Posttest)</td>
<td>42</td>
<td>23.00</td>
<td>36.00</td>
<td>28.52</td>
<td>3.42</td>
</tr>
<tr>
<td>Personal Challenge (Pretest)</td>
<td>42</td>
<td>10.00</td>
<td>19.00</td>
<td>13.95</td>
<td>2.00</td>
</tr>
<tr>
<td>Personal Challenge (Posttest)</td>
<td>42</td>
<td>12.00</td>
<td>20.00</td>
<td>16.52</td>
<td>2.38</td>
</tr>
<tr>
<td>Shared and Supportive Leadership (Pretest)</td>
<td>42</td>
<td>17.00</td>
<td>44.00</td>
<td>31.55</td>
<td>7.10</td>
</tr>
<tr>
<td>Shared and Supportive Leadership (Posttest)</td>
<td>42</td>
<td>24.00</td>
<td>44.00</td>
<td>36.62</td>
<td>5.09</td>
</tr>
<tr>
<td>Shared Values and Vision (Pretest)</td>
<td>42</td>
<td>12.00</td>
<td>36.00</td>
<td>24.10</td>
<td>5.85</td>
</tr>
<tr>
<td>Shared Values and Vision (Posttest)</td>
<td>42</td>
<td>21.00</td>
<td>36.00</td>
<td>30.55</td>
<td>3.81</td>
</tr>
<tr>
<td>Collective Learning and Application (Pretest)</td>
<td>42</td>
<td>14.00</td>
<td>40.00</td>
<td>26.24</td>
<td>7.19</td>
</tr>
<tr>
<td>Collective Learning and Application (Posttest)</td>
<td>42</td>
<td>26.00</td>
<td>40.00</td>
<td>33.24</td>
<td>4.23</td>
</tr>
<tr>
<td>Shared Personal Practice (Pretest)</td>
<td>42</td>
<td>9.00</td>
<td>28.00</td>
<td>17.31</td>
<td>4.83</td>
</tr>
<tr>
<td>Shared Personal Practice (Posttest)</td>
<td>42</td>
<td>20.00</td>
<td>28.00</td>
<td>23.40</td>
<td>3.12</td>
</tr>
<tr>
<td>Supportive Conditions-Relationships (Pretest)</td>
<td>42</td>
<td>8.00</td>
<td>20.00</td>
<td>13.83</td>
<td>3.36</td>
</tr>
<tr>
<td>Supportive Conditions-Relationships (Posttest)</td>
<td>42</td>
<td>10.00</td>
<td>20.00</td>
<td>16.21</td>
<td>2.56</td>
</tr>
<tr>
<td>Supportive Conditions-Structures (Pretest)</td>
<td>42</td>
<td>15.00</td>
<td>40.00</td>
<td>26.81</td>
<td>4.95</td>
</tr>
<tr>
<td>Supportive Conditions-Structures (Posttest)</td>
<td>42</td>
<td>19.00</td>
<td>40.00</td>
<td>31.50</td>
<td>4.91</td>
</tr>
</tbody>
</table>
Reliability Analysis

Instrument reliability for pretest and posttest scores for the Staff Morale Questionnaire (Smith, 1971) and Hipp and Huffman’s (2010) Professional Learning Community Assessment- Revised instruments was investigated using Cronbach’s alpha. Relative to pretest scores, reliability coefficients ranged from .371 for personal challenge to .970 for collective learning and application, indicating that the participants favored working in teams. Regarding posttest scores, reliability coefficients ranged from .684 for personal challenge to .956 for shared personal practice. Reliability coefficients for the internal consistency of the subscales of the Staff Morale Questionnaire (Smith, 1971) and Hipp and Huffman’s (2010) Professional Learning Community Assessment- Revised instruments subscales are presented in Table 10.
Table 10

*Distribution of Reliability Coefficients for the Subscales of the Staff Morale Questionnaire (Smith, 1971) and Hipp and Huffman’s (2010) Professional Learning Community Assessment-Revised Instruments*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>N of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Synergy (Pretest)</td>
<td>10</td>
<td>.789</td>
</tr>
<tr>
<td>Leadership Synergy (Posttest)</td>
<td>10</td>
<td>.750</td>
</tr>
<tr>
<td>Cohesive Pride (Pretest)</td>
<td>9</td>
<td>.872</td>
</tr>
<tr>
<td>Cohesive Pride (Posttest)</td>
<td>9</td>
<td>.739</td>
</tr>
<tr>
<td>Personal Challenge (Pretest)</td>
<td>5</td>
<td>.371</td>
</tr>
<tr>
<td>Personal Challenge (Posttest)</td>
<td>5</td>
<td>.684</td>
</tr>
<tr>
<td>Shared and Supportive Leadership (Pretest)</td>
<td>11</td>
<td>.964</td>
</tr>
<tr>
<td>Shared and Supportive Leadership (Posttest)</td>
<td>11</td>
<td>.935</td>
</tr>
<tr>
<td>Shared Values and Vision (Pretest)</td>
<td>9</td>
<td>.952</td>
</tr>
<tr>
<td>Shared Values and Vision (Posttest)</td>
<td>9</td>
<td>.920</td>
</tr>
<tr>
<td>Collective Learning and Application (Pretest)</td>
<td>10</td>
<td>.970</td>
</tr>
<tr>
<td>Collective Learning and Application (Posttest)</td>
<td>10</td>
<td>.955</td>
</tr>
<tr>
<td>Shared Personal Practice (Pretest)</td>
<td>7</td>
<td>.940</td>
</tr>
<tr>
<td>Shared Personal Practice (Posttest)</td>
<td>7</td>
<td>.956</td>
</tr>
<tr>
<td>Supportive Conditions-Relationships (Pretest)</td>
<td>5</td>
<td>.932</td>
</tr>
<tr>
<td>Supportive Conditions-Relationships (Posttest)</td>
<td>5</td>
<td>.955</td>
</tr>
<tr>
<td>Supportive Conditions-Structures (Pretest)</td>
<td>10</td>
<td>.887</td>
</tr>
<tr>
<td>Supportive Conditions-Structures (Posttest)</td>
<td>10</td>
<td>.926</td>
</tr>
</tbody>
</table>

Two research questions were formulated for investigation. The Staff Morale Questionnaire (Smith, 1971) instrument and the Hipp and Huffman Professional Learning Community Assessment-Revised (2010) were utilized to collected and analyzed.

**Research Question 1**

What are the effects of a researcher-developed intervention on high school teachers’ morale? The researcher-developed intervention consisted of lesson study activities selected from Stepanek et al. (2007), a goal-setting worksheet guide developed by the Columbia University Lesson Study Research Group, Tyler’s (1949) instructional design model for participants to read, the Yoshida et al. (2001) lesson plan template to design a lesson plan, teams using a professional evaluation template (Guskey, 2000) to
evaluate if their learning affected adult and student learning, students writing letters of appreciation to teachers, improving school stakeholder communication by having participants use a text-messaging system, and teacher sharing best practices. Research question 1 was investigated with three dependent-sample \( t \) tests: one for each morale subscale. The statistics for the paired samples are presented in Table 11.

Table 11

<table>
<thead>
<tr>
<th>Paired variables</th>
<th>( M )</th>
<th>( N )</th>
<th>( SD )</th>
<th>( SEM )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Leadership Synergy (Pretest)</td>
<td>26.83</td>
<td>42</td>
<td>3.68</td>
</tr>
<tr>
<td></td>
<td>Leadership Synergy (Posttest)</td>
<td>30.38</td>
<td>42</td>
<td>3.25</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Cohesive Pride (Pretest)</td>
<td>24.62</td>
<td>42</td>
<td>4.24</td>
</tr>
<tr>
<td></td>
<td>Cohesive Pride (Posttest)</td>
<td>28.52</td>
<td>42</td>
<td>3.42</td>
</tr>
<tr>
<td>Pair 3</td>
<td>Personal Challenge (Pretest)</td>
<td>13.95</td>
<td>42</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>Personal Challenge (Posttest)</td>
<td>16.52</td>
<td>42</td>
<td>2.38</td>
</tr>
</tbody>
</table>

The \( t \) test results are presented in Table 12.

Table 12

<table>
<thead>
<tr>
<th>Paired variables</th>
<th>( M )</th>
<th>( SD )</th>
<th>( SEM )</th>
<th>( t )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Leadership Synergy (Pretest) - Leadership Synergy (Posttest)</td>
<td>3.55</td>
<td>3.72</td>
<td>.574</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Cohesive Pride (Pretest) - Cohesive Pride (Posttest)</td>
<td>3.91</td>
<td>3.82</td>
<td>.589</td>
</tr>
<tr>
<td>Pair 3</td>
<td>Personal Challenge (Pretest) - Personal Challenge (Posttest)</td>
<td>2.57</td>
<td>2.21</td>
<td>.341</td>
</tr>
</tbody>
</table>

Note. \( df = 41, ***p < .001, \) two-tailed test.
Leadership synergy at posttest ($M = 30.38$, $SD = 3.25$) was significantly higher than leadership synergy at pretest ($M = 26.83$, $SD = 3.68$), $t(41) = .619$, $p < .001$, two-tailed test). Cohesive pride at posttest ($M = 28.52$, $SD = 3.42$) was significantly higher than cohesive pride at pretest ($M = 24.62$, $SD = 4.24$), $t(41) = 6.63$, $p < .001$, two-tailed test). Personal challenge at posttest ($M = 16.52$, $SD = 2.38$) was significantly higher than personal challenge at pretest ($M = 13.95$, $SD = 2.00$), $t(41) = 7.54$, $p < .001$, two-tailed test). Therefore, the researcher-developed intervention significantly increased high school teacher morale.

**Research Question 2**

What are the effects of a researcher-developed intervention on high school teachers’ professional learning community practices? Research question 2 was investigated with six paired-sample $t$ tests. The statistics for the paired samples are presented in Table 13.
Table 13

*Paired Sample Statistics for Teachers’ Professional Learning Community Practices Based on Subscales of the Professional Learning Community Assessment*

<table>
<thead>
<tr>
<th>Paired Variables</th>
<th>M</th>
<th>N</th>
<th>SD</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared and Supportive Leadership (Pretest)</td>
<td>31.55</td>
<td>42</td>
<td>7.10</td>
<td>1.10</td>
</tr>
<tr>
<td>Shared and Supportive Leadership (Posttest)</td>
<td>36.62</td>
<td>42</td>
<td>5.09</td>
<td>.785</td>
</tr>
<tr>
<td>Shared Values and Vision (Pretest)</td>
<td>24.10</td>
<td>42</td>
<td>5.85</td>
<td>.902</td>
</tr>
<tr>
<td>Shared Values and Vision (Posttest)</td>
<td>30.55</td>
<td>42</td>
<td>3.81</td>
<td>.589</td>
</tr>
<tr>
<td>Collective Learning and Application (Pretest)</td>
<td>26.24</td>
<td>42</td>
<td>7.19</td>
<td>1.11</td>
</tr>
<tr>
<td>Collective Learning and Application (Posttest)</td>
<td>33.24</td>
<td>42</td>
<td>4.23</td>
<td>.653</td>
</tr>
<tr>
<td>Shared Personal Practice (Pretest)</td>
<td>17.31</td>
<td>42</td>
<td>4.83</td>
<td>.745</td>
</tr>
<tr>
<td>Shared Personal Practice (Posttest)</td>
<td>23.40</td>
<td>42</td>
<td>3.12</td>
<td>.482</td>
</tr>
<tr>
<td>Supportive Conditions-Relationships (Pretest)</td>
<td>13.83</td>
<td>42</td>
<td>3.36</td>
<td>.518</td>
</tr>
<tr>
<td>Supportive Conditions-Relationships (Posttest)</td>
<td>16.21</td>
<td>42</td>
<td>2.56</td>
<td>.395</td>
</tr>
<tr>
<td>Supportive Conditions-Structures (Pretest)</td>
<td>26.81</td>
<td>42</td>
<td>4.95</td>
<td>.764</td>
</tr>
<tr>
<td>Supportive Conditions-Structures (Posttest)</td>
<td>31.50</td>
<td>42</td>
<td>4.91</td>
<td>.758</td>
</tr>
</tbody>
</table>

The *t* test results are presented in Table 14. The table is formatted to emphasize the subscales paired variables results.
Table 14

Teachers’ Professional Learning Community Practices t Test Results Based on Subscales of the Professional Learning Community Assessment

<table>
<thead>
<tr>
<th>Paired variables</th>
<th>M</th>
<th>SD</th>
<th>SEM</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Shared and Supportive Leadership (Pretest) - Shared and Supportive Leadership (Posttest)</td>
<td>5.07</td>
<td>4.63</td>
<td>.714</td>
<td>7.10***</td>
</tr>
<tr>
<td>Pair 2 Shared Values and Vision (Pretest) - Shared Values and Vision (Posttest)</td>
<td>6.45</td>
<td>4.80</td>
<td>.741</td>
<td>8.70***</td>
</tr>
<tr>
<td></td>
<td>Collective Learning and Application (Pretest) - Collective Learning and Application (Posttest)</td>
<td>7.00</td>
<td>5.41</td>
<td>.835</td>
</tr>
<tr>
<td>Pair 3 Shared Personal Practice (Pretest) - Shared Personal Practice (Posttest)</td>
<td>6.10</td>
<td>3.29</td>
<td>.508</td>
<td>12.00***</td>
</tr>
<tr>
<td>Pair 5 Supportive Conditions-Relationships (Pretest) - Supportive Conditions-Relationships (Posttest)</td>
<td>2.38</td>
<td>2.90</td>
<td>.448</td>
<td>5.31***</td>
</tr>
<tr>
<td>Pair 6 Supportive Conditions-Structures (Pretest) - Supportive Conditions-Structures (Posttest)</td>
<td>4.69</td>
<td>4.12</td>
<td>.636</td>
<td>7.37***</td>
</tr>
</tbody>
</table>

Note. df = 41, ***p < .001, two-tailed test.

Shared and supportive leadership at posttest ($M = 36.62, SD = 5.09$) was significantly higher than shared and supportive leadership at pretest ($M = 31.55, SD = 7.10$), $t (41) = 7.10, p < .001$, two-tailed test). Shared values and vision at posttest ($M = 30.55, SD = 3.81$) was significantly higher than shared values and vision at pretest ($M = 24.10, SD = 5.85$), $t (41) = 8.70, p < .001$, two-tailed test). Collective learning and
application and posttest \((M = 33.24, SD = 4.23)\) was significantly higher than collective learning and application at pretest \((M = 26.24, SD = 7.19)\), \(t\) \((41) = 8.39, p < .001\), two-tailed test). Shared personal practice at posttest \((M = 23.40, SD = 3.12)\) was significantly higher than shared personal practice at pretest \((M = 17.31, SD = 4.83)\), \(t\) \((41) = 12.00, p < .001\), two-tailed test). Supportive conditions-relationships at posttest \((M = 16.21, SD = 2.56)\) was significantly higher than supportive conditions-relationships at pretest \((M = 13.83, SD = 3.36)\), \(t\) \((41) = 5.31, p < .001\), two-tailed test). Supportive conditions-structures at posttest \((M = 31.50, SD = 4.91)\) was significantly higher than supportive conditions-structures at pretest \((M = 26.81, SD = 4.95)\), \(t\) \((41) = 7.37, p < .001\), two-tailed test). Therefore, the researcher-developed intervention significantly increased high school teachers’ professional learning community practices.

Table 15 provides a summary of the research questions and the outcomes.

Table 15

<table>
<thead>
<tr>
<th>Research question</th>
<th>Statistical test</th>
<th>Significance</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>R₁: What are the effects of a researcher-developed intervention on high school teachers’ morale?</td>
<td>Paired Samples (t) Tests</td>
<td>(p &lt; .001) for all three subscales</td>
<td>The researcher-developed intervention significantly increased high school teacher morale.</td>
</tr>
<tr>
<td>R₂: What are the effects of a researcher-developed intervention on high school teachers’ professional learning community practices?</td>
<td>Paired Samples (t) Tests</td>
<td>(p &lt; .001) for all six subscales</td>
<td>The researcher-developed intervention significantly increased high school teachers’ professional learning community practices.</td>
</tr>
</tbody>
</table>
Summary of Findings

Two research questions were formulated for this investigation. The research questions were examined with nine paired-sample \( t \) tests. Each sample subscale was paired with pretest and posttest to determine participants’ perceptions at the beginning and at the end of the study. The Staff Morale Questionnaire (Smith, 1971) had three subscales: Leadership Synergy, Cohesive Pride, and Personal Challenge. The Hipp and Huffman (2010) Professional Learning Community Assessment- Revised instruments had six subscales: Shared and Supportive Leadership, Shared Values and Vision, Collective Learning and Application, Shared Personal Practice, Supportive Conditions, and Supportive Conditions-Structures. Pairing the subscales identified the means. All of the tested pairs of means were determined to be statistically significant at the \( p < .001 \) level, indicating a higher value at posttest. Therefore, the researcher-developed intervention significantly increased participants’ morale and professional learning community practices. Implications of these findings will be discussed in Chapter 5. The \( t \) test verified, to a very high degree, an apparent correlation. When teachers meet to develop and implement lesson study, teacher morale increased. The intervention revealed on posttest that the developed lesson study process had a significant effect on participants’ morale.
Chapter 5: Discussion

Introduction

The purpose of this study was to assess the effectiveness of a lesson study plan to improve teacher collegiality and increase professional learning community activities. Over a period of 4 months, the researcher met biweekly with one English, math, and science superstar teacher. During the 30-minute meetings, the teachers discussed setting goals, planning, teaching, observing, debriefing, revising, re-teaching, and sharing results.

During the first month, the researcher met with participants at the research site and explained the purpose of the study, distributed the instruments, collected data, and analyzed the data. The participants read the 2007 work by Stepanek et al. that describes a procedure to develop a lesson-study process. Lesson study was a new process of professional development for the participants.

During the second month, teachers who taught similar content and grade level met to set goals and to develop a lesson-study plan. During the third and fourth months, teachers finalized the lesson-study process, identified student learning outcomes, revised and re-taught the lesson, and shared best practices in small groups.

During the fifth month of this study, the researcher readministered the Staff Morale Questionnaire (Smith, 1971) and Hipp and Huffman’s (2010) Professional Learning Community Assessment-Revised, collected the data, and performed the analyses to answer the research questions. These instruments were utilized to determine the level of professional learning practice and morale before and after participants
collaboratively worked with lesson study. The researcher also collected and summarized copies of the following from three superstar teachers: (a) Group Goal-Setting Worksheets; (b) Lesson Study Action Plan: Schedules; (c) Lesson Plan: Team Member Log-Post-debriefings; (d) Process for Revising the Lessons; (e) Student Learning Outcomes; and (f) Lesson Study Report Guidelines. The teacher teams consisted of three groups of three science, four language arts, and three math teachers.

**Teacher Morale**

According to Kinsey (2006), the greatest predictors of student success are teachers’ positive attitudes, connectedness to the school, and feeling that their work is important and acknowledged. Data collected in this study using the Staff Morale Questionnaire (Smith, 1971) indicated that at the end of the study, participants felt they had a higher sense of belonging in the school and were an important part of the school. Similarly, the results from the Professional Learning Community Instrument-Revised (Hipp & Huffman, 2010) indicated that participants felt that opportunities and structures increased for collective learning through open dialogue.

**Log for Teacher Support and Recognition**

A superstar teacher maintained a log that identified the time teacher teams used for lesson-study meetings, and the resources they requested and ultimately obtained from the administrator. The superstar teachers secured substitute teachers so that they could observe each other teach the lesson, edit the lesson, and re-teach the lesson.

**Professional Learning Practices**

Change in professional learning practices over time can be determined by
reflecting on whether objectives were met. Was the time sufficient to conduct the lesson? How did participants feel about the group project? How useful was the format used in the training? What was their general reaction to lesson study (Morrison et al., 2011)?

Teachers met the objectives of identifying student learning needs; developing a lesson; and teaching, editing, and reteaching the lesson. During the study period, participants met during planning time, early release, and planning days for a total of 12 hours. To facilitate the development of common lesson plans, teachers’ groups were formed according to similar subjects and grade levels. In the Lesson Study Report Guidelines, the science teachers indicated that they learned new teaching strategies, students’ learning increased during the second lesson, veteran and beginning teachers learned from each other, and teachers observed best practices being implemented by other teachers. English teachers indicated that cooperative learning and collegial interaction helped them get to know each other better. Similarly, math teachers stated that sharing ideas helped them develop new practices that improved students’ learning. This finding is consistent with the research of Finnigan and Gross (2007) who found a direct correlation between teacher efforts, motivation, and morale.

Participants also reported that levels of perceived collegiality increased, that observing each other teach resulted in mutual respect as teachers, and that best practices were shared. Participants reported that they could improve lesson study work by (a) sharing and discussing results with teachers across the curriculum, (b) learning about other teams’ results, (c) continuing to have teachers act as lesson observers, (d) allowing students to guide or take charge of their own learning, and (e) monitoring the amount of
time students spent completing tasks. Where teacher morale is high, students typically show high achievement (Kinsey, 2006).

**Conclusion**

The results of this study revealed an increase in teacher morale after participants engaged in facilitated professional learning opportunities through lesson study, which showed that lesson study is a process centered on student learning rather than on teacher teaching. DuFour and Eaker (1998), Foord and Haar (2008), Hurd and Lewis (2011), and Hipp and Huffman (2010) stated that when teachers work in teams to identify student learning gaps, to connect those gaps with standards that could help students improve learning, and to develop effective lessons and assessments, student learning improves and teachers feel better about their profession.

The increases in means from the pretest to the posttest for the Staff Morale Questionnaire (Smith, 1971) and the Professional Learning Community Assessment (Hipp & Huffman, 2010) instruments indicated that when teachers work in teams to discuss student learning needs and share best practices, they experience job satisfaction, learn from each other, and develop instructional activities more centered on student learning needs. The findings of this study show that teacher morale increases when participants collaboratively develop and implement a lesson study plan. Lumsden (1998) stated that when teacher morale increases, teaching is more enjoyable for teachers and learning is more pleasant for students.

A lesson study process benefits both senior and novice teachers. This research showed that lesson study gave participants the opportunity to:
1. Reflect on student learning styles and explore different teaching strategies.

2. Examine learning focused on required standards.

3. Be empowered to develop professional growth.

4. Hold themselves accountable for students’ learning growth.

5. Improve collegiality among professionals.

6. Adopt effective and eliminate ineffective methods of student learning.

7. Increase teacher morale.

In a study where teacher groups examined lessons similar to case studies, groups found that providing feedback in writing helped them refine their ideas about applying learning strategies (Tallerico, 2005). The data from this study support the proposition that during lesson study activities, teachers felt appreciated and motivated by the time given to them to engage in professional learning, valued the follow-up and support, and felt that they were producing work they could immediately use with their students.

The findings of this study are consistent with those of Stepanek et al. (2007), Hipp and Huffman (2010), Taylor et al. (2005), and the National Staff Development Council (NSDC) which stated that effective professional learning occurs when teachers meet on a regular basis to discuss student learning gaps and develop learning activities that could improve student learning. The study data revealed a significant change in teacher perceptions about professional learning. The Shared-and-Supportive-Leadership mean increased from 32 (pretest) to 37 (posttest) on a scale of 11 to 44, and the Collective-Learning mean increased from 26 (pretest) to 33 (posttest) on a scale of 10 to 40.
The study’s findings also indicated teacher morale increased when teachers were given sufficient time and resources to engage in lesson study. Based on the data collected from the Staff Morale Instrument (Smith, 1971), the biggest change in teacher perception about their work environment was shown by the Cohesive-Pride mean which increased from 24 (pretest) to 28 (posttest) on a scale of 9 to 36, and the Leadership-Synergy mean which increased from 26 (pretest) to 30 (posttest) on a scale of 10 to 40.

**Implications**

The results of this applied research study suggest lesson study (Stepanek et al., 2007) has a positive impact on participating teachers by increasing professional learning community practices and teacher morale. A potential explanation of these results is that teachers’ morale improves when they increase their collaboration with colleagues and engage in an expanded scope of collegial relationships.

Another implication of the results of this study is that lesson study could be an effective method of improving teacher morale in urban high schools where morale is low. The lesson study process engages teachers in decision making, gives them opportunities to determine their students’ learning needs, and empower them to select and use methods and resources they perceive are effective to address students’ needs. This process enables teachers to focus on their roles as members of a professional team who design and deliver curricula appropriate for their students’ educational needs.

**Limitations**

The researcher distributed consent forms to 93 teachers who worked in an urban high school, but only 42 volunteered to participate in the study. The effect of the non-
volunteer teachers on their colleagues is unknown. Another limitation is that the potential difference in the effects of the teachers who participated in the teams led by superstar teachers and the teachers who participated in the teams but did not volunteer to complete the instruments is unknown.

**Recommendations**

The researcher recommends that superstar teachers make an effort to include as many teachers as possible within the high school to participate in the process of lesson-study planning. Participants should also use students’ learning data to determine the impact lesson study has over a longer period of time. An expert could be invited to offer participants a lesson-study workshop to improve participants’ understanding about the lesson-study cycle.

The administrator should provide funds to hire substitute teachers to relieve teachers who are involved in lesson study. Professional learning teams should strive to develop school-wide lesson study plans (Lewis & Hurd, 2011). Increasing the number of teachers who have common planning could also increase teacher participation in lesson study.

Teachers who are willing to participate in lesson study, but cannot meet during the school day, could develop electronic teams to meet at their convenience. Electronic teams are groups of teachers who meet using Skype, iChat, Google’s chat, Yahoo chat, or other technological means. Teacher teams could also develop websites to share lesson study strategies.
To promote more participation, teachers should share lesson study best practices across curricular areas. Teachers should continue to use the lesson-study cycle to create a collection of lesson plans sorted by grade level and subject area for use by other teachers. Participants should share lesson-study plan best practices with teachers in other schools to promote effective professional learning and morale throughout the school district.

**Continuous Improvement**

Lesson study significantly increased morale. Teachers were offered the opportunity to collaborate with peers to identify a student learning problem, to provide each other continual feedback, and to share with each other meaningful professional learning (Protheroe, 2006). Participants observed other teachers and shared best practices, which increased morale (Postell, 2004). Teacher teams had the opportunity to try new ideas to improve their professional learning (Berman, 1987). Lesson study plans gave participants responsibility, achievement, positive reinforcement, and autonomy—all of which, according to Whitaker et al. (2000), improve job satisfaction.

To increase morale, participants should continue teacher-developed and teacher-driven professional learning. Teachers should implement curricular strategies in the lesson-study cycle to help each other learn new teaching strategies. The school improvement team should include lesson study in a long-term student and adult learning plan (Lewis & Hurd, 2011).
References


Appendix A

Staff Morale Questionnaire
Instructions: For each question select one choice only and respond to all questions.

Scoring scale: A four-point scale is used ranging from one to four. (1) indicates that you strongly disagree, (2) disagree, (3) agree, and (4) strongly agree.

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I would rather teach with my present colleagues than with any other group of teachers in another school.</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>In this school, teachers have a sense of belonging and of being needed.</td>
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<td>3</td>
<td>The teachers in this school cooperate with each other to achieve common professional objectives.</td>
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<td>4</td>
<td>Every teacher on this staff contributes toward the achievement of the school’s aims.</td>
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<td>5</td>
<td>I would perform my duties equally well and continuously under less pleasant conditions than I have at present.</td>
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<tr>
<td>6</td>
<td>I do school work beyond my normal working hours</td>
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<td>7</td>
<td>When I believe that suggestions made by my immediate supervisor are of little value, I ignore them.</td>
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<td>8</td>
<td>Members of this staff can be relied upon to work with steady persistence.</td>
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<td>9</td>
<td>On the whole, how much chance is given to you in this school to show what you can really do?</td>
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<tr>
<td>10</td>
<td>How well are you kept informed about what is going on in your school?</td>
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<td>11</td>
<td>How do you feel after your immediate supervisor has talked to you about a mistake or weakness in your work?</td>
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<td>12</td>
<td>How well are school policies and the reasons for them explained to you?</td>
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<td>13</td>
<td>How well do you think your school is run?</td>
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<td>14</td>
<td>The principal seems to want everything to depend solely on his judgment.</td>
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<tr>
<td>15</td>
<td>Our principal encourages teachers to participate in the formulating of major school projects.</td>
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<td>16</td>
<td>Duties delegated to teachers are clearly and explicitly defined.</td>
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<td>17</td>
<td>To what extent do teachers in your school pursue in-service or university courses?</td>
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<tr>
<td>18</td>
<td>In general, teachers on this staff show a great deal of originality and initiative in their teaching.</td>
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<tr>
<td>19</td>
<td>To me there is not more challenging profession than teaching.</td>
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<tr>
<td>20</td>
<td>Teachers in this school display confidence and keenness when called upon for a special effort.</td>
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<tr>
<td>21</td>
<td>In general, I have tried to be innovative in my teaching techniques on my own initiative.</td>
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<tr>
<td>22</td>
<td>Teachers in this school are convinced of the importance of the school’s objectives.</td>
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<tr>
<td>23</td>
<td>The teaching I am doing at present gives me a feeling of success and pride.</td>
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<tr>
<td>24</td>
<td>I feel that I am an important part of my present school.</td>
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<tr>
<td>25</td>
<td>There is not complaining, arguing and taking of sides among my colleagues.</td>
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<tr>
<td>26</td>
<td>To what extent do you feel that your colleagues act as a unified staff rather than as a collection of independent individuals?</td>
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<tr>
<td>27</td>
<td>Keeping up to date professionally is too much of a burden.</td>
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<tr>
<td>28</td>
<td>Are you provided with the best possible equipment consistent with your school’s aims and finances?</td>
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<tr>
<td>29</td>
<td>Would your immediate supervisor support you and back you up if something went wrong which was not your fault?</td>
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<tr>
<td>30</td>
<td>To what extent would you wish to share in the organization and running of your school?</td>
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<tr>
<td>31</td>
<td>To what extent do past successes in teaching cause you to strive for similar success in the future?</td>
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</tr>
</tbody>
</table>

**Type of source**

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Appendix B

Hipp and Huffman’s (2010) Professional Learning Community Assessment-Revised
Instructions: For each question select one choice only and respond to all questions.

Scale score: Strongly Disagree, Disagree, Agree, and Strongly Agree

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Staff members are consistently involved in discussing and making decisions about most school issues.</td>
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<tr>
<td>2</td>
<td>The principal incorporates advice from staff members to make decisions.</td>
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<td>3</td>
<td>Staff members have accessibility to key information</td>
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<td>4</td>
<td>The principal is proactive and addresses areas where support is needed.</td>
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<td>5</td>
<td>Opportunities are provided for staff members to initiate change.</td>
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<td>6</td>
<td>The principal shares responsibility and rewards for innovative actions.</td>
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<td>7</td>
<td>The principal participates democratically with staff sharing power and authority.</td>
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<td>8</td>
<td>Leadership is promoted and nurtured among staff members.</td>
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<td>9</td>
<td>Decision-making takes place through committees and communication across grade and subject areas.</td>
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<tr>
<td>10</td>
<td>Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
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<tr>
<td>11</td>
<td>Staff members use multiple sources of data to make decisions about teaching and learning.</td>
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<tr>
<td>12</td>
<td>A collaborative process exists for developing a shared sense of values among staff.</td>
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<tr>
<td>13</td>
<td>Shared values support norms of behavior that guide decisions about teaching and learning.</td>
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<tr>
<td>14</td>
<td>Staff members share visions for school improvements that have undeviating focus on student learning.</td>
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<tr>
<td>15</td>
<td>Decisions are made in alignment with the school’s values and vision.</td>
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<tr>
<td>16</td>
<td>A collaborative process exists for developing a shared vision among staff.</td>
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<tr>
<td>17</td>
<td>School goals focus on student learning beyond test scores and grades.</td>
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<tr>
<td>18</td>
<td>Policies and programs are aligned to the school’s vision.</td>
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<tr>
<td>19</td>
<td>Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
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<tr>
<td>20</td>
<td>Data are used to prioritize actions to reach a shared vision.</td>
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<tr>
<td>21</td>
<td>Staff members work together to seek knowledge, skills, and strategies and apply this new learning to their work.</td>
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<td>22</td>
<td>Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
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<tr>
<td>23</td>
<td>Staff members plan and work together to search for solutions to address diverse student needs.</td>
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<tr>
<td>24</td>
<td>A variety of opportunities and structures exist for collective learning through open dialogue.</td>
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<td>25</td>
<td>Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
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<td>26</td>
<td>Professional development focuses on teaching and learning.</td>
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<tr>
<td>27</td>
<td>School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
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<tr>
<td>28</td>
<td>School staff members are committed to programs that enhance learning.</td>
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<tr>
<td>29</td>
<td>Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
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<tr>
<td>30</td>
<td>Staff members collaboratively analyze student work to improve teaching and learning.</td>
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<tr>
<td>31</td>
<td>Opportunities exist for staff members to observe peers and offer encouragement.</td>
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<tr>
<td>32</td>
<td>Staff members provide feedback to peers related to instructional practices.</td>
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<tr>
<td>33</td>
<td>Staff members informally share ideas and suggestions for improving student learning.</td>
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<tr>
<td>34</td>
<td>Staff members collaboratively review student work to share and improve instructional practices.</td>
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<tr>
<td>35</td>
<td>Opportunities exist for coaching and mentoring.</td>
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<tr>
<td>36</td>
<td>Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
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<tr>
<td>37</td>
<td>Staff members regularly share student work to guide overall school improvement.</td>
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<tr>
<td>38</td>
<td>Caring relationships exist among staff and students that are built on trust and respect.</td>
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<tr>
<td>39</td>
<td>A culture of trust and respect exists for taking risks.</td>
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<tr>
<td>40</td>
<td>Outstanding achievement is recognized and celebrated regularly in our school.</td>
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<tr>
<td>41</td>
<td>School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
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<tr>
<td>42</td>
<td>Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
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<tr>
<td>43</td>
<td>Time is provided to facilitate collaborative work.</td>
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<tr>
<td>44</td>
<td>The school schedule promotes collective learning and shared practice.</td>
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<tr>
<td>45</td>
<td>Financial resources are available for professional development.</td>
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<tr>
<td>46</td>
<td>Appropriate technology and instructional materials are available to staff.</td>
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<tr>
<td>47</td>
<td>Resource people provide expertise and support for continuous learning.</td>
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<tr>
<td>48</td>
<td>The school facility is clean, attractive, and inviting.</td>
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<tr>
<td>49</td>
<td>The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
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<tr>
<td>50</td>
<td>Communication systems promote a flow of information among staff members</td>
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</tr>
<tr>
<td>51</td>
<td>Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
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<tr>
<td>52</td>
<td>Data are organized and made available to provide easy access by staff members.</td>
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</tbody>
</table>

Appendix C

Permission to Use Hipp and Huffman’s (2010) PLCA Revised
April 14, 2011

Angel Almanzar
Doctoral Student
Nova Southeastern University
9681 NW 10th Street
Plantation, Florida 33322

Dear Mr. Almanzar:
This correspondence is to grant permission to utilize the Professional Learning Community Assessment-Revised (PLCA-R) as your instrument for data collection for your doctoral study through Nova Southeastern University, Davie, Florida. I believe your research relating to teacher morale through professional learning communities will contribute to both the research literature and provide valuable information to schools functioning as PLCs. I am pleased that you are interested in using the PLCA-R measure in your research.

Upon completion of your study, I would be interested in learning about your results. If possible, I would appreciate the opportunity to receive raw data scores from your administration of the PLCA-R. This information would be added to our data base of PLCA-R administration. I would also be interested in learning about your entire study and would welcome the opportunity to receive an electronic version of your completed dissertation research.

Thank you for your interest in our research and measure for assessing professional learning community attributes within schools. Should you require any additional information, please feel free to contact me.

Sincerely,
Dianne F. Olivier

Dianne F. Olivier, Ph. D.
Assistant Professor
Joan D. and Alexander S. Haig/BORSF Professor
Department of Educational Foundations and Leadership
College of Education
University of Louisiana at Lafayette
P.O. Box 43091
Lafayette, LA 70504-3091
(337) 482-6408 (Office)
dolivier@louisiana.edu

Appendix D

Consent Letter to Participants
IRB protocol #__________________

Principal investigator                                Co-investigator
Angel Almanzar, M.Ed.                                  Harry L. Bowman, Ed.D.

For questions/concerns about your research rights,
Contact Human Research Oversight Board:
Institutional Review Board (IRB)
Nova Southeastern University
Office of Grants and Contracts
(954) 262-5369/Toll Free: 866-499-0790
IRB@nsu.nova.edu

Research Location

A public high school in Broward County

The subjects for this study will be 93 high school teachers who work at the research site. All teachers are state certified with 14 having master’s degrees and 2 having doctoral degrees. The teachers’ demographics demonstrate that 15% have taught at the research site less than 5 years, 50% between five and 10 years, and 35% over 10 years. The teachers’ age distribution demonstrates that 10% are between the ages of 25 and 35, 60% are between 35 and 45, and 20% are between 45 and 55, and 10% are 55 and older. Additionally, 50% of the teachers are White, 35% are Black, and 15% are Hispanic.

What is the study about?
Angel Almanzar is a doctoral student at Nova Southeastern University engaged in research for the purpose of satisfying a requirement for a Doctor of Education degree. The purpose of this study is to determine the impact of professional learning communities on morale in a high school that employs 93 classroom teachers. The intervention will provide methods for teacher collaboration, sharing information, seeking new knowledge, teaching skills, strategies, and working collaboratively to plan and improve student learning. The intent of this program is to provide teachers with additional information they can use to foster and address teacher collaboration.
Why are you asking me?
You are a teacher at the research site. The questionnaires will help the researcher identify the strengths and weaknesses of teachers’ perception relevant to professional learning community practices and morale. The data from this questionnaire will be used to identify teachers’ training that could improve student achievement. The researcher and teachers will use the data collected to develop professional learning community practices.

What will I be doing if I agree to be in the study?
The study requires that you complete a pre-survey and post-survey. The researcher will issue you a code to complete the pre-survey and post-survey. It is important that you use the same codes to complete the first and second survey. The codes are confidential. Do not share the code with anyone. The first survey will be conducted at the beginning of the professional development plan, and the second survey will be completed at the end.

The study will be completed in four months. When the study is completed, all identifiers will be destroyed. The researcher will maintain the identifiers separate and secured in encrypted file in a portable hard drive. To anonymize the data, all identifiers will be destroyed after the study has been completed. Copies of the tests results with the identifiers will be available upon request. When the intervention has been completed and it is time to complete the posttest, I will place a reminder letter in your mailbox.

As a show of appreciation for your time and collaboration, once you complete both surveys I will place in your individual mailbox a ticket to the movie theater located in Pine Island and 595. The ticket can be used to watch a movie of your choice.

Is there any audio or video recording?
No

What are the dangers to me?
Some questions may be sensitive to others. There is a minimal possibility that during the time you complete the surveys, you might feel uncomfortable about judging your work location. There is also a minimal likelihood that some responses may be connected to specific individuals.

Are there benefits to me for taking part in this research study?
No specific benefits are associated with this study.

Will I get paid for being in the study? Will it cost me anything?
Participation is completely voluntary and no payment will be provided. There is no cost for participating in this study.

How will you keep my information private?
Information obtained in this study is strictly confidential unless law requires disclosure. Some of the questions in the Staff Morale Questionnaire could be sensitive to some
subjects. The subject responses to the instrument will be code protected and completing the instrument will not require the name or any other subject identification. The code assigned to you, and the instruments’ results will not be shared with the administrators, teachers, or anyone else. The researcher will be the only person in possession of the codes. The codes will be kept separate from the instruments in an encrypted password protected file in a portable hard drive. Your name will not be used in the reporting of information in publications or conference presentations. To protect your right to privacy and confidentiality, a code will be assigned to you, your name will not be connected to the codes, and the researcher will not share your code with anyone. The administrators at the research site will not have access to your survey responses. The first survey will be conducted at the beginning of the study, and the second survey will be completed at the end of the study.

**What if I do not want to participate or I want to leave the study?**
You have the right to refuse to participate in this study and the right to withdraw from the study at any time without penalty and without loss of benefits to which you are entitled. If you decide to terminate participation, the researcher will keep any data collected from you until the study is completed and may use it. The investigator may terminate your participation in this study without your permission.

**Other Considerations:**
If the researcher learns anything that might change your mind about being involved in this study, you will be informed in writing.

1. If you agree to participate, sign this form, place it in the attached envelope, and return it to the researcher. On September 6, 2013 the researcher will be in the media center for three hours to collect the instruments and respond to any questions you may have. Please complete the surveys before September 6, 2013. Please use the following link to complete the surveys and do not forget to use the same code during the first and second surveys.


I have read this letter and I fully understand the contents of this document and voluntarily consent to participate. All of my questions concerning this research have been answered. If I have any questions in the future about this study the investigator listed above or his/her staff will answer them. I understand that the completion of the questionnaires implies my consent to participate in this study and I give the researcher permission to collect the pre and post surveys responses, and analyze the data.

2. If you do not wish to participate in this survey, do not proceed to complete the instruments.
Voluntary Consent by Participant:

By signing below, you indicate that:
- This study has been explained to you,
- You have read this document or it has been read to you,
- Your questions about this research study have been answered,
- You have been told that you may ask the researchers any study-related questions in the future or contact them in the event of a research-related inquiry,
- You have been told that you may ask Institutional Review Board (IRB) personnel questions about your study rights,
- You are entitled to a copy of this form after you have read and signed it, and
- You voluntarily agree to participate in the study entitled Impact of an Intervention on Morale and Professional Learning Community Practices of Urban high School Teachers.

Participant’s Signature: ___________________________ Date: __________________

Participant’s Name: ___________________________ Date: __________________

Signature of Person Obtaining Consent: ___________________________

Date: ___________________________
Appendix E

Letter to Teachers To Complete Instruments
Date:

To:

From: Angel Almanzar, Nova Southeastern University Student

Subject: Request to participate in the study: Impact of Professional Learning Community Practices on Morale of Urban high School Teachers

My name is Angel Almanzar and I’m currently a doctoral student at Nova Southeastern University engaged in research for the purpose of satisfying a requirement for a Doctoral Education degree.

Please consider this information carefully before deciding whether or not to participate in this research.

The purpose of the study: is to determine the impact of professional learning community practices on morale has on 93 teachers who work at high school in Broward County.

What you will do in this research: you will complete two surveys: (a) Staff Morale, and Professional Learning Communities-Revised. To read the consent form and complete the surveys log into:


Each survey will take about 7 minutes. Your responses will be completely confidential and your name will not be used in the study.

Risk: Some questions may be sensitive to others. There is a minimal possibility that during the time you complete the surveys, you might feel uncomfortable about judging your work location, and there is also a minimal likely hood that some responses may be connected to specific individuals.

Benefits: There are no direct benefits to you for your participation. However, as a show of appreciation, once you complete both instruments, I will place in your individual mailbox a ticket to the movies theater located in Pine Island and 595.
Appendix F

Guided Goal Setting for Groups Presentation
Objectives

Participants will:
1. Learn how to set goals to contribute to the school goals
2. Learn how to use a systemic approach to set goals

Assessment
Teachers will use the Common Core standards to develop a set of goals for the school

Materials
1. Flip charts (one per group)
2. Markers
3. Pads of Post-It Notes (one per member)

Activity One
1. Participants get in groups of three
2. Individually without talking they will brainstorm for school goals
3. For now do not worry about long- and short-term goals
4. Each member places the Post-It Notes on the wall in a cluster
5. Each member reads all the Post-It Notes found in the group cluster
6. Participants walk clockwise to read all the Post-It Notes found in other teams’ clusters
7. As each member uses a Post-It to write ideas found in other groups’ clusters
8. Members can also write other ideas they did not think about as they brainstormed and add them to their group cluster

Activity 2
1. Each group sorts the Post-Its into common themes
2. Use three blank Post-Its and make a star on them
3. Place the Post-It on the cluster they developed
4. Members vote for the Post-It that has the most important idea
5. Eliminate any theme that did not receive at least one vote
6. Write the themes that got at least two votes into goal statements on a large flip chart, such as “to increase the student reading scores on the state test.”
7. Tape the large papers with the small-group goals on the wall
8. Each group shares with all participants their goals written on the flip chart
9. Presenter asks the groups to identify common goals among the groups
10. Compile the common goals into one group
11. If the participants have too many goals, they can vote on the one they consider to be most important until they have two or three goals
12. Sort the goals into short- and long-term goals
13. Teams select goals to develop plans

Appendix G

Lesson Study Guiding Questions
1. What concerns might teachers have?

2. How will concerns be addressed?

3. How many meetings are needed to give teachers enough time to plan the lesson?

4. What are the options for creating time to meet?

5. What are the preferences of the team members?

6. When will the teachers/observation be held, how will teachers cover classes or bring in students?

7. Who has the authority to help teachers find or create time for lesson study

Appendix H

Lesson Study Action Plan: Team Responsibilities
<table>
<thead>
<tr>
<th>Task</th>
<th>Person Responsible</th>
<th>Teacher initials</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

**Coordinating Meetings**

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<thead>
<tr>
<th>Task</th>
<th>Person Responsible</th>
<th>Teacher initials</th>
</tr>
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<tbody>
<tr>
<td>Scheduling planning meetings</td>
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<td></td>
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<tr>
<td>Scheduling first teaching and debriefing</td>
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<tr>
<td>Scheduling second teaching and debriefing</td>
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</table>

**First Teaching, Observation, and Debriefing**

<table>
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<tr>
<th>Task</th>
<th>Person Responsible</th>
<th>Teacher initials</th>
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<tbody>
<tr>
<td>Teaching the lesson</td>
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<td></td>
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<tr>
<td>Moderating the debriefing</td>
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<tr>
<td>Keeping time</td>
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<tr>
<td>Taking notes</td>
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**Second Teaching, Observation, and Debriefing**

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<th>Task</th>
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<th>Teacher initials</th>
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<tbody>
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<td>Teaching the lesson</td>
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<td></td>
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<tr>
<td>Moderating the debriefing</td>
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<td>Keeping time</td>
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<td>Taking notes</td>
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Appendix I

Lesson Study Action Plan: Schedule
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<th>Getting Started</th>
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<td>Date</td>
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<table>
<thead>
<tr>
<th>Planning Sessions</th>
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<tbody>
<tr>
<td>Date</td>
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</table>

<table>
<thead>
<tr>
<th>Teaching, Observation, and Debriefing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
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</tbody>
</table>

  Teaching  
  Reflection  
  Debriefing

<table>
<thead>
<tr>
<th>Revising Sessions</th>
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<tbody>
<tr>
<td>Date</td>
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<table>
<thead>
<tr>
<th>Reteaching, Observation and Debriefing</th>
</tr>
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<tbody>
<tr>
<td>Date</td>
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</table>

  Teaching  
  Reflection  
  Debriefing

<table>
<thead>
<tr>
<th>Reflection and Sharing</th>
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<tr>
<td>Date</td>
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Appendix J

Reading Leading Lesson Study: A Practical Guide for Teachers and Facilitator
Leading Lesson Study: A Practical Guide for Teachers and Facilitator  
(Stepanek, et al., 2007)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Teacher initials</th>
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<tr>
<td>Introduction-Making the Case for Lesson Study</td>
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<tr>
<td>Laying the groundwork for Lesson Study</td>
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<tr>
<td>Starting the Lesson Study Cycle</td>
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<tr>
<td>Planning the Research Lesson</td>
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</tr>
<tr>
<td>Teaching, Observing, and Debriefing</td>
<td></td>
</tr>
<tr>
<td>Revising and Reteaching the Lesson</td>
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<tr>
<td>Reflecting and Sharing Results</td>
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Appendix K

Log of Faculty Job Satisfaction Activities
<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Lesson Study Resources</th>
<th>Teacher Observable Practices</th>
<th>Success Celebration for Best Practices</th>
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Appendix L

Group Goal Setting Worksheet
1. Think about the aspirations that you have for your students. What kind of students do you want to foster and help develop at your school? What qualities do you want your students to have by the time they leave your school?

2. What gaps do you see between these aspirations and how children are actually developing at your school?

3. Discuss these gaps with your group. As a group, select a gap that you would like to focus on with your lesson study. What “gap” have you selected?

4. Write a group goal that states the quality you would like to develop in your students, in order to address the gap that you have chosen.

Appendix M

Lesson Study Action Plan
<table>
<thead>
<tr>
<th>Expected Outcomes</th>
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<tbody>
<tr>
<td>Team Members</td>
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<tr>
<td>Time Needed</td>
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<tr>
<td>Administrator Support</td>
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<tr>
<td>Sources of External Support</td>
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<tr>
<td>Documentation</td>
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<tr>
<td>Compensation</td>
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</table>

Appendix N

Lesson Study Lesson Plan Format
Logistical Information:
Date:
Grade:
Subject:
Period and Location:
Instructor:

Name of the unit: (i.e., “Finding areas of geometric figures”)

1. Plan of the unit
   a) Goal(s) of the unit: (i.e., describe/list goals of the unit here)
   b) How this unit is related to the curriculum (i.e., Addition and subtraction of fractions with different denominators) Teacher will use the common core standards.
   c) Instructional sequence for the unit:
      1. Phase I (e.g., How to find area of quadrilateral)

Name of the study lesson: (“Finding the formula for area of a triangle”)

II. Plan of the study lesson

A. Goals of the study lesson: (i.e., describe/list the goals of the study lesson here)

B. How this study lesson is related to the lesson study goals: (i.e., a few descriptive paragraphs)

C. Process of the study lesson:

<table>
<thead>
<tr>
<th>Steps of the lesson: Learning activities and key questions</th>
<th>Student activities and expected reactions/responses</th>
<th>Teacher’s response to student reactions/Things to remember</th>
<th>Method(s) of evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>This chart represents the bulk of the lesson plan. It is usually laid out in order by the parts of the lesson (e.g., introduction, presentation of problem, student work, student presentation, summary, etc.) and allocation of time for each of these parts</td>
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</table>

D. Evaluation

Appendix O

Team Member Log-Post-Debriefing
Describe participants’ observations of student learning. Include details of what students said, did, and write/produced.

Were there any unanticipated student responses? Explain

To what extent were the goals of the lesson achieved? Please provide supporting evidence.

Which instructional decisions might have contributed to helping students meet these goals?

What aspects of the goals were not reached? Please provide supporting evidence.

What aspect of the lesson should be reconsidered based on this evidence?

Appendix P

Student Learning Outcome
1. What was the impact of the lesson on the students

2. Did the lesson affect student performance or achievement?

3. Are the students more confident as learners?

4. Did the lesson affect organizational climate and procedures

5. Were best practices shared and celebrated.

Appendix Q

Process for Revising the Lesson Teams Guiding Questions
1. What evidence do we need to authentically inform the team’s learning?

2. What do the data reveal about student understanding and learning?

3. What aspects of the lesson contributed to student learning?

4. Which goals are the students still struggling with?

5. How can we change the lesson plan to help students more effectively reach the goals?

Appendix R

Lesson Study Report Guidelines
What did you learn through this cycle of lesson study that can be applied to other areas of your work?

What learning can be generalized to other situations?

Student Learning

Pedagogy

Lesson Study Process

In what ways can you improve your lesson study work?

What questions would you like to explore in your next cycle of lesson study?