Leading School Change Through Innovation: The Hybrid Schedule

by

Aneta Walker

A dissertation submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

Auburn, Alabama
August 6, 2016

Keywords: Leading Change, Innovation, Culture, and Student Learning
Copyright 2016 by Aneta Walker

Approved by

Ellen H. Reames, Chair, Associate Professor of Educational Foundations, Leadership and Technology
Frances K. Kochan, Professor Emerita of Educational Foundations, Leadership and Technology
Maria Witte, Professor of Educational Foundations, Leadership and Technology
James Kaminsky, Fraley Professor of Educational Foundations, Leadership and Technology
Abstract

Decades of differing philosophies and conventions have placed the idea of change at the forefront of reform efforts (Rothkopf, 2009). With the implementation of the rigorous, complex Alabama College and Career Ready Standards, a deeper understanding of subject matter is required, and the complexities of these standards require specialized content instruction (Common Core State Standards Initiative, 2012; National Education Association, 2010; Porter, et al., 2011). Schools must prepare and organize for the changes required to teach these standards effectively. Although there is a vast amount of research on educational change as related to school improvement, there is a lack of evidence on how to create a context for change to implement a new innovation on teaching practices, school culture, and student learning outcomes. Therefore, it is pivotal in connecting the dots of what it will take to bridge the gap between failed change and successful sustained school improvement efforts.

The purpose of this research study was to assess the effectiveness of the Innovative Hybrid schedule in improving student learning outcomes and school culture. This mixed-method research study used data generated by the Stages of Concern Questionnaire (SoCQ), the AdvancEd®’s Stakeholder Feedback Survey, the ACT Aspire® Student Achievement Tests, teacher interviews, and artifact data that consisted of a Qualtrics departmentalization survey given to the teachers and students at the end of the pilot year.

The conceptual framework of the present case study was based on the five attributes of the PLCs identified through the work of Shirley M. Hord (2004) and Michael Fullan’s
Educational Change Theory (2007). Hord’s five attributes were: 1) Shared Values and Vision, 2) Intentional Collective Learning, 3) Supportive and Shared Leadership, 4) Supportive Conditions, and 5) Shared Personal Practice. Fullan’s educational change theory has three phases: Phase I – Initiation; Phase II – Implementation; and Phase III – Institutionalization.

The analysis of this study’s data revealed a number of factors that facilitated the implementation of the Innovative Hybrid Schedule. The researcher discovered during the interview process that the overall facilitating factors related to the benefits of changing classes, teachers as content specialists, teacher collaboration through PLCs and vertical planning. Even though the findings from the data from the Stages of Concern Questionnaire (SoCQ) were not statistically significant, there was a decrease in teacher concerns from the beginning to the end of the implementation process. The results of this study of the Innovative Hybrid Schedule showed that significant change occurred in school culture based on the two administrations of the AdvancEd®’s Stakeholder Feedback Survey. Additionally, student learning outcomes measured by ACT Aspire® Reading and Mathematics Student Achievement Tests showed a statistically significant improvement in both reading and math. Lastly, the analysis of teacher interviews supported the findings in the quantitative data. Four themes emerged from the interview process and supported the school culture and student learning outcome data. The four emergent themes were: Benefits of Changing Classes, Improvement in School Culture, Teachers as Content Specialists, Teacher Collaboration through PLCs and Vertical Planning.
Acknowledgments

As I reach the end of my experience as a doctoral student and reflect back on this journey, I am acutely aware of the many people who have impacted my life during this process. My appreciation for their support and friendship is boundless. I want to express my gratitude and thankfulness to my wonderful committee members: Dr. Ellen Reames, Dr. Fran Kochan, Dr. Maria Witte, and Dr. James Kaminsky. They have given their time and expertise to guide me in the dissertation process, and I am so grateful to have them on my committee. Your thoughts have been insightful in crafting this research study. Words will never express how much I appreciate and recognize that your time, encouragement, support, thoughts, and prayers inspired me to finish this journey. Without each of you, crossing the finish line would still be just a dream of mine. If it were not for Dr. Ellen Reames, my committee chairperson, I wouldn't have reached this point. In my final semester as a doctoral student, confronted with my son’s serious illness, I thought that my academic career and life had ended before it had actually started. Ellen, your telephone calls and text messages were the source of the encouragement that I needed to realize I could endure, overcome, and persevere. All along the way, you have pushed when I needed pushing and encouraged when I needed encouraging. Thank you, Ellen.

I especially want to thank my family for their support, their patience, and their encouragement throughout the doctoral process. I love you all more than you'll ever know. To my mom and Gene, who have prayed for me and my “schoolwork” every morning, encouraged me through the darkest time of my life, thank you just doesn’t paint the picture of love I feel for
you both in my heart! To my son, John Flowers, you are the source of my inspiration! You have encouraged me, loved me, supported me, put up with me, and pushed me to not only finish but finish well! John, I have watched you fight the toughest battle in life! The fight for your life! Through it all you have never complained! And, I am amazed at your strength and persistent will to fight and win! I love you so very much and I am so proud to be your “Mommy”!

To Sami Q. Walker, soldier, husband, friend, there are many who are married, but few are also friends, playmates, and partners. This dream and journey would not be a reality now without your help, love, and support. You have given selflessly to me! Thank you for holding me when I was in tears because you knew how hard I worked on something and it just disappeared. You watched over me as I stared at three computer screens and encouraged me when I just thought I could not write another word. Just you being there was enough to keep me going. You have given me so much and I will be forever grateful. You never lost faith that I would finish, even though I told you, on a regular basis, that it was hopeless, you just kept pushing me towards the finish line that I am finally crossing.
Table of Contents

Abstract ......................................................................................................................... ii
Acknowledgments ........................................................................................................ iv
List of Tables ................................................................................................................ xi
List of Figures ............................................................................................................... xiii
Chapter 1: Overview of the Study ............................................................................. 1
  Introduction ................................................................................................................ 1
  Purpose of the Study ................................................................................................. 5
  Problem Statement .................................................................................................. 6
  School Culture and Change ..................................................................................... 9
    Background of the Hybrid Schedule at Stella Elementary School ............... 12
  Conceptual Framework and Research Questions ............................................. 18
  Research Questions ............................................................................................... 21
  Significance of the Study ....................................................................................... 22
  Limitations ............................................................................................................... 22
  Assumptions ............................................................................................................ 23
  Definitions of Terms ............................................................................................... 23
Chapter 2: Literature Review ..................................................................................... 26
  Conceptual Framework ......................................................................................... 27
  Organizational Culture ......................................................................................... 32
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>35</td>
</tr>
<tr>
<td>Change Process</td>
<td>39</td>
</tr>
<tr>
<td>Professional Learning Communities</td>
<td>51</td>
</tr>
<tr>
<td>Hybrid Schedule</td>
<td>64</td>
</tr>
<tr>
<td>Summary</td>
<td>76</td>
</tr>
<tr>
<td>Organizational Culture</td>
<td>76</td>
</tr>
<tr>
<td>Leadership</td>
<td>77</td>
</tr>
<tr>
<td>Change Process</td>
<td>77</td>
</tr>
<tr>
<td>Professional Learning Communities</td>
<td>78</td>
</tr>
<tr>
<td>Chapter 3: Methodology</td>
<td>80</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>80</td>
</tr>
<tr>
<td>Research Design</td>
<td>81</td>
</tr>
<tr>
<td>Research Questions</td>
<td>85</td>
</tr>
<tr>
<td>Setting</td>
<td>86</td>
</tr>
<tr>
<td>Role of the Researcher</td>
<td>88</td>
</tr>
<tr>
<td>Participants</td>
<td>89</td>
</tr>
<tr>
<td>Ethical Conditions</td>
<td>90</td>
</tr>
<tr>
<td>Limitations</td>
<td>91</td>
</tr>
<tr>
<td>Data Collection</td>
<td>92</td>
</tr>
<tr>
<td>Stages of Concern Questionnaire (SoCQ)</td>
<td>93</td>
</tr>
<tr>
<td>ACT Aspire</td>
<td>94</td>
</tr>
<tr>
<td>Interview</td>
<td>94</td>
</tr>
<tr>
<td>Artifacts</td>
<td>95</td>
</tr>
</tbody>
</table>
Concluding Remarks........................................................................................................176
References..........................................................................................................................179
Appendix 1 Auburn University Institutional Review Board Approval ..............................205
Appendix 2 Dothan City Schools’ Approval of Research Study........................................215
Appendix 3 Informed Consent Letter ................................................................................218
Appendix 4 Audio Release Consent Letter ........................................................................221
Appendix 5 Stages of Concern ........................................................................................223
Appendix 6 AdvancEd Stakeholder Feedback Questions by Quality School Standards.....227
List of Tables

Table 1. Participants Involved in the Implementation of the Innovative Hybrid Schedule.... 90
Table 2. Internal Reliability Ranges ................................................................. 93
Table 3. Research Questions and Data Collection Instruments ........................................ 96, 157
Table 4. Enrollment at Stella Elementary School by Race ........................................... 105
Table 5. Enrollment at Stella Elementary School by Gender and Grade Level ................. 105
Table 6. Teacher Demographics .............................................................................. 107
Table 7. Participants Involved in the Implementation of the Innovative Hybrid Schedule .. 109
Table 8. Data Collection and Research Questions ...................................................... 112
Table 9. Description of Stages of Concern ................................................................ 114
Table 10. Questionnaire Items Related to Each Stage of Concern ................................. 115
Table 11. Means, Standard Deviations, Eta Square, F Value, and p Value on the SoCQ Questionnaire ........................................................................................................ 119
Table 12. Means, Standard Deviations and n on the AdvancEd®’s Stakeholder Feedback Survey during the Implementation of the Innovative Hybrid Schedule .................... 131
Table 13. Means, Standard Deviations, Eta Square, and p values for Purpose and Direction, Governance and Leadership, Teaching and Assessing for Learning, Resources and Support Systems, and Using Results for Continuous Improvement addressed by AdvancEd®’s Stakeholder Feedback Survey .................................................. 132
Table 14. Level of Significance Comparison ANOVA .................................................. 139
Table 15. Means, Standard Deviations, and Number of Students Tested on the ACT Aspire® Mathematics .............................................................. 139

Table 16. Means, Standard Deviations, Degrees of Freedom, Eta Square, and p Values for the ACT Aspire® Mathematics Test ........................................................................ 140

Table 17. Means, Standard Deviations, and Number of Students Tested on the ACT Aspire® Reading ........................................................................ 141

Table 18. Means, Standard Deviations, Eta Square, and p Values for the ACT Aspire® Reading Test ........................................................................ 141
List of Figures

Figure 1. Conceptual Framework and Phases................................................................. 31
Figure 2. Convergent Parallel Design............................................................................ 84
Figure 3. Means Scores for Each Stage .......................................................................... 118
Figure 4. Conceptual Framework used to Implement the Innovative Hybrid Schedule ..... 171
Figure 5. Alignment of Conceptual Framework, Past Research, and Current Quality School Standards........................................................................................................ 175
CHAPTER 1: OVERVIEW OF THE STUDY

Introduction

At the heart of educational reform, is the central idea that education has the power to positively change lives and improve society. Decades of differing philosophies and conventions have placed the idea of change at the forefront of reform efforts (Rothkopf, 2009). Additionally, the rapid changes and increased technological advances in today’s society present new challenges and demands on our educational system. These factors and their consequences are continually forcing educational issues onto national and international agendas. In fact, according to the Organization of Economic Cooperation and Development (2001), “Education has moved up the political agenda… {and} is seen as the key to unlocking not just social, but also economic problems” (p. 48).

In 1983, the National Commission on Excellence in Education, appointed by President Ronald Reagan, published findings concerning the declines in educational performance in the report, A Nation at Risk. The review assessed K–12 public schools across the country and found them inadequate to prepare students, threatening the ability of the country to function in the information age. States passed laws and reform legislation requiring higher standards and expectations for students at all levels. Many increased higher graduation requirements and implemented new policies to strengthen the teaching profession. After the writing of A Nation at Risk, concerns emerged about the poor economy and the American educational system. These
concerns led the way for the push for a mandated school reform effort that is now historically known as the No Child Left Behind Act of 2001 (NCLB), Public Law 107-110.

NCLB increased the federal government’s involvement in education by mandating annual assessment of student achievement through standardized testing (U.S. Department of Education, 2001). The NCLB set out to close the achievement gap with accountability, flexibility, and choice, so that no child was left behind. This law expected all schools and districts to make “adequate yearly progress (AYP)” and reach 100 percent proficiency pass rate for all various student subpopulations by 2013–2014 school year (U.S. Department of Education, 2001). School districts and schools that failed to make adequate yearly progress (AYP) toward statewide proficiency goals would, over time, be subject to improvement, corrective action, and restructuring measures aimed at getting them back on course to meet state standards. Schools that met or exceeded objectives or closed achievement gaps would be eligible for state academic achievement awards. Additionally, NCLB stipulated that all teachers would be highly qualified in each subject they taught. In March of 2011, the Washington Post reported that more than three-quarters of all public schools would be labeled as failing after the reporting cycle (Anderson, 2011). Anderson (2011) suggested that even though schools looked successful, students were still not achieving at higher levels on college-readiness assessments, such as the ACT (2008).

In 2008, the National Governors Association (NGA), Council of Chief State School Officers (CCSSO), and Achieve released, Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education. This report illuminated the need for policy reform for college and career readiness and outlined five steps toward building globally competitive education systems. The report stated,
We are living in a world without borders. To meet the realities of the 21st century global economy and maintain America’s competitive edge into the future, we need students who are prepared to compete not only with their American peers, but with students from all across the globe for the jobs of tomorrow. (Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education, 2008, p. 1)

The first action recommended was to “upgrade state standards by adopting a common core of internationally benchmarked standards in math and language arts for grades K–12 to ensure that students are equipped with the necessary knowledge and skills to be globally competitive” (National Governors Association, Council of Chief State School Officers [CCSSO], & Achieve, p. 24). In 2009, with approval from the National Governors Association and the Council of Chief State School Officers (CCSSO), the Common Core State Standards Initiative was envisioned. Unlike previous attempts at a national consensus of standards, there was widespread support from these influential groups. The final version of the standards was introduced in June 2010, and by September 2012, 46 states, the District of Columbia, and other U.S. territories had adopted the Common Core State Standards.

These major reforms were just the tip of the iceberg. According to research conducted by Wright (2010), federal legislation such as the implementation of the Disabilities Education Improvement Act (IDEIA) of 2004,

…the legislation prevents schools from classifying students too hastily as LD (learning disabled) because it requires that they first demonstrate that the students have received adequate instruction in the general education classroom and that the student’s academic progress in that setting has been closely monitored. (p. 10)
This documenting process, known as Response to Intervention (RTI), has added to the already increasing workload of schools. To further complicate matters, state and district mandates have added to the ever growing sense that teachers are discouraged and dissatisfied with their jobs. Education blogger, Vicki Davis (2013), recently summed it up when she argued her point in the Washington Post that many teachers are leaving education because of cookie-cutter approaches to teaching and learning. In addition, a recent article in NEA Today (Feb., 2013), according to the 2012 MetLife Survey of the American Teacher: Challenges for School Leadership, indicated teacher dissatisfaction was at an all-time high. The satisfaction rate dropped from 62 percent in 2008 to 39 percent in 2012. More than one-half of the teachers reported feeling under great stress several days per week, as opposed to one-third in 1985.

There have been decades of research findings that indicated the connection between teacher effectiveness and student learning. According to RAND Education’s article (2012), Teachers Matter: Understanding teachers’ impact on student achievement, teachers matter more to student achievement than any other aspect of schooling. Stronge, Ward, and Grant (2011) markedly found that the individual teacher was the most important factor affecting student growth and learning. While teachers matter most, it is unclear how the additional stressors to perform plus the lack of support and professional development for change initiatives has caused rising dissatisfaction with the profession.

Another example of the lack of support can be exemplified with the implementation of Common Core. According to a poll conducted by American Federation of Teachers (AFT) (2013), teachers had concerns regarding the Common Core State Standards. Most of the 800 surveyed teachers felt unprepared to teach the Common Core State Standards (CCSS) and less than one third said their districts provided adequate resources. In an article from NEA Today,
Walker (2013) acknowledged that “teachers needed the opportunity to participate in curriculum development and share their expertise” (p. 41). Without supporting teachers through organizational learning and appropriate professional development for teachers, enthusiasm for the CCSS will quickly diminish. Principals and instructional leaders must provide supports for planning, capacity building, and implementation (Reed, 2013). To successfully increase student growth and achievement, instructional leadership must resound with all stakeholders (Marzano, Carbaugh, Grego, & Toth, 2005). Additionally, the school leader must advocate, monitor, evaluate, and provide guidance through collaborative learning opportunities such as Professional Learning Communities (PLCs) and Professional Development (PD) (Marzano, 2003; Stronge, 1993).

**Purpose of the Study**

Departmentalization is not a new concept in education. Middle schools and high schools have utilized a departmentalized organizational structures for years. However, applying the idea to elementary school seems to be a break from tradition, a long held belief that an elementary school should have a one teacher per classroom model. Departmentalization at an elementary school is controversial because many believe it does not lend to teaching the whole child (Becker, 1987; Chang et al., 2008; Dropsey, 2004; Harris, 1996). This traditional school of thought is held because some believe that younger students benefit from the relationships established because the students are with the same teacher, same students all day every day for the entire school year. Elementary school teachers are trained to be generalists that teach all of the core subjects of math, reading, science, social studies, and language arts (Chan & Jarman, 2004; Chang et al., 2008; Contreras, 2009; Delviscio & Muffis, 2007; Dropsey, 2004; Hampton, 2007; Hood, 2009; McGrath & Rust, 2002; McPartland, 1987).
The current research available on departmentalizing at the elementary school level is still unclear as it relates to improving student learning outcomes, improving instructional practice and teacher effectiveness, and school culture. With the implementation of the rigorous, complex Alabama College and Career Ready Standards, a deeper understanding of subject matter will be required, and the complexities of these standards will require specialized content instruction (Common Core State Standards Initiative [CCSSI], 2012; National Education Association [NEA], 2010; Porter, et al., 2011).

However, some elementary schools have adopted a hybrid schedule to allow teachers to maintain their student relationships, while still engaging in some departmentalization. The hybrid schedule is a variation of departmentalization coupled with ability grouping. This innovative hybrid schedule appears to allow teachers to become specialists in one content area and individualize instruction through use of small group leveled instruction. The formulation of the hybrid schedule also appears to offer the opportunity for teachers to discuss their content areas and participate in a learning community to improve their instructional practice. The teachers plan and collaborate vertically with other subject specific teachers as well as work collectively within their grade levels. The purpose of this study was to investigate the degree to which the implementation of an innovation improves school culture and student learning outcomes?

**Problem Statement**

Educational reform appears to be a movement that is being pursued by politicians and educational leaders across the country. The implementation of the Alabama College and Career Ready Standards has required schools to change the structure and content of their curriculum because the new standards are more rigorous and in-depth than previous state standards (CCSSI, 2012; Porter, McMaken, Hwang, & Yang, 2011). Traditional elementary school organizational
structures and how they function is a growing concern relative to the newly adopted standards. One reason is the fact that the College and Career Ready Standards define the skills and knowledge essential for students to succeed in college and the workplace (NEA, 2010). The standards represent an increase in the difficulty and complexity in the math and English language arts (CCSSI, 2012; Porter et al., 2011). Schools must be prepared and organized for the changes required to teach these standards effectively.

In order to address the reality of the concerns and promote change for the better, the individuals responsible for improving the instruction and curriculum are required to change their behavior (DuFour, Eaker, & DuFour, 2005). Fullan (2003) stated that “it is only by raising our consciousness and insights about the totality of educational change that we can do something about it” (p. vii). In order for success to occur, teachers need to be placed in a structured environment that allows them to focus on the connections between their organization and management skills and how they facilitate their learning and their students’ learning (Fullan, 2003; 2007). Zmuda, Kuklis, and Kline (2004) stressed that the school should be an effective organization that requires a significant change from “unconnected thinking to systems thinking, from perceived reality to information-driven reality, and from individual autonomy to collective autonomy and collective accountability” (p. 1). DuFour et al. (2004) stated that there are two categories for schools, those that succeed and those that do not. For organizations to lead successful change, schools should create a learning community (Fullan, 2007). Consequently, this type of learning community requires organizational change (Fullan, 2003, 2007).

Change often encompasses the implementation of an innovation such as an idea, new knowledge, or a physical object, such as an innovative hybrid schedule. These types of innovations are sometimes forced on an organization by external or environmental forces.
(Rogers, 1983). Harvey and Broyles (2010) agreed that “Change virtually always begins in response to some stimulus, whether internal or external, which motivates us to move from doing one thing to doing something else” (p. 10). Concomitantly, Cummings and Worley (2001) stated “Change is usually triggered by some major disruption to the organization” (p. 12). In order for change to occur, leaders have to assist teachers by offering them the opportunity to discover the need for change rather than trying to clarify to them why the change is necessary (Fullan, 2003, 2007). Fullan (2003) specified that “Once people realize the change potential of context, and begin to direct their efforts at changing it, the breakthrough can be amazing” (pp. 28–29).

Educators are often left out of the conversations centered around change initiatives and as a result there is not a clear understanding of how change is affecting them. Fullan (2007) posits that one of the main reasons that change fails is that there is not underlying conception that grounds what would happen with new structures. Additionally, Fullan (1993) stated that educators must, “redesign the workplace so that innovation and improvements are built into the daily activities of teachers… and adopt institutional renewal with new forms of leadership, collegiality, commitment to, and mechanisms for continuous improvement” (p. 353). In order to accomplish such organizational agility, schools will need to empower teachers and administrators to develop solutions collaboratively (Weller & Weller, 1997).

Consequently, if schools are to evolve, to truly become a vehicle for continuous improvement and learning, then they must develop a culture capable of continuous change (Fullan, 1993; 2004; 2007). The question that remains is whether or not an innovation spawned from the need for changing a cultural context within a school can be sustained through a framework of a learning community which fosters a collaborative, synergistic capacity for continuous improvement. Therefore, how do schools that are striving to be innovative leverage
new ideas or unproven methods to improve practice or solve persistent problems implement change to effectively improve school culture and student learning outcomes?

**School Culture and Change**

In the midst of ever changing curriculum, higher expectations, and increasing accountability, those leading schools have immense responsibilities and challenges in the implementation of change initiatives. An essential factor in any school reform initiative has been to understand school culture, as examined by Hinde (2004) in the article, School Culture and Change: An Examination of the Effects of School Culture on the Process of Change. Hinde (2004) further quantified that “any change introduced to schools is often met with resistance and is doomed to failure as a result of the reform being counter to this nebulous, yet all-encompassing facet—school culture” (p. 4). Danielson (2012) also stated in a National Association of Elementary School Principal’s article that appeared in Principal Magazine, “that the school’s culture is key to professional growth and learning, and established through building trust” (p. 26). According to Sergiovanni (1992), truly effective schools are those that clearly articulated the school’s core value. Also, he suggested that true leadership emanates from the heart of the leader where decisions, actions, and relationships are made from moral connections grounded in the cultural norms of a school. These provided the foundation of establishing a positive school community.

Research supports the idea that there was a significant connection between school culture and successful school change. Fullan (2007) stated that collaboration played a critical role in the school change process. He believed that school culture was based on the belief systems and expectations that are evidenced by the way a school operates. According to Schein (1990),
Culture can now be defined as (a) a pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid and, therefore (e) is to be taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems. (p. 5)

Several researchers agreed that a part of school culture was observable through rituals and ceremonies, as well as symbols and stories that make up the persona of the school. The school’s culture was established over time by trying to make sense about situations and experiences. For example, every school has a set of expectations about specific topics that are discussed at meetings, best practices and methods, the willingness of teachers to change, and the level of importance and role of professional development (Bolman & Deal, 2010; Deal & Peterson, 1999; Fullan, 2007).

Baker (1999) suggested that students’ learning experiences in school are impacted by the curriculum, routines and procedures, and organization for learning. Another researcher confirmed that organizational structures used within schools for content delivery influence student learning experiences (Williams, 2009). Two types of organizational structures widely used in elementary schools are (1) the self-contained classroom in which students have one teacher for core content areas; and (2) the departmentalized classroom, where students have more than one teacher for different content areas and change classes at a set period of time (Dropsey, 2004).

In order to establish an environment that increases content knowledge and skills and reduce the workload of teachers, requires changes in the organizational structure in the traditional elementary school model. According to Sowers (1968), meeting the varying needs of
students was the first priority for every school. In order to provide high quality instruction, educational programs, practices, and issues, required constant evaluation to identify the needed areas of improvement. According to Williams (2009), yearly issues that must be addressed by elementary principals are student achievement and how to organize the school for instruction.

Schools must have innovative ideas that inspire and drive change for improving student learning outcomes that will ultimately be reflected in the continuous improvement of the instructional process. Effective educational practices for implementing innovation and change are aligned with the framework of this study. Research on change has been focused at the organizational level in order to identify the system's role in supporting changes and effective practices. To create consistent and sustained change, research has shown that the organization as a whole must initiate, implement, and maintain accountability for change to become solidified practice. Supportive conditions must be created also for individual teachers to experiment and try new ideas in order for the change to flourish and for organizational learning to occur.

According to Fullan (2007), “Real change, whether desired or not, represents a serious personal and collective experience characterized by ambivalence and uncertainty; and if the change works out, it can result in a sense of mastery, accomplishment, and professional growth” (p. 23). In order for innovation to be sustained within an organization, support must be provided to those responsible for the implementation of change. Innovation cannot stand alone. Successful implementation requires support to learn the necessary components of the innovation and how it will create change in instructional practices by increasing teacher collaboration in a learning community.

The basis of this study is designed on Fullan’s (2007) Educational Theory and Hord’s five attributes of PLCs. Fullan’s (2007) Educational Theory suggested that successful initiatives
are develop during three phases of initiation, implementation, and institutionalization. Hord’s (2004) five attributes of PLCs are: 1) Shared Values and Vision, 2) Intentional Collective Learning, 3) Supportive and Shared Leadership, 4) Supportive Conditions, and 5) Shared Personal Practice. These attributes are key elements for sustained change and continuous school improvement.

In order to successfully implement change through innovation, the attributes of PLCs offered an ideal structure to respond to the need for support and collaboration, also it is an approach that offers the potential to provide continuous teacher learning and improvement of instructional practice (DuFour & Marzano, 2011). With a balance of support and cooperation, PLCs are more likely to persist with addressing problems, such as implementing an innovation such as the hybrid schedule, long enough to make connections between instructional and organizational changes, and student learning outcomes (Gallimore, Ermeling, Saunders, & Goldenberg, 2009).

**Background of the Hybrid Schedule at Stella Elementary School**

Schools are complicated organizations, both socially and politically. Every school has differing levels of interacting cultures, cultural influences, structural designs, values, beliefs, bureaucratic and political influences, and highly complex operating environments. This holds true at Stella Elementary School.

Stella is a kindergarten through fifth grade elementary school, one of eleven elementary schools in the Eagle City Schools’ System. The school serves approximately 410 students. The student population served is primarily from low socio-economic households. Ninety-six percent of the students received free and reduced lunches. Due to the high number of students living at
or below poverty status, Stella also received schoolwide Title I funding. In addition to high poverty, Stella’s student population is highly transient.

Stella’s organizational purpose and educational goal is centered on student growth. In order for students to be successful, as well as be college and career ready, Stella’s staff is charged with the establishment of a strong educational foundation for students by emphasizing analytical skills, a deeper understanding of concepts, and applied knowledge rather than simple recall of facts. For many years the school system’s curriculum has been a mile-wide and an inch-deep approach to subject matter. However, changes in the curriculum with the Alabama College and Career Ready Standards (ACCRS) has required a deeper level of knowledge, critical thinking, and application of skills for both teachers and students. Ultimately, every student needs to think critically and analytically to successfully master the new ACCRS for Math and English Language Arts. Thus, implementing the ACCRS required changes in the instructional and planning processes. These components are essential and critical to continuous improvement an improving student learning outcomes.

Eagle City schools are required to adhere to the AdvancED® continuous school improvement standards for accreditation. Under AdvancED® guidelines, schools are required to review school improvement standards and provided documentation of adherence to the five Quality School Standards: (1) Purpose and Direction, (2) Governance and Leadership, (3) Teaching and Assessing for Learning, (4) Resources, and (5) Support Systems. Embedded throughout the Quality School Standards are the common themes of continuous improvement, stakeholder involvement, student engagement, collaboration, equity, and personalization. Additionally, included within each standard is a strong focus on teaching and learning.
Furthermore, the standards address how the school prepares students with skills needed for the future and analyzed the schools’ high expectation for professional practice.

At Stella, the term continuous improvement is defined as constant review and evaluation of every factor that affects teaching and learning. In order to evaluate, a comprehensive needs assessment is conducted that analyzes programs, methods, instructional strategies, organizational structure, and culture indicators within the school. At the end of the 2012–2013 school year, Stella’s Building Leadership Team (BLT) intensely analyzed the AdvancED® Stakeholder Feedback Diagnostic that reported and determined that the school’s morale, climate, and culture was in need of improvement. Further analysis revealed that teachers’ believed they were not meeting the needs of the various levels of students due to the fact that they had multiple subject areas and student ability levels for which to plan. Additionally, the implementation process for initiatives such as College and Career Ready Standards and RTI was making planning alarmingly difficult to nearly impossible. It was determined that the school morale and climate was stifled by the number of new curricular expectations and documentation requirements.

Each member of the Building Leadership Team was charged with identifying possible root causes of the low morale issue. This team then collected feedback from the faculty. As a whole, the entire faculty was distraught over the insurmountable workload they were contending with on a daily basis. At this point every teacher was responsible for the following:

1) Planning for whole group and small group reading and math instruction

2) Differentiating instruction for intervention for math and reading, science, social studies, and writing,

3) Planning Center activities,

4) Progress monitoring reading fluency,
5) Scoring writing prompts according to the Eagle City Schools Writing rubrics each nine weeks,
6) Monitoring and assigning student activities in benchmark tests,
7) Providing documentation for Response to Instruction for students on Tier II and Tier III intervention,
8) Grading and re-assessing students for reading and math,
9) Infusing the technology standards in the curriculum, and
10) Preparing for the implementation of the Alabama College and Career Standards.

The key cause indicated was teachers were struggling with the implementation of current shifts in instruction for the Alabama College and Career Ready Standards for Math and English Language Arts. As a team, the staff unanimously determined that radical changes needed to be made to the organizational structure. The recommendation to investigate a hybrid model or version of departmentalization grades 1 through 5 was approved by the Building Leadership Team (BLT), and teams of teachers moved forward with researching and investigating options.

Opportunities were provided for teams of teachers to observe at schools that were departmentalized or had implemented a modified departmentalized schedule. The BLT was able to question the teachers about their perceptions and concerns about departmentalizing. Additionally, the teachers were able to ask if they supported and believed that student learning outcomes had increased by focusing on planning for one content area. Other questions asked centered around the possibility of increased additional opportunities for teachers to engage students in rigorous activities, as well as if they had additional time to differentiate instruction. Finally, they addressed ability grouping and if they believed it added positive curriculum experiences for students through ability grouping. Many teachers asked if the teachers saw
departmentalizing as an improvement that allowed for targeted professional development for the subject area they were responsible for teaching.

At the end of the 2012–2013 school year, the faculty decided that a hybrid model of a departmentalized schedule was a viable option. In this variation of a departmentalized organizational structure, teachers were only required to plan and master one subject area of the Alabama College and Career Ready Standards. Teachers felt they could become a master teacher in one subject area and could plan more effectively for one content area. The system administration approved the hybrid schedule for Stella. Therefore, a committee was established to develop a schedule based on selected research and observation data that had been collected from the school visits. Using the scheduling and observational data gathered, Stella Elementary School implemented the new schedule at the beginning of the 2013–2014 school year.

Since the beginning of the 2013–2014 school year, grades first through fifth have implemented the innovative hybrid schedule. Over the course of the first semester, revisions were made as needs or concerns were identified. Student learning outcomes data, perceptual and process data, as well as school climate and culture indicators still need to be collected to determine whether the innovative hybrid schedule had a positive impact on student learning outcomes, instructional practices, and school culture.

Cloke and Goldsmith (2000) stated, “Organizations are capable of startling innovations, daunting creativity, and breakthrough contributions when they are led by people who generate and sustain self-motivated, self-managing teamwork” (The Flowering of Self-Management Theories, para. 9). All teachers at Stella had input in the planning, organization, and implementation of the new hybrid schedule and organizational structure. Stella implemented this new innovative hybrid schedule that reflected the ideas and proposals provided by the entire
staff. The hybrid schedule was structured for whole group instruction in the morning for Reading, Math, and Literacy Standards for Science and Social Studies. The afternoon schedule was organized into leveled small groups in order for teachers to target the needs of the various levels of student performance. With this model, higher performing students were given challenging instruction. The lower performing students were provided with individualized and differentiated instruction. Instructional aides, tutorial staff, and special education staff members were assigned to assist with the lower performing small groups in order to support the teachers and help students within those groups. The implementation of the innovative hybrid schedule encouraged teachers to work collaboratively and focus on planning for and implementing engaging lessons for their subject area. It was evident that a shift within the school’s culture was triggered as teachers worked and planned together.

Fullan (2002) addressed the issue concerning culture and organizational change that he describes as “reculturing”. Reculturing was defined as a way to bring about successful lasting change. In addition, he believed the cultural change is difficult, but that it is the most important job of the school leader (p. 13). According to Patterson, Purkey, and Parker (1986), culture was established through relationships. Depending on how well leaders understood the importance of relationships and interactions would either assist in positive change or become a barrier to change. These interactions of what we believe, do, and say are the fundamental ingredients for growing the culture in a school. Eaker, DuFour, and DuFour (1998) stated in Professional Learning Communities at Work: Best Practices for Enhancing Student learning outcomes that for substantive improvement schools must develop and grow the capacity of its personnel to function as a Professional Learning Community (PLC).
School leaders are familiar with the term professional learning communities. In fact, Hord (1997, 2003) noted the term “learning community” is becoming commonplace in education. School-based collaboration and reflective dialogue on student learning and instructional practices are positive outcomes of PLCs. The “learning community” of educators analyzes the practices and procedures for the purpose of ensuring support for the fundamental purpose of student learning. The PLC groups must maintain an unrelenting focus on student learning (DuFour, DuFour, Eaker, & Karhanek, 2004). Fullan (2006) stated that Professional Learning Communities must function to build the capacity for learning with a focus on results.

**Conceptual Framework and Research Questions**

A central focus of scholarly research on educational change has indicated that change is a complex process. There is ample research evidence that building the capacity of organizations to learn through professional learning communities can be powerful in establishing collegial trust, organizational change, continuous improvement, and ultimately improving student learning outcomes (Fullan, 2007; Fullan & Hord, 2015; Hall & Hord, 2004, 2011). The forces require a new educational paradigm that shifts from traditional systems to a mindset of collaboration. In turn, this mindset will foster a continuous capacity for change. Schools that adopt collaborative learning environments create a cultural context that is conducive for continual improvement. There is evidence to suggest that a school’s capacity for change is directly related to its culture and overall organizational structure (Fullan, 2007; Fullan & Hord, 2015; Hall & Hord, 2011; Hargreaves, 1997; Miller, 2002).

A study’s conceptual framework provides an outline for discussing the theoretical underpinnings. According to Miles and Huberman (1994), “A conceptual framework explains either graphically or in narrative forms the main ideas to be studied—the key factors, constructs,
or variables—and the presumed relationship among them” (p. 6). The conceptual framework of the present case study was based research conducted on the five attributes of the PLCs identified through the work of Shirley M. Hord (2004) and Michael Fullan’s Educational Change Theory (2007). Hord’s five attributes were: 1) Shared Values and Vision, 2) Intentional Collective Learning, 3) Supportive and Shared Leadership, 4) Supportive Conditions, and 5) Shared Personal Practice. Fullan’s educational change theory has three phases: Phase I – Initiation; Phase II – Implementation; and Phase III – Institutionalization.

Shirley Hord’s (2004) five attributes for PLCs are:

1. **Supportive and Shared Leadership** – The act of teams of teachers and administrators collaborate and work together to focus on improving student learning outcomes and school improvement results. Fullan (2000) stressed that decision-making and problem-solving is shared by all stakeholders. The power is a shared process and all have a shared ownership in the process.

2. **Shared Values and Beliefs** – Student learning and the success of all students was the focus of all PLC members. Each member identifies with the schools’ vision, purpose, and core values. Members understand his or her role and purpose in achieving the schools’ goals that were aligned to the vision and mission of the stakeholders in the school. The staff worked together to improve instructional practices. In doing so, the vision, and all it involves continued to improve as the staff strives to achieve success for all students. Peterson (1995) expressed the following idea about having a shared vision:

   Many schools do not have a clear and shared sense of purpose focused on student learning. Yet, without it, programs become fragmented, teachers lose motivation,
and improvement efforts fail… Without a clear sense of direction, planning and decision-making about programs, curricula, and instruction can remain uncoordinated. (p. 1)

3. **Collective Group Learning** – Collective group learning reflects the efforts focused on building the learning capacity of the members. All members of the learning organization are engaged in structured and deliberate collaboration focused on improving student learning. The process is student learning-centered and it is a continuous action-oriented cycle.

4. **Supportive Conditions** – Important and necessary component for leadership to plan for opportunities for members to meet. This condition is logistics. Structured time, place, and action items needing attention are addressed and discussed within the school day. The second condition necessary is a space for relationships to develop and build trust and confidence among participants.

5. **Shared Personal Practice** – Teachers working together to improve instruction. This dimension of shared personal practice is often the last to develop. The challenge is bringing teachers out of isolation. Teachers working together collaboratively in teaching and learning environment is a learned skill that requires some training. This requires teachers to visit classrooms and observe teaching and learning, taking notes, and giving feedback to their peers. The purpose of this attribute is individual and organizational learning and improvement.

Fullan (2007) explained the complexity of educational change as:

Thus, on the one hand, we need to keep in mind the values and goals and the consequences associated with specific educational changes; and on the other hand, we
need to comprehend the dynamic of educational change as a sociopolitical process involving all kinds of individual, classroom, school, local, regional, and national factors at work in interactive ways. (p. 9)

This is the basis of the second component of this study’s conceptual framework based on the three phases that comprise Fullan’s (2007) educational change theory. Within the first phase, initiation, a change is adopted or initiated. Phase I occurred when a need was realized by individuals or groups within an organization. Phase II, the implementation phase, involved the change process after an adopted change occurred. Phase III, institutionalization, referred to the sustainability of the innovation within the organization.

The alignment of this study’s conceptual framework are encompassed in AdvancED® (2014) research. This research on continuous improvement cycle solidified that continuous change and improvement process for schools must adhere to and address the five Quality Schools Standards. The standards for Quality Schools are: Standard 1: Purpose and Direction; Standard 2: Governance and Leadership; Standard 3: Teaching and Assessing for Learning; Standard 4: Resources and Support Systems; and Standard 5: Using Results for Continuous Improvement. These standards align with the characteristics of Hord’s five attributes of PLCs and are accomplished through Fullan’s (2007) phases of educational change.

**Research Questions**

The research questions that guided this study were:

1. What do teachers perceive as factors that facilitated and/or hindered the implementation of the Innovative Hybrid Schedule?

2. As perceived by the teachers, to what extent has the school culture changed as a result of the implementation of the Innovative Hybrid Schedule?
3. To what extent have student learning outcomes changed with the implementation of the Innovative Hybrid Schedule?

4. What are the perceived program outcomes related to the implementation of the Innovative Hybrid Schedule?

**Significance of the Study**

The study was designed to assess the effectiveness of implementing an innovation to bring about a change in school culture. The researcher attempted to deepen the understanding of the relationship of educational change and school culture. Although there is a vast amount of research on educational change as related to school improvement, there is little to no empirical evidence to suggest positive effects and the relationships of implementing a new innovation on teaching practices, school culture, and student learning outcomes. With minimal existing research on the relationships among the attributes of professional learning communities, creating a context for change through innovation and how it affects school culture and student learning outcomes, it is pivotal in connecting the dots of what it will take to bridge the gap between failed change and successful sustained school improvement efforts. Findings from this study will greatly contribute to the existing literature pertaining to implementing educational innovation, as well as, add insight to the literature related to the influences of the attributes of PLCs have on implementing change to establish a context for innovation that improves school culture and learning for students. Although it may not be generalizable, it will provide valuable information and perspectives for other schools implementing innovations to bring about change. It should help stimulate further research on this important topic by providing potential avenues for further study.

**Limitations**
The following limitations were noted.

1. The study only investigated the innovation of hybrid scheduling in one first through fifth grade elementary school.

2. Subjects included only teachers from one elementary school who have participated in the hybrid schedule.

3. Teachers participating in this study were involved in the development of the hybrid schedule.

4. Participation in this study is voluntary.

Assumptions

The researcher made the following assumptions regarding this study:

1. Each participant is an active and invested member of the innovative hybrid schedule.

2. Participants will truthfully answer the survey questions about their perceptions concerning the effects of the hybrid schedule.

3. Participants are familiar enough with the hybrid departmentalization to answer the survey questions.

Definitions of Terms

Accreditation: The process of an educational institution or program receiving a certain level of approval for operating at a level of quality or integrity from an approved accrediting agency.

Collaboration: A process when members of a team “work interdependently to achieve common goals” (Eaker, DuFour, & DuFour, 2002, p.11).
**Common Core State Standards**: The set of mathematics and English language arts and literacy standards created by the National Governors’ Association for Best Practices, Council of Chief State School Officers and released in 2010 (CCSSI, 2012a; NEA, 2010).

**Educational Change Theory**: The phases that an educational organization moves through when a change is introduced into a new environment. The three change phases consist of initiation phase, implementation phase, and an institutionalization (sustaining) phase (Fullan, 2007).

**Hybrid Schedule**: An innovative organizational structure developed that incorporates a variation of departmentalization to empower teachers to become experts in one subject matter with heterogeneous classes in the morning and allows for teachers to group students in the afternoon to prescribe learning activities to meet the different levels and needs of every student they teach.

**Innovation**: Concerns the content of a new program, idea, or reform and involves the capacity of an organization to engage in continuous improvement (Fullan, 2007).

**Learning Organizations**: “Human beings cooperating in dynamical systems that are in a state of continuous adaptation and improvement” (Senge, 1990, p. 10).

**Organizational Change**: “Activities and processes that are designed and deliberately implemented to accomplish change in organizational structures and processes” (Burns, 1996, p. 45).

**Organizational Culture**: “The basic tacit assumption about how the world is and ought to be that a group of people share and that determines their perceptions, thoughts, feelings, and their overt behavior” (Schein, 1996, p. 25).
**Organizational Learning**: The ideas that “groups of people with a common purpose, who continually examine and modify those purposes, and continuously develop more effective and efficient ways of accomplishing those purposes” (Leithwood & Aikens, 1995, p. 41).

**Professional Learning Communities (PLCs)**: PLCs are “those environments that foster mutual cooperation, emotional support, and personal growth as the professional staff work and learn together to achieve what they cannot accomplish alone” (DuFour & Eaker, 2008, p. 6).

**Student Learning Outcomes**: Refers to different types of results and can be thought of generally as the degree of improvement in relation to given criteria in relation to student performance or growth (Fullan, 2007).
CHAPTER 2: LITERATURE REVIEW

This chapter examined related literature and research on how the process of the implementation of an innovation can create a context for sustained change in school culture. In addition to investigating the educational change process, it was necessary to review types of leadership, organizational culture, and professional learning communities. Departmentalization and ability grouping were reviewed for the purpose of the innovative hybrid schedule. The innovative hybrid schedule was initiated as an adapted version of departmentalization integrated with ability grouping. Although, these topics under investigation are reviewed in individual sections, they are components necessary to understanding and sustaining effective school change. A particular focus was made on how the attributes of Professional Learning Communities (PLCs) are effectively utilized to sustain innovation and change, improve teaching and learning, and create a context for improved school culture. There is a strong connection and correlation among these elements to successfully implement innovation in the educational setting.

This chapter is divided into five sections. The first section delved into organizational culture, leadership styles, and effective practices that are connected to effectively leading change in the educational setting. Secondly, an in-depth study of the Fullan’s Educational Change Theory (2007) and innovation implementation are examined. The third section reviewed the history and definition of Professional Learning Communities (PLCs) and the relationship between PLCs and creating a context for change for sustaining innovation in the educational setting.
setting and its impact on continuous school improvement. The succeeding sections were correlated to the organizational structures involved in the innovation of the hybrid schedule. The two primary components explored are departmentalization and ability grouping.

**Conceptual Framework**

In the wake of the educational reform efforts, focused attention on continuous improvement efforts, culture, and sustaining effective change remain topics of importance (Fullan, 2001, 2007; Schein, 1983). It has been noted that education reform legislations have increased pressure for schools to adapt and change. However, change does not occur on its own, it must be initiated (Fullan, 2001, 2007). Researchers established leadership is the key to the change process (Fullan, 2007). Schein (1983) argued that leaders not only influence culture, but that they create and manage culture. Leadership impacts the success or failure of schools (Marzano, Walters, & McNulty, 2003; Wahlstrom, Louis, Leithwood, & Anderson). School leadership are required to demonstrate and document the planning process, how they assess student growth and achievement, teaching instructional practices, and efforts to improve in the decision-making process.

Accreditation is a voluntary method of quality assurance designed primarily to evaluate schools adhering to a set of educational standards. According to *AdvancED®,* the process of continuous school improvement is based upon core requirements and measured through standards of quality that consist of indicators or target areas that demonstrate school effectiveness. *AdvancED®* accreditation process required schools demonstrate and document the planning process, how they assess student growth and achievement, teaching instructional practices, and efforts to improve in the decision-making process.

Shirley Hord’s (2004) five attributes for implementing PLCs are:
1. **Supportive and Shared Leadership** – The act of teams of teachers and administrators collaborate and work together to focus on improving student learning outcomes and school improvement results. Fullan (2000) stressed that decision-making and problem-solving is shared by all stakeholders. The power is a shared process and all have a shared ownership in the process. The principal’s role is more of a leader and less of a manager (Lencioni, 2012; Levi, 2007)

2. **Shared Values and Beliefs** – Student learning and the success of all students was the focus of all PLC members. Each member identifies with the school’s vision, purpose, and core values. Members understand his or her role and purpose in achieving the school’s goals that were aligned to the vision and mission of the stakeholders in the school. The staff worked together to improve instructional practices. In doing so, the vision, and all it involves continued to improve as the staff strives to achieve success for all students. Peterson (1995) expressed the following idea about having a shared vision:

   Many schools do not have a clear and shared sense of purpose focused on student learning. Yet, without it, programs become fragmented, teachers lose motivation, and improvement efforts fail. …. Without a clear sense of direction, planning and decision-making about programs, curricula, and instruction can remain uncoordinated. (p. 1)

3. **Collective Group Learning** – Collective group learning reflects the efforts focused on building the learning capacity of the members. Glickman (2002) highlighted that dialogue is necessary for all learners in order to build learning capacity within organizations. All members of the learning organization are engaged in structured
and deliberate collaboration focused on improving student learning. The process is student learning-centered and it is a continuous action-oriented cycle.

4. **Supportive Conditions** – Important and necessary component for leadership to plan for opportunities for members to meet. This condition is logistics. Structured time, place, and action items needing attention are addressed and discussed within the school day. The second condition necessary is a space for relationships to develop and build trust and confidence among participants.

5. **Shared Personal Practice** – Teachers working together to improve instruction. Hord (2004) stated that this dimension of shared personal practice is often the last to develop. The challenge is bringing teachers out of isolation. Teachers working together collaboratively in teaching and learning environment is a learned skill that requires some training. This requires teachers to visit classrooms and observe teaching and learning, taking notes, and giving feedback to their peers. The purpose of this attribute is individual and organizational learning and improvement.

Fullan (2007) explained the complexity of educational change as:

Thus, on the one hand, we need to keep in mind the values and goals and the consequences associated with specific educational changes; and on the other hand, we need to comprehend the dynamic of educational change as a sociopolitical process involving all kinds of individual, classroom, school, local, regional, and national factors at work in interactive ways. (p. 9)

The second component of this study conceptual framework is based on the three phases that comprise Fullan’s (2007) educational change theory. Within the first phase, initiation, a change is adopted or initiated. Phase I occurred when a need was realized by individuals or
groups within an organization. Phase II, the implementation phase, involved the change process after an adopted change occurred. Phase III, institutionalization, referred to the sustainability of the innovation within the organization.

*AdvancED®* (2014) research solidified that the process for continuous improvement requires schools to adhere to five Standards for Quality Schools. The Standards for Quality Schools are: Standard 1: Purpose and Direction; Standard 2: Governance and Leadership; Standard 3: Teaching and Assessing for Learning; Standard 4: Resources and Support Systems; and Standard 5: Using Results for Continuous Improvement. These standards align with the five attributes of Hord’s PLCs and are accomplished through Fullan’s (2007) phases of educational change.

The principles from the framework served to guide the study to evaluate the implementation of an innovative hybrid schedule. Figure 1 shows how Hord’s (2004) five attributes and Fullan’s (2007) aligned with *AdvancED®* Standards for Quality Schools for continuous improvement.
Institutionalization Phase
- Change gets embedded into the structure
- Administrators and teachers who are skilled in and committed to the change
- Established procedures for continuing assistance

Implementation Phase
- Administrators set supportive conditions and understand the change
- Clarity exists—understanding of the change in relation to practice or need
- Collaborative practices are evident (PLCs)

Initiation Phase
- Decision to adopt change based on research of quality and effectiveness
- Decision to proceed with change
- Identification of advocate and stakeholders

Figure 1. Conceptual Framework Correlated with Quality School Standards
Organizational Culture

Many researchers established that culture is the most defining factor when considering implementing change (Burke, 2008; Cameron & Edington, 1988; O’Reilly & Chatman, 1996; Schein, 1996). Burke (2008) noted changing the culture of an organization is extremely difficult. Schein (1990) defined culture as:

A function of the stability of the group, the length of time the group has existed, the intensity of the groups’ experiences of learning, the mechanism by which the learning has taken place (i.e., positive reinforcement or avoidance conditioning) and the strength and clarity of the assumptions hailed by the founders and leaders of the groups. (p. 111) Schein (1990) believed that public schools have developed the culture of resistance that has allowed for meaning, stability, and comfort.

Cameron and Quinn (2011) referred to “two main factors mentioned when defining culture systems in the current literature: (a) “organizations have culture” and (b) “organizations are culture” (“The Meaning of Organizational Culture,” para. 1). Cameron and Quinn (2011) define culture as “an enduring, slow-to-change, core characteristic of organizations...Culture includes core values and consensual interpretations about how things are” (“The Meaning of Organizational Culture,” para. 6). Cameron and Quinn (2011) noted, “Culture is a socially constructed attribute of organizations which serves as the social glue binding the organization together” (“The Meaning of Organizational Culture,” para. 1). Understanding of the school’s culture assisted in identifying how it will react to implementing an innovation. Educational research provided examples of the connections of successful schools and the influence of culture on its success. Overall, school culture is complex and important in school life (Stoll, 1998). Schein’s (1985) definition suggested that school culture addressed the reality of the day
today life at school and identified the complexities that exist when trying to analyze school culture (Stoll, 1998). Stoll (1998) referenced Schein’s (1985) definition of school culture as “the deeper level of assumptions and beliefs that are shared by members of an organization, that operate unconsciously, that define in a basic ‘take for granted’ fashion and organizations view of itself and its environment” (p. 9).

Undeniably school culture is attributed to school success (Brown, 2004; Leithwood et al., 2004; Marzano, 2005; Waters, 2007). Cultural attributes may not be a written set of rules, but are underlying patterns that guide organizations. Individuals within the organizations are firmly aware of these influences and understand its power. According to Huffman and Hipp (2003), initiatives associated with school reform usually fail when a lack of attention is given to the impact that culture has within a school. They believed that school culture must support teacher development through a collaborative learning environment. Richardson (2001) implied that members of schools have established cultures and the potential for improvement depended on whether that culture was positive or negative. According to Brown (2004), culture provided the context for organizational members to create meaning to their work, lives and relationships. He believed that this can often have a negative effect if schools are satisfied with the status quo. Hence, educational leaders found it difficult to change school culture after years of tradition and assumptions.

According to Brothers (2005), people tended to live out their assumptions as facts. Furthermore, he stated that teachers believed that their assumptions about how things should operate and function were correct even if current methods were producing negative results. When teachers believed that their assumptions are accurate, change becomes problematic. DuFour (1998) stressed that to change assumptions, schools needed to reinforce appropriate
behaviors and improve school culture through celebrations. Celebrations acknowledged what was going well and encouraged others to maintain the values that were being recognized.

Maele and Houtte (2011) researched the relationship of how the structural, compositional, and cultural characteristics of the teacher workplace affected an individual teacher’s trust in colleagues. In addition, the authors examined whether the teacher’s trust in colleagues was fostered when teachers hold similar assumptions about students’ teach-ability. The authors found that when teachers have the same beliefs about the students they teach, the homogeneous teach-ability culture positively related to a teacher’s trust in colleagues. The final results of the study revealed that teacher’s trust in colleagues was situated at the school level and connected to the school culture. Maele and Houtte (2011) concluded that teachers share teach ability assumptions about their students in their schools, homogeneity of school’s culture, and both are connected to the collegial trust relationships in the school.

Repeatedly in research the relationships among the teacher, the student, and the content are believed to create and support the environment for student learning. According to McNulty and Qualglia (2007), relationships were one of the most important key components in a successful classroom and a successful school. Hallinger and Heck (1998) found that positive school cultures correlated with student learning outcomes and motivation. In addition, Deal and Peterson (1999) agreed that schools with strong organizational cultures correlated with higher job satisfaction and increased productivity among teachers. However, building positive relationships in a school culture was a daunting task. Most importantly, viewing people at the core of school improvement is imperative for continued growth. They found that the faculty and staff must feel safe, appreciated, and valued for their dedication to supporting the school and student learning outcomes. Owens (2015) indicated that effectively implemented professional
learning communities promote and sustain an environment conducive to build the learning capacity and school culture necessary for innovation.

**Leadership**

Leadership is a highly complex idea. There is an abundant amount of research that supported the belief that leadership matters in educational change (Fullan, 1999; Hallinger, 2003; Hallinger & Murphy, 1986; Leithwood, Louis, Anderson & Wahlstrom, 2004; Murphy, 2008). Leithwood et al. (2004) stated that leadership has two undeniable components attached to its function: “setting directions and exercising influence” (p. 10). The functions of leadership are carried out differently in varying models of leadership styles. With the plethora of accountability issues, local, state, and federal government mandates placed on local schools, it has become apparent that the school administrator and the leadership connection is gaining momentum in the role of importance in impacting student learning, the relationship it plays in improving school’s culture, and sustaining educational change. Research conducted through the New Orleans School Leadership Center by Leithwood, Riedlinger, Bauer, and Jantzi (2003) indicated that leaders influence school and classroom conditions, as well as teachers, as individuals, and as members of professional learning communities. Ultimately, leadership and leadership styles influenced the formation of school goals, culture, structures, and classroom conditions (Leithwood et al., 2004; Leithwood, Day, Sammons, Harris & Hopkins, 2006). These factors were connected with the success of a school and directly responsible for the learning experiences for students.

Leadership was influenced and dependent on many variables. According to Waters, Marzano and McNulty (2003), these factors pertained to areas such as personal style, organizational setting, a leader’s attitude, values, and beliefs, cultural norms and expectations.
The different leadership models attempted to construct the fundamental basis of how these factors influence a leader’s decision making processes and practices. Leithwood et al. (2004) elaborated on two models that have a strong connection for educational leadership. These were instructional and transformational leadership.

According Horng and Loeb (2010), effective school’s research in the 1970s and 1980s, produced the new paradigm of instructional leadership. This research connected the role of the principal to the effectiveness of schools. Hallinger (2003) stated that instructional leadership has also been examined for effectiveness through the lenses of “change implementation (Hall & Hord, 1987) and program improvement (Leithwood & Montgomery, 1982)” (p. 331). According to Hallinger (2003), key ideas emerged from this research on instructional leadership. Hallinger (2003) summarized these concepts of instructional leadership and suggested that this type of leadership is “focused on the principal coordinating, controlling, supervising, and developing curriculum and instruction in the school; instructional leaders were strong, directive leaders, lead from a combination of expertise and charisma, hands-on and unafraid of working with teachers for improving teaching and learning; goal-oriented, focused on improvement of student learning outcomes; culture builders” (Horng & Loeb, 2010; Rutherford, 1985; Smith & Andrews, 1989, pp. 331–332). Hallinger (2003) proposed that there are three defining elements of instructional leadership: “defining the school’s mission, managing the instructional program, and promoting a positive school-learning climate” (p. 332).

Researchers suggested that transformational leadership can be viewed as a form of shared leadership due to the fact that this style allows for change through the involvement of the entire organization (Hallinger, 2003; Leithwood et al., 2004). Hallinger (2003) conceptualized leadership as “belonging to the entire organization rather than the property of a single individual”
Leithwood and Louis (1999) stated that a transformational leader’s desire is to increase the capacity of others in order to produce organizational learning. This creates a climate conducive for the collegial engagement in continuous learning within the organization. Additionally, transformational leaders worked with all stakeholders to create goals that link to the overall organization goals. This line of thinking is believed to bring about a higher level of commitment to accomplish the mission of the school (Barth, 1990; Bogler, 2001; Lambert, 1998; Leithwood & Louis, 1999). Leithwood (1994) pointed out that this also pertains to how it affects the people within the organization and is the fundamental driving force behind transformational leadership. Researchers concluded that transformational leadership has a positive impact on the perceptions of teachers concerning the conditions under which they work, how willing they are to implement change, and its impact on organizational learning (Bogler, 2001; Day et al., 2001; Fullan, 2002; Leithwood & Jantzi, 1999).

Shared or participative leadership researchers investigated the role of school-based management in relation to organizational change. The shared decision-making process was typically viewed as a practice resting in the hands of more than one person (Elmore, 2000; Lambert, 1998; Olson, 2000; Spillane, Halverson, & Diamond, 2001). Early research in participative leadership was directed on the effects of teacher participation in decision-making related to job satisfaction, stress, role conflict, perceived organizational effectiveness, collaboration, and work alienation (Conley, 1991; Fullan, 2001; Little, 1988; Weise & Murphy, 1995). Johnston and Pickersgill (1992) elaborated on the participative model and the importance of engaging organizational members in matters of their work and improving practice. Leithwood et al., (2000) suggested that participative leadership “assumes that the decision making processes
of the group ought to be the central focus of the group” (p. 12). Leithwood et al. (2000) outlined a model for participatory leadership based on three criteria:

- participation will increase school effectiveness.
- participation is justified by democratic principles.
- in the context of site-based management, leadership is potentially available to any legitimate stakeholder. (p. 12)

Spillane, Halverson, and Diamond (2004) viewed leadership as distributed throughout the organization, not solely the responsibility of one person or entity. This type of leadership reflected that notion that the power to lead an organization is not held by one person or even a small group working in a planning process. Spillane et al. (2004) indicated that leadership has the purpose to guide the development of an organization through the formation and communication of the organization’s perspective. Although Spillane et al.’s (2002) logic of these was based on control oriented, systems theories-based concepts, the relationship of leadership tasks and the situations in which they occur erodes the view that “skill and expertise (is) exclusively a function of individual traits, styles, and schemata” of leaders (p. 33). Leadership practice must be analyzed at the school level rather than the individual. Their research further suggested that organizational change is a result of leadership, regardless of whether it is from a group level or an individual, because of the power to effect and influence specific types of change.

Peter Senge (1990, 1999) viewed leadership as distributed to several parts of the organization believing that collective is better than individualistic. He described leadership distribution through differing levels within the organization so that the change, innovation and organizational learning are continuous. Senge (1999) stated in this type of leadership style,
“Leaders are designers, stewards, and teachers. They are responsible for building organizations where people continually expand their capabilities to understand complexity, clarify vision, and improve shared mental models—that is, they are responsible for learning” (p. 315). Senge et al. (2000) reiterated that multiple levels of leadership must be in place in order for schools to learn and utilize learning successfully to bring about change. Senge et al. (2000) echoed the school of thought that “formal and informal leaders, at the classroom, school, and community levels, each provide different resources to the change initiative” (p. 274).

Educators have heard politicians use scholarly rhetoric, philosophies, and research based findings they will implement to improve America’s schools. According to Roland Barth (1990), schools must be improved from within first for lasting change to occur. The driving force behind improving schools were the leaders and teachers working together as change agents. In a meta-analysis of research studies examining the impact of principal leadership on student learning outcomes, Marzano, Waters, and McNulty (2005) identified 21 responsibilities of the school leader that correlate to student learning outcomes. One of these responsibilities was that the principal must become the change agent. It was the leader’s responsible for challenging the status quo, to challenge current practice, and encourage teachers to move out of their comfort zone and embrace new practices.

**Change Process**

Cloke and Goldsmith (2002) examined change within organizations and discovered that the effects of change of rarely examined. Hence, “change often results in unnecessary conflicts, resistance, damage to relationships, and injured morale” (para.1). However, educational leaders can integrate change strategically and alter the way their employees perceive change. Cloke and Goldsmith (2002) pointed out that successful change only happens when we change how we
change. Change that occurred in a collaborative environment increased the organizations ability to embrace the change. They referred to this as “organizational democracy, which is a form of power sharing” (para. 2). When organizations were performing in a collaborative, democratic setting, those involved become an owners of change process. Cloke and Goldsmith (2002) stated that the “change process is automatically democratized by involving employees in defining their shared values; strategically planning their futures; opening communications regarding goals, process, and relationships; inviting feedback, coaching, and mentoring; evaluating and assessing progress; and challenging assumptions about what is possible and acceptable” (para. 3).

Collins (1998) described change as an oxymoron. He suggested that organizations that adapt to a changing world, know what should not change; they have a firm vision and a set of organizational principles around which they can more easily change everything else. They knew the difference between what is sacred and what is not, between what should never change and what should be always be open for change. These reverberated between what an organization stands for and the idea of how certain things are done. In the chapter titled “The Changing Infrastructure of Educational Research”, Collins (1998) elaborated on the importance of defining an organization by core values and purposes. These two elements were preserved and used to guide the change process in practice, culture, and strategies in response to the need to change. In addition to core values and purpose, he suggested that it is important to establish a commitment to change through choice and not through coercion. The exercise of true leadership and innovation comes from commitments through a partnership approach.

According Schein (1990), there were three basic types of change that occurs within all organizations. The types were “(1) natural evolutionary changes; (2) planned and managed changes; and (3) unplanned revolutionary changes” (p. 34). The natural evolutionary changes
followed a sequence and the course of evolution from simple to higher and more complex as learning occurs within an organization. The change that benefitted and contributed to growth is considered to be a part of the organization’s capacity to learn. When change required new learning, groups tended to respond to the change as a reward or punishment. The new learning caused the group to learn or adapt to the new environment. The natural evolutionary change process spawned the need for planned and managed changes.

The second type of change focused on the elements within an organization that have a tendency to be controlled. Two examples were building the capacity to learn and changing organizational culture. The third type of change was unplanned revolutionary change. These types of changes happened as a response to a turbulent and unstable environment. In this situation, power and power struggles became prevalent within the organization. According to the power gained or lost, new people and assumptions gained control of key positions.

Regardless of individual leadership styles, researchers found that leaders were change agents and innovators. Numerous research studies showed that leadership is inextricably connected to innovation and change (Fullan, 2007; Kanter, 1983, Kouzes & Posner, 2002). Education has had a long history of implementing improved practices, concepts, and approaches with little or lasting success (Clemmit, 2012; Hargreaves, 2006; Ravitch, 2010). Schools have been quick to embrace an abundance of innovations; however, the long-term adoptions of these innovations were thin at best (Hargreaves, 2001; Kotter, 1995; Sledge & Morehead, 2006). It was common for an organization to revert back to its original basic design because the change efforts were focused on the innovation rather than the changing the overall system (Dolan, 1994; Senge, 1990). It was determined for education to effectively meet the challenges of increasing demands on student learning outcomes, organizations must understand the fundamentals of the
change process and how to effectively implement innovations (Hall & Hord, 2011; Hargreaves, 2001, 2006; Hord & Roussin, 2013; Kotter, 1995). Additionally, effective change focused on an overall system change rather than changing unique features within the system (Fullan, 1991; Glickman, 1991). It required effective leadership to successfully bringing about change. The leader thought about how the system worked, how people interacted, envisioned and communicated goals to be accomplished (Senge, Kleiner, Roberts, Ross, & Smith, 1994).

Fullan (2007) stated that “educational change is technically simple and socially complex” (p. 84). Tyack and Cuban (1995) noted that regardless of the mandates placed upon schools to force change, they remain comparatively the same as they were in the mid-19th century. There have been many educational theorists that have tried to explain the reasons why schools have failed in the change process (Harper & Maheady, 1991; Havlock, 1973; Howey & Joyce, 1978; Wood & Thompson, 1980). According to Fullan (2007), Promfret’s (1977) earlier research acknowledged that educational change was a challenging process. As cited by Fullan (2007), Promfret established that “the pressure and incentives to bring about change through innovation were the reasons why schools rushed to adopted reforms even though the capacity to implement and sustain the change were not in place” (p. 5).

Regardless of how well a change approach is planned, organizations faced multiple obstacles when creating change (Cuban, 1990; Darling-Hammond, 2004; Murphy, 2008; Tyack & Cuban, 1995). Fullan (2007) supported this when he wrote,

The good news is that there is a growing sense of urgency about the need for large-scale reform, more appreciation of the complexity of achieving it, and even some examples of partial success. The bad news is that in some countries, such as the United States, we are losing ground—the economic and education gap had been widening at least since the year
2000 (Berliner, 2005; Education Trust, 2005; Fullan, 2006). At this point we know what needs to be done, but there is neither the sense of urgency nor the strategic commitment to do the hard work of accomplishing large-scale, sustainable reform. (p. 6)

Bolman and Deal (2010) agreed that schools are no different than any other organizations that have complex systems. Furthermore, successful leaders paid attention to the details of meeting people’s needs, produce positive outcomes, deal with individual and group interests and conflicts, and create a culture of meaning. Bolman and Deal (2013) stated the importance by addressing the fact that “change undermines existing structural arrangements, creating ambiguity, confusion, and distrusts” (pp. 381–382).

Hall and Hord (2011) outlined twelve principles that are engrained in the various aspects of change. These principles are connected to the process of change and established patterns associated with organizations engaged in the change process. These guiding principles are:

Change Principle 1: Change is learning and it’s as simple and complicated as that. This principle explains that each change initiative is a new opportunity to learn.

Change Principle 2: Change is a process and not an event. Research indicates that it takes three to five years for a change to be implemented effectively. More complex innovations will take longer.

Change Principle 3: The school is the primary organizational unit for change. The key organizational unit for making change successful is the school. The staff and its leaders will make or break any change effort.

Change Principle 4: Organizations adopt change and individuals implement change. Successful change starts and ends at the individual level. The organization does not change until each member changes.
Change Principle 5: Interventions are keys to the success of the change process. People tend to be preoccupied with the innovation and its use and fail to think about the actions or events to take to influence the process.

Change Principle 6: Appropriate interventions reduce resistance to change and in most change efforts some people will resist and some may actively try to sabotage the change process. The first step is to try and find out the source of the resistance.

Change Principle 7: District- and school-based leadership is essential to long-term change success. This is a central theme of advocates for bottom-up change is that those nearest the action have the best ideas about how to accomplish change.

Change Principle 8: Facilitating change is a team effort. It is important to facilitate the change process, which means that leadership must be ongoing for change to be successful. Change is a team effort.

Change Principle 9: Mandates can work. Mandates can be successful if they are accompanied with communication, professional learning opportunities, coaching, and time to implement.

Change Principle 10: Both internal and external factors greatly influence implementation success. Several internal factors that need to be addressed that effect implementation include the history of past attempts to change, characteristics of the innovation, physical features and people factors.

Change Principle 11: Adopting, implementing, and sustaining are different phases of the change process. Most innovations today are complex and understanding that change is a process.
Change Principle 12: And finally, focus! focus! focus! Multiple change efforts require multiple resources and multiple amounts of attention and energy. The focus should be on the primary goal and all changes that do not support the goal should be eliminated. (pp. 9–20)

Evans (2010) reinforced the importance of understanding the change process in organizations, including schools, and was a valuable skill necessary for the ever-changing landscape of education. Additionally, he stated that the process of change moved an organization from what it is to what it will become. He stressed that change must be viewed not only as a necessity but an opportunity for growth involving the entire organization. Organizations recognized that change is a dynamic process and an ongoing and spiraling process (Fullan, 1993, 2001; Marzano, Waters, & McNulty, 2005; Senge, 1990). Bolman and Deal (2013) provided a view of change within an organization as different frames that are affected by the change process. They described the frames connected to different components of the organization as structural, human resource, symbolic, and political. They stated issues surrounding change must be “reframed” within these contexts or areas within the organization. This type of change required leaders to have “multi-frame thinking” and “to see the same organization as a machine, family, jungle and theater that requires the capacity to think in different ways at the same time about the same thing” (p. 434).

Educational change has been viewed from many different perspectives. Fullan (2007) addressed two basic educational reform approaches. He referenced these as innovation-focused approach and capacity-building focus for engaging in the continuous improvement cycle. Both approaches were not exclusive of each other but were intertwined. Fullan’s (2007) model provided a framework of the three phases of change to assist leaders to a process that makes
sense of the educational change process as an innovation approach. Fullan (2007) outlined the three phases of the change process.

Phase I was regarded as the initiation phase. At this stage, Fullan (2007) stated the need for change was realized and encompassed “the process leading up to and the decision to proceed with implementation” (p. 69). It occurred when an individual or group initiated change by suggesting a new innovation, program, or direction for change within an institution. Change was seen as an improvement to a program or materials that were already established. These types of change involved a select group of individuals. A third implication of change was seen as shift in the beliefs held by individuals in an organization. Fullan (2007) suggested that there are many factors that can play a part in the initiation phase within the organization. Some factors were teacher or administrator lead community influences, access and quality of an innovation, or other efforts to solve educational process problems can play a part in the initiation phase.

Phase II was addressed as the implementation stage and occurred when the organization adopted a change and began the change process. Need, clarity, complexity, and quality of the innovation were taken into consideration as a part of this phase. Other factors such as local characteristics and external elements were addressed at this level. These influences involved teachers, principals, community, and district agencies.

Phase III was the institutionalization of an innovation or change that referred to the sustainability of an innovation within an organization. Institutionalization was connected to the effectiveness of the implementation of the innovation. Fullan (2007) cited Berman and McLaughlin’s (1977) findings that highlighted “the reasons for failed projects were due to the fact they were not implemented effectively and were discontinued” (p. 101). Other reasons for the lack of institutionalization were the same as those influenced in the implementation process.
For the innovation to be institutionalized, or sustained, depended on whether the change was effectively embedded into the organization’s structures and procedures for which the innovation was established (Fullan, 2007; Huberman & Miles, 1984). It was noted to be important to make the connection that the implementation and institutionalization phases shared several interrelated components.

Changes involved the creation of meaning of the relationship to new ideas, programs, or reforms. Meaning addressed both the cognitive and affective domains to create a context for the new learning or change. There were purposeful cultivations and connections at both levels. Leaders were responsible for building the capacity for change. Within the school setting, educational change was driven by new innovations. Schools that sought new innovations must consider many factors that affected the school and its unique context (Fullan, 2007; Zucker 2008). Fullan (2007) emphasized that innovation in the school setting not only involved the adoption process of the innovation, but considered those that were responsible for implementing the change.

Innovation required individuals to move through the change process and create new meaning. In the educational context of change, innovation and building the organization’s capacity to learn were critical components for successful change to occur. Hargreaves and Shirley (2012) advocated that it was a collective responsibility of everyone involved for the adoption of an innovation because they were ultimately responsible for its success or failure. Researchers agreed that individuals needed a sense of ownership, autonomy, and authority over the process for the implementation to be successful (Fullan, 2007; Hargreaves & Shirley, 2012; Lamperes, 2005; Senge, 2012).
In addition to the fundamental change principles, Hall and Hord (2011) identified relevant research-based concepts that supported the process of change when implementing an innovation. These six identified functions helped change agents and facilitators of the innovation move forward through the change process. The six functions were described as follows.

Function I: Developing, articulated, and communicating a shared vision of intended change: the elements of this vision must be clearly defined and continuously communicated to move the innovation forward towards implementation.

Function II: Planning and providing resources: planning is an ongoing process and is an essential part of the change process. One key factor of the planning process is establishing and making appropriate time for the implementation of the innovation to be successful.

Function III: Investing in professional learning: the essence of change is synonymous with new understandings, new ideas, and doing things a new way. The underlying foundation for change is learning. An important factor in professional learning should be focused on the vision for change and addresses concerns about the new innovation.

Function IV: Checking progress: the implementation of an innovation must be continuously checked and assessed. By monitoring and checking the progress of the implementation process provides data that can guide the decision-making process.

Function V: Providing continuous assistance: this function is connected directly to the monitoring and assessing component. This function assists in addressing the concerns or needs that may arise during the assessment process. Coaching, consultation, and follow up are critical in this function.
Function VI: Creating a context supportive of change: context refers to the physical component of an organization and the internal components such as peoples’ beliefs and attitudes towards the change. This function supports the environment that nurtures and builds relationships among the stakeholders. (pp. 31–35)

According to Fullan (1999) and Hall (2010), there were no shortcuts to building the capacity for learning when implementing a complex change. Senge (1990) pointed out the necessity of tapping in to people’s commitment and building the capacity to learn at all levels within an organization. Hall and Hord (2011) agreed that actively seeking involvement of individuals within the organization created a sense of responsibility to assist in facilitating the implementation process. Synergy came from the people’s involvement in the change process and was vital in building the capacity from within the organization to sustain long-term implementation.

There were many factors to evaluate as organizations facilitate the change process. Hall and Hord (2011) discussed the importance of analyzing the feelings, emotions, and perceptions of those individuals affected by the change. Additionally, they found that teachers experienced certain feelings and reactions whenever change occurred in curriculum, instruction, or policies. There were certain stages that identified typical expressions of concern that clustered into four areas: unrelated, self, task, and impact concerns. Although individuals experienced certain stages of concern more or less intensely, as certain concerns subsided, other concerns often emerged. Hall and Hord (2011) explained these processes of change that educators experienced when implementation occurred, using the Stages of Concern (SOC) and ascertained how individuals were affected by the change process. The following provides a ranking for the level
of concern in the SOC model described common expressions of concern of implementing innovations.

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrelated concerns</td>
<td>0 – unconcerned – I am concerned about some other things</td>
</tr>
<tr>
<td>Self-concerns</td>
<td>1 – Informational – I would like to know more about it</td>
</tr>
<tr>
<td></td>
<td>2 – Personal – How will using it affect me?</td>
</tr>
<tr>
<td>Task concerns</td>
<td>3 – Management – I seem to be spending all of my time getting materials ready.</td>
</tr>
<tr>
<td>Impact concerns</td>
<td>4 – Consequence – How was my use affecting clients/students?</td>
</tr>
<tr>
<td></td>
<td>5 – Collaboration – I am concerned about relating what I am doing with what my co-workers are doing.</td>
</tr>
<tr>
<td></td>
<td>6 – Refocusing – I have some ideas about something that would work better.</td>
</tr>
</tbody>
</table>

Yip and Cheung (2005) found similar sequences or constructs when they reviewed how teachers responded to change. The authors noted that the intensity of concerns are not sequential and that early concerns were lowered before later concerns increased in intensity. Anderson (1997) suggested that teacher concerns associated with change was a necessary component for analyzing the implementation of an innovation. Anderson (1997) believed that teachers typically go through certain stages but not all teachers necessarily experienced all of the stages.

Stages of concerns are measured using standardized questionnaires. Hall and Hord (2011) developed a 35-item survey called the Stages of Concern Questionnaire (SoCQ) as a way
to measure concerns that applied to implementing any educational innovation. Adaptations of these measures occurred in numerous studies that captured stages of concerns among innovators of change (Anderson, 1997; McFarland, 1998; Yip & Cheung, 2005). McFarland (1998) illustrated that understanding predictable patterns of change and identifying how teacher concerns affected the change process was critically important to move from implementation to institutionalization. Results of studies indicated it was important to attend to the concerns of teachers as new innovations were implemented (Ghaith & Shaaban, 1999; Sanders & Ngxola, 2009). To increase the likelihood of successful institutionalization of an innovation, educators acknowledged, identified, and addressed the stages of concerns of those involved in the process.

**Professional Learning Communities**

Building educator capacity for change, innovation, and successful institutionalization requires a significant amount of professional learning. Professional learning and collaborative cultures were the keys to changing practice and ultimately affected student learning and supported the sustainability of implemented innovations over time (Andrews & Crowther, 2006; Booth & Rowell, 2007; Louis, 2007). Fullan and Hord (2015) suggested that professional learning that increased educator effectiveness and sustained support for implementation was required for long-term change. According to Fullan (2015), the following elements were necessary to promote effective professional learning environments:

There must be a culture of continuous improvement, informed by data and students and educator performance and supported by leadership and sufficient resources. Educators learning daily have access to information about relevant instructional strategies and resources, just as important time for collaboration with colleagues, coaches, and school leaders. Education leaders and systems that value effective professional learning provide
not only sufficient time and money but also create structures that reinforce monitoring and a valuation of that learning so they understand what is effective and have information to adjust and improve. (p. vii)

Researchers stated professional learning needed to be designed as an ongoing process that helped refine practice (DuFour, 2004; Fullan & Hord, 2015; Hord, 2004; Louis, 2007). Louis (2007) stated that PLCs supported improved instruction and student learning. Booth and Rowsell (2007) agreed that PLCs capitalized on strengths and created a collegial environment that provided both pressure and support for teachers to adjust to change and improve student learning. DuFour, Eaker, and DuFour (2005) concurred that collaborative efforts among teachers were imperative for student success.

Fullan and Hord (2015) described professional learning as a “process of continuous improvement focused on achieving clearly defined student and educator learning goals rather than an event defined by a predetermined numbers of hours” (vii). Schools that impacted student learning outcomes were those that provided professional learning organized around shared goals that focused on increasing the effectiveness of the teaching practice. Fullan and Hord (2015) suggested this stating that “professional learning that is embedded in changing culture, has sustainability built-in” (p. 20).

Building positive relationships influenced change within an organization. Stoll (2009) stated that capacity building through the implementation process was a result of the development of relationships and trust. It was imperative to provide opportunities for teachers that connected them together and strengthened their skills in order to build that capacity for change. Many researchers believed that professional learning communities fostered efforts towards collegial involvement and development of collaborative cultures (DuFour, Eaker, & DuFour, 2005;
Fullan (2007; Louis, 2007). Fullan (2007) described the type of schools that actively seek to provide meaningful collaboration “learning-enriched schools” (p. 141). Researchers showed there is a link between successful schools and professional learning communities, teacher learning, and student performance (Kruse, Louis, & Bryk, 1995; Newman & Wehlage, 1995). Fullan (2007) referenced research conducted by Newman and Wehlage (1995) and noted the following reasons why PLCs make a difference:

1. Teachers pursue a clear purpose for students’ learning.
2. Teachers engage in collaborative activity to achieve the purpose.
3. Teachers take collaborative responsibility for student learning.
4. Schoolwide teacher professional community affected the level of classroom authentic pedagogy, which in turn affects student performance.
5. Schoolwide teacher professional community affected the level of social support for student learning, which in turn affected student performance. (p.141)

In order for an organization to build capacity for learning, change, and improve organizational effectiveness, it must build a culture of continuous learning. Hall and Hord (2011) stated that Senge’s (1990) research identified factors and ways of thinking that individuals and organizations needed to establish for change to become evident and improve as a learning organization. These factors were identified as disciplines.

The first discipline is systems thinking. This discipline takes the whole system into account and recognizes parts and their patterns and they’re into relationships. It also integrates the remaining four disciplines.

The second discipline is building a shared vision. The vision is shared by all members and focuses on what the organization wants to become. The third discipline is
personal mastery. This should be a continual process of creating a personal vision and identifying what each individual wants for the organization. The fourth discipline is the use of mental models. This discipline focuses on what has truly been observed from assumptions and generalizations based on others’ observations. The fifth discipline is team learning. Members of the team come together to discuss and learn with and from each other. (p. 163)

Hall and Hord (2011) established the connection between the necessity of building a positive collaborative culture and support for individuals through professional learning communities (Darling-Hammond, 1986; Lieberman, 1995; Little, 1982; McLaughlin & Talbart, 1993). Hord and Sommers (2008) identified the PLC as the vehicle to support teachers in their professional learning through a supportive and collaborative setting. Additionally, Huffman and Hipp (2003) agreed that the PLC was one such approach to improved and supported organizational change in culture.

The five attributes of PLCs provided the framework for schools and allowed the schools to implement and sustain their efforts (Hord & Sommers, 2008). Hord (2004) identified these five attributes of a PLC that included shared values and vision, intentional collective learning and its application, supportive and shared leadership, supportive conditions and shared personal experience.

According to Hord (2004), the first attribute of shared values and vision was viewed as the professional staff having a clear understanding on student learning outcomes and student learning. It was here teachers worked together and created visions of what the learning environment needed to be in order for students to reach their potential. A noted point was that everyone held a steadfast focus on the quality of work for students and staff. Leaders constantly
revisited the vision through strategic conversations throughout the organization (Hord & Sommers, 2008). The vision was embedded in the school’s culture and collectively tied into the individual visions of others.

Next, the attribute of intentional collective learning and its application provided the opportunities within the school for teachers to work together to improve learning for all. Hord (2004) stated that individuals worked within the PLC and rigorously analyzed student data to determine strengths and weaknesses. Additionally, they worked together collaboratively and addressed learner needs, researched new instructional strategies, and evaluated instructional practices within the school. Hord (2004) noted that strategic conversations, interactions, and decisions were made collectively to improve classroom practice. The author elaborated that collective learning fortified feelings of shared decision making among teachers. Together teachers sought knowledge, skills, and strategies and applied the new learning to their work.

Hord (2004) stated that the supportive and shared leadership attribute flourished in a democratic process and allowed everyone in the organization to share in the decision-making. The school staff worked collaboratively in making decisions. This required a new way of thinking on the part of the school leaders and teachers. Fullan (1993) suggested that teachers were accustomed to working in isolation when he made the following statement:

This professional isolation of teachers limits access to new ideas and better solutions, drives stress inward to fester and accumulate, fails to recognize and praise success, and permits incompetence to exist and persist to the detriment of students, colleagues, and the teacher themselves. (p. 34)

Hord and Sommers (2008) explained teachers envision the administrator as the all-powerful one. The principal of the school participated with the staff as a learner and shared the decision-
making process. There were three factors that principals must utilize when operating a PLC: a need to share authority, the ability to facilitate the work of the staff, and the capacity to participate without dominating (Hord, 2004).

Supportive conditions were the fourth attribute and were described by Hord (2004) as features that included scheduling of time to collaborate, resources, communication procedures, and resources. The focus for this attribute was structural conditions as well as relationships within the school. The author suggested that these two components worked together and provided an environment conducive for a PLC to thrive. The supportive element provided resources for the school, open lines of communication, and structures that limited the amount of time teachers worked alone. All of these items should decrease isolation, build trust, and foster a collaborative environment. In order to foster such environments, school leaders demonstrated caring attitudes, trust, and shared norms. Hord and Sommers (2008) agreed that “principals can contribute to the collegial attitudes and relationships demanded of school staff by nurturing the human capacities demanded of PLC work” (p. 15).

The final attribute was shared personal practice. Hord (2004) stressed this attribute was critical to changing the classroom and improving instructional practice. Teachers were provided the opportunity to participate in peer to peer observations in non-threatening and non-evaluative settings. Teachers observed and provided feedback. This process was essential to building support for each other. The author suggested personal reflection and conversations among teachers stimulated professional growth individually as well as collectively.

It takes time, effort, and buy-in on the part of all stakeholders to transform a school into a highly professional, collaborative culture. Many researchers provided characteristics of positive collaborative cultures (Ashton & Webb, 1986; Fullan & Hargreaves, 1991; Lortie, 1975;
Peterson, 1994; Rosenholtz, 1989). According to Hall and Hord (2011), collaborative cultures contained the following essential elements:

1. There should be regular opportunities for continuous improvement and career long learning;
2. Team teaching and shared decision-making; sharing resources and supplies, planning collaboratively and developing a sense of efficacy;
3. Confidence in and commitment to improvement of the teaching practice; professional networking with other teachers, schools, and programs; and

Research conducted by Laitsch (2004), explored teacher turnover and the effects it has on culture of a school to include faculty, staff, students, and the larger community. This research study examined the relationship between teacher turnover and school culture. Laitsch (2004) reported that schools with low turnover rates stated that reason was due to the positive aspects of a stable faculty that included a stable and established support system; capacity for planning over extended time; capacity for cohesive planning and program implementation; and capacity for strong teamwork and collaboration within and across grade levels.

Knight (2011) targeted seven critical components for improving instruction, culture and ultimately student learning outcomes. He considered the following areas to be a recipe for creating the kind of schools that engage and energize educators in order to create excellence in instruction every day in every class. These were equality, choice, voice, reflection, dialogue, praxis, and reciprocity. He believed that these provided the environment for togetherness, autonomy, input, reflection, and high expectations.
Additionally, Knight (2011) described the five core concepts upon which professional learning should be established. They were (1) humanity, (2) focus, (3) leverage, (4) simplicity, and (5) precision. These concepts were centered on engaging teachers and educators in frequent, positive, and relevant professional learning. He stated that professional development needed to be aligned to accountability, provided vertical or content team planning, and ensured instructional coaching. Additionally, professional learning was embedded instructionally in order for teachers to master and implement effective practices.

Principals supported, lead, and understood that the single factor common to successful change was that relationships improve (DuFour, 2004; Fullan & Hord, 2015; Knight 2011). Researchers agreed that when relationships and culture improved, schools got better (DuFour, 2004; Knight, 2011). Knight (2011) stated that:

Professional learning fails when change leaders underestimate how complicated change can be. Just telling people what to do and expecting them to do it might work for simple tasks like stocking shelves in a grocery store, but such an approach is seldom motivating or effective for professionals. In education, effective professional learning must be grounded in an understanding of how complex helping relationships can be. Failing to understand the nature of helping relationships can doom leaders of change. (p. 20)

DuFour and Marzano (2009) stated that effective principals communicated and collaborated with all members of the school community, responded to diverse interests and needs, and mobilized resources to promote student success.

DuFour (2004) suggested that the term Professional Learning Community was common among educators. He defined the PLC as “groups of educators who focus their efforts on crucial questions related to learning and generate products that reflect that focus, such as lists of
essential outcomes, different kinds of assessments, analyses of student learning outcomes, and strategies for improving results” (p. 5). DuFour and DuFour (2006) added another dimension to a PLC and stated it was an “ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve” (“What are Professional Learning Communities”, para. 8). Teachers became empowered through PLCs by building a shared knowledge base and commitments to school improvement initiatives. DuFour (2004) indicated that in order for a PLC to maintain effectiveness the members stayed focused on three critical questions he termed as “big ideas” (p. 6). These questions “drive the work of those within the professional learning community: What do we want each student to learn? How will we know when each student has learned it? How will we respond when a student experiences difficulty in learning?” (p. 6). These questions addressed the fundamental principles of the professional learning communities, were focused on student learning outcomes, collaboration, and were results driven (DuFour, 2004; DuFour & Marzano, 2011).

Advocates of PLCs argued that these practices fostered and promoted positive professional interactions among teachers and improved teaching and learning for students. Hord (2007) cited research conducted by (Astuto, Clark, Read, McGree, & Fernandez, 1993) that labeled the professional community of learners as,

Teachers in a school and its administrators continuously seek and share learning and then act on what they learn. The goal of their actions is to enhance their effectiveness as professionals so that students benefit. This arrangement has also been termed communities of continuous inquiry and improvement. (SEDL Letter, Volume XIX, number 1, 2007)
Many research articles suggested that relationships are critical to student and school success. Minks (2014) wrote about her experiences concerning the relationship of student learning outcomes and how it is directly related to effective teaching. The author focused on how a school’s PLC was the force behind becoming a more effective teacher. The article stated the author focused on four primary questions and addressed what an effective PLC really means. Minks (2014) stated that meaningful collaboration and planning revolved around the following four questions: “(1) What do we want our students to learn? (2) How will we know they have learned it? (3) How will we respond when learning has not occurred? (4) How will we respond when learning has already occurred?” (p. 20). According to Minks (2014), teachers used these as conversation starters but the heart of PLC and collaboration began when teacher teams came together to plan for instruction. Within the PLC’s instructional conversations, issues that concerned assessments, higher order thinking skills, overall achievement, instructional gaps, and interventions were discussed to drive instruction. She noted that administrator’s support was critical to the PLC’s success. One of the main priorities for the administrator was scheduling time for the teacher teams to collaborate. Furthermore, it was imperative that educators involved in a PLC understood the importance of collaboration. Lastly, the author stated that the PLC was not a solution for a specific problem, but changed and grew year to year.

Hord (2007) stated that Rosenholtz’s (1989) research started the dialogue concerning PLCs based on observations of teachers that were supported by teacher networks and cooperating colleagues. It was noted that teachers who were supported portrayed self-efficacy, handled change, and more likely remained in teaching. Many researchers agreed that shared decision making promoted teachers working together to continuously strive toward improving
learning for students (Darling-Hammond, 1996; McLaughlin & Talbert, 1989; Rosenholtz, 1989).

High quality professional development was associated as a key to school improvements and reform. Sparks (2005) commented that school leaders were challenging the old ideas of professional development and they held the keys to implementing PLCs. The researcher suggested that real change happened when a deeper understanding of professional development occurred and altered what we thought, said, and did in order to significantly improve teaching and learning. These practices were consistently implemented effectively and used every day. These practices deepened understanding, affected beliefs, produced new habits of mind and behavior, and altered the teacher’s practice.

Sparks (2005) stated that effective PLCs included activities that followed the methods outlined in Easton’s Powerful Designs for Professional Learning (2004) created by Easton. Their methods incorporated action research, designing and evaluating student assessments, case discussions, classroom walk-throughs, critical friend groups, curriculum design, data analysis, lesson study, journal writing, and mentoring, peer coaching, portfolios, shadowing students, tuning protocols, and study groups. Lastly, Sparks (2005) suggested PLCs were safe environments where everyone was a learner.

Birman, Desimone, Porter, and Garet (2000) stated in the ASCD article, “Designing Professional Development That Works”, true reform occurred when teaching practices improved. The authors suggested that professional development delivered effectively was the key to improving teacher practice to meet the rigor of standards based reform. They identified that professional development should have the following three structural features:
Form – professional development can be delivered as traditional or reform activities and it can be in a traditional format as long as it has appropriate duration, subject matter content, active learning, and coherence

Duration – longer activities have more subject area content focus, more opportunities for active learning, and more coherence with teachers

Participation – professional development for teachers of the same content area allows for concept discussions, integration in other content areas, and builds a professional culture.

(pp. 1–2)

In addition to the three structural features, professional development must incorporate the following three core features:

Content Focus – professional development is delivered by content area which strengthens knowledge and skills in that subject area and should address how students learn that content

Active Learning – activities that encourage and engage teachers in meaningful work through observations, practicing in simulated conditions, developing lesson plans, reviewing student work, and coaching opportunities

Coherence – professional development is more effective when directly connected to teacher learning and classroom practice, aligned with standards, improving knowledge and skills that are consistent with goals, connected to earlier activities, follow up activities and involve teachers discussing experiences. (p. 2)

Teacher’s learning and talking about their practice while participating in a PLC was a key factor to sustained new programs or strategies. These fostered changes in approaches to the teaching and learning process (Garrett, 2010). Moller, Mickelson, Stearns, Banerjee, and Bottia
(2013) focused primarily on the role of PLC and teacher collaboration that influenced mathematics achievement particularly in achievement gaps of race, ethnicity, and socioeconomic status (SES). The authors explained that the components of collective pedagogical teacher culture were associated with teacher satisfaction, accountability of student learning, student centered environments, academically oriented student culture, and ultimately higher achievement. Moller et al. (2013) stated that to accomplish these milestones were through effective professional and collaborative communities. The authors analyzed the Department of Education’s Early Childhood Longitudinal Study to gather logistical data. They defined teacher culture as the workplace environments where teachers perceived (1) strong community orientation, and (2) teacher collaboration. They determined a strong professional community by measuring the following five variables: (1) teachers had school spirit, (2) leadership communicated the school mission, (3) teachers agreed on the school mission, (4) teachers felt accepted and respected as a colleague, and (5) teachers were constantly engaged in learning. Ultimately, the results indicated that black, low-SES students experienced the greatest benefit from teachers who sensed the existence of a strong professional community. Finally, the authors noted that schools improved math performance and reduced achievement gaps by improving the culture within the school.

In a research study conducted by D’Ardenne, et al. (2013) defined a PLC as: “a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way” (p. 2). D’Ardenne et al. (2013) found that utilizing the PLC was as valuable to professionals as it was to student growth. The authors reported the PLC approach of utilizing the collective experiences and expertise of the involved reading teachers was arguably as valuable as the student gains achieved. In another research
study conducted by Watson (2014), the PLC was examined as a vehicle for teachers to lead change in schools. The author pointed out that PLCs were a common place in schools as a means to strengthen the deficiencies associated with sporadic, disjointed professional development. Within the article, Watson (2014) focused on three additional important aspects of PLCs: shared values and vision, learning within the PLC, and community. According to the authors, there were many issues surrounding the conceptual understanding and practices of a PLC. However, the author provided evidence that PLCs were either motivators or initiators of change in schools. Lastly, Watson (2014) cautioned schools to be aware of the complexities of the PLCs and search for ways to increase its adaptability. Additionally, the research of Bolam, McMahon, Stoll, Thomas and Wallace (2005) suggested PLCs encompassed four characteristics: (1) collective responsibility for pupils learning; (2) reflective professional inquiry; (3) collaboration focused on learning; and (4) group as well as individual professional learning was promoted. The purpose of the PLC was focused on student learning. Lastly, they advised that educators needed to examine of the meanings of the three purposeful words – professional, learning, community.

**Hybrid Schedule**

Every organization has a structure by which it operates. Structures were designed and implemented to achieve its goals. Organizational structures designed and implemented in elementary schools were a traditional, self-contained pattern. According to Chang, Munoz, and Koshewa (2008), this type of traditional structure required elementary teachers to act as a generalist and teach all subjects in a self-contained setting. Self-contained classrooms were effective in the past and the typical structure used in most elementary. Parkay and Stanford (2007) defined classroom organization as “the way teachers and students are grouped for
instruction and the way time is scheduled in the classroom” (p. 362). Parkay and Stanford (2007) described different organizational patterns as follows:

1. At the elementary level, the self-contained classroom is the traditional arrangement.

   In this arrangement, the teacher and students remain in the same class for all core subjects such as math, science, social studies, and language arts.

2. Another arrangement is the team-teaching configuration. In this arrangement, teachers divide the responsibility for two or more classes among two or more teachers. The teachers specialize in different subjects, skills, or ability groupings of students.

3. A third teaching arrangement is open-space classrooms. In the open-space classroom, students work independently with a number of teachers providing individual assistance. Typically, these classrooms have no walls, hence the name open-space.

4. The last elementary level arrangement described is the departmentalized classroom.

   This arrangement is usually found in middle, junior, or high schools. In this setting, students study four or five academic subjects taught by teachers who specialize in those subjects. Students typically move from class to class for their subjects.

   Departmentalized arrangements require more structured schedule of time. (p. 362)

With the changing landscape of educational reform, Lesaux and Kelley (2013) suggested that the implementation of the Common Core State Standards (CCRS) had necessitated educational change. The focus of these standards shifted and focused educators on preparing students for the literacy demands for the 21st century economy. The article raised the question: How can principals successfully support teacher’s implementation of the new curricula? The
authors provided teacher feedback that was gathered during their design and implementation of an academic language curriculum in 14 urban middle schools. The five findings were as follows:

1) Robust materials can be a solution – but also the challenge. Principals need to design and select rich and rigorous materials that challenge students and that are easy for teachers to follow and deliver. They must give teachers a road map for instruction.

2) Training didn’t train teachers; teaching did. Principals must realize implementing a new curriculum takes time and practice and on-the-job-training is most effective.

3) Web-based support may be very helpful, but not in the beginning! Principals should provide live support to address problems and model and reinforce how to access the website and what is available.

4) Regular and repeated routines make a difference for students and teachers. Principals must realize advanced literacy skills demands structured opportunities for practice. They must educate themselves on effective instructional practices and ensure that they are implemented to fidelity.

5) Teachers’ expectations influence students’ learning opportunities and outcomes. Principals continue to affirm all students can learn and will learn complex subject matter with effective instruction. They need to be able to help teachers troubleshoot lessons, be aware and prepared for difficulties, and be helping them preserve through the lesson.

With the mandated implementation of the *Alabama College and Career Ready Standards*, it became apparent that the traditional structure for our school needed to be changed. The *Alabama College and Career Ready Standards* required in-depth teaching and learning for mastery of skills to occur. Gerretson (2008) stated that it was impractical for “elementary
teachers to have the specialized knowledge to facilitate mathematics instruction, as well as knowledge for every other subject they teach” (p. 303). Varma (2008) agreed that elementary teachers “often lack a deep understanding of science. Unlike secondary teachers, elementary teachers typically do not major in science, and 40% have taken four or fewer semester of science coursework” (p. 594). In order to ensure a deeper understanding of learning, beliefs about teaching and learning must be changed.

Creating different instructional and organizational patterns must be based on sound educational principles. Baker (1999) suggested that because teachers have to spend a majority of their time devoted to lesson planning, group instruction, and evaluation it limits the opportunities for teachers to attend to students’ individual learning problems. Baker (1999) indicated that collaboration and teaming were the keys to (a) identifying barriers to teaching and learning, (b) promoting engagement, and (c) providing effective responses to student needs.

Hargreaves (1994) noted one way to relieve the uncertainty of classroom teaching was to create communities of colleagues who work collaboratively. Teaming benefitted students, but helped teachers to become more specialized. Collaboration took on various forms. Parallel work occurred when classes were combined and each teacher taught to their strength. In Stewart and Perry’s (2005) study, found that experience levels of teachers were an important factor to pairing teachers. Additionally, the partnership was crucial according to Stewart and Perry (2005), they stated “a ‘good’ team teaching partnership can energize a person, while an ineffective partnership can become a burden” (p. 10). Complementary work was seen as one team member that took the lead and another facilitated the follow up activity. Teaming was the most widely used when two or more teachers shared the instructional load and specialized in a subject.
Recently according to McGrath and Rust (2002), departmentalizing elementary school structure became an issue debated by educators and administrators. Departmentalized organizational structures were in place ever since secondary schools were initiated. Some advantages of departmentalization included specialization, instructional teams, teacher retention, and helped with the transition to the middle school, and flexibility (Chan & Jarman, 2004). Specialization allowed instructional time to be better utilized. Teams were formed to integrate subject content across the curriculum. Teachers were able to plan for less so they taught at deeper levels, which resulted in a stronger content delivery. When teachers understood their content well, they were more likely to provide students improved content access which increased student learning outcomes (Gerretson, 2008; Varma, 2008).

Successful departmentalization in elementary school resulted from the amount of preparation and involvement of teachers. Departmentalization allowed teachers to maximize resources and preparation time. Teacher that had adequate understanding of the subject matter they were responsible for teaching (Lederman & Flick 2004). Using the departmentalization approach teachers became more knowledgeable of the subject they were expected to teach if they were planning for fewer subjects. Gerretson (2008) pointed out that there was “more time for lesson preparation…, if they taught fewer subjects, teachers could focus on their area of strength and spend less time refining lessons instead of preparing lessons in multiple areas” (p. 309).

With departmentalization there were obvious advantages, but there were disadvantages as well. One disadvantage was that students change classes several times a day, they may not receive the individual attention they need. Positive teacher-student relationships were more difficult to establish. Canady and Retting (1995) alluded to departmentalization was an assembly line, depersonalized with students. Another disadvantage was the integration of subject matter.
Content areas were taught in isolation. Curriculum needed to be planned and organized so all subject areas were connected (Chang et al., 2008; Smith, et al., 2000). This is difficult because different teachers teach different subjects. Planning and working together to develop effective ways to integrate the curriculum is an important concept to the success of effective departmentalization.

There were several researchers that supported traditional classroom settings (Chang et al., 2008; Dropsey, 2004). They argued that this setting was better because it met the needs of the whole child. Meeting the needs of the whole child included the development of personality characteristics, an important part of the total learning process (Chang et al., 2008). However, McPartland (1987) found that traditional classroom structures positively impacted teacher-student relationships while sacrificing high quality instruction. With careful attention paid to organization, instruction, and students’ social development, high quality learning opportunities was designed in departmentalized settings.

There is still much that needs to be learned about the relationship of student growth and achievement with a departmentalized structure in the elementary school. According to Yearwood’s (2011) research of the effect of traditional versus departmentalized structures, she found that the tests scores were higher resulting from departmentalization. Educational practices in today’s elementary schools were very different from those in the past. Many schools were in support of departmentalization due to the level of content and subject matter that was to be taught. Yearwood’s (2011) study surmised that departmentalization was suited for elementary schools where it is implemented with the assumption that student learning outcomes was positively impacted. It also provided conclusive evidence that administrators employed teachers that were content specialists.
Rogers (2012) conducted research to understand principals’ perceptions of departmentalization and self-contained classrooms at the elementary level. The issues that surrounded departmentalization were concerns about meeting the academic, social, and emotional needs of students. Two principals in the study utilized departmentalization, two self-contained classrooms, and two implemented a combination of organizational structures among various grade levels. The significant points made in this study was that principals concerned with meeting the deficiency needs of students supported self-contained classrooms; whereas principals in favor of meeting growth needs utilized departmentalization. The findings in the article were used by administrators to weigh the pros and cons of changing an elementary school’s organizational structure based on their school demographics.

The school curriculum and expectations changed dramatically over time. Watts’ (2012) researched the relationship between school organizational style and student outcomes. This research focused on whether there was a difference primarily in math performance of fourth graders who received instruction in a departmentalized setting compared to a self-contained setting. The researcher identified six key factors at the forefront of departmentalization movement. They were core subjects, learning skills, 21st Century Tools, 21st Century context, 21st Century content, and new assessments that measured 21st Century Skills. The connection to the importance of the Common Core State Standards was noted and referenced to the rationale of specialized teachers with the core content knowledge was necessary for teaching to the depth that these standards are dictating. A striking result was teachers believed that their lesson delivery was better in a departmentalized setting. The results of the achievement scores indicated that classroom organizational style had no significant differences in student scores. However, the
researcher noted that changes were needed in organizational structures to meet all of the increasing demands of the changing curriculum and the outcomes.

Another research study conducted by Koch (2013) investigated whether fifth grade students attending departmentalized schools or self-contained classrooms had higher achievement scores in science. The results indicated there were no significant differences between students attending departmentalized schools as those attending self-contained schools. However, the data collected also demonstrated that for at least male students with disabilities, departmentalized schools had a slight effect on improving science instruction.

The innovative hybrid schedule was developed as a modified version of a departmentalized organizational structure that used ability grouping. Ability grouping has been heatedly debated in educational circles for years. However, the timing, types, and criteria for grouping varied among researchers (Maaz, Trautwein, Ludtke, & Baumert, 2008). The fundamental notion behind ability grouping was to provide leveled instruction according to their achievement or mastery of skills. There were many research studies conducted on ability grouping. Hollified (1987) identified two common forms of ability grouping “between-class and within-class ability grouping” (p. 1). Between-class terminology referred to the development of classes of one ability level and within-class depicted the idea of a teacher grouping students within one class.

There were numerous forms of groupings researched and found either inconclusive or incomplete results. Allan (1991) stated that a provoking challenge for educators on the topic of grouping was whether to group, when to group, and how to group students effectively. The researcher pointed out that to make informed decisions educators needed to align these questions accordingly with the previous questions conducted in prior research (Allan, 1991). Allen (1991)
stated that the “most destructive aspect of the controversy over ability grouping is the misrepresentation of the findings, particularly those of Slavin’s (1986) best-evidence synthesis” (p. 4).

Research over the last fifty years provided advantages and disadvantages of ability grouping (Billett, 1932; Borg, 1965; Esposito, 1971; Findley & Bryan, 1970; Good & Marshall, 1984; Slavin, 1986). Slavin (1986) explained that ability grouping was thought to have two purposes: (1) increased student learning outcomes by allowing the teacher to the appropriate level of instruction; (2) allowed the teacher increase the pace for high achievers or provide individualized instruction for low achievers. He reported that opposition to ability groups stemmed from the practice of grouping low achievers which isolated these students from example and stimulation from high achievers. Additionally, Slavin (1986) found that most types of grouping supported “positive achievement effects of the use of within-class ability grouping in mathematics and of Joplin and non-graded plans in reading. In contrast, there was no support for the practice of assigning students to self-contained classes according to general ability or performance level” (pgs. 60–61). Slavin (1986) pointed out that three criteria were necessary for grouping students. They were as follows:

(1) The grouping plan must measurably reduce student heterogeneity in the specific skill being taught; (2) The plan must be flexible enough to allow teachers to respond to miss assignments and changes in student performance level after initial placement; (3) Teachers must actually vary their pace and level of instruction to correspond to students’ levels of readiness and learning rates. (p. 71)

Accommodating and meeting the needs of varying achievement levels in a classroom remained a constant in education. Wheelock (1994) stated the premise behind like-ability groups
was to put students with other students that had like abilities so targeted instruction was accomplished. Kulik (1992) said that the foundation for like-ability grouping was to increase student learning outcomes by closing the gap in achievement. The researcher pointed out teachers better met the needs of the class if they were all on the same academic level. This type of organizational structure allowed the teacher to target instruction for both low ability and high ability students (Kulik, 1992).

Dube, Dorval, and Bessette (2000) focused on research that evaluated the impact of intervention combining flexible and explicit instruction of reading comprehension strategies. The research was conducted in an elementary school, with four teachers and one learning specialist that planned and examined 90-minute monthly classes and involved 76 students over a ten-month period. The results indicated noticeable improvement in reading comprehension, particularly in students with learning difficulties. Flexible grouping referenced to this research referred to grouping practices that respected the diverse and changing needs of all students. Teachers accounted for students’ strengths and weaknesses for grouping purposes. The outcomes of the research indicated that intervention with combined flexible grouping that included explicit instruction led to an increase in reading comprehension skills. Positive effects of flexible grouping proved effective when used with short, focused teaching sessions, and contributed significantly to development of reading skills. Positive outcomes emerged when students worked in subgroups with their particular learning needs, with student attention focused on a particular strategy.

As a social organization in nature, the school influenced teacher attitudes about grouping. Petrello (2000) examined the differences of opinions and rationales for homogenous grouping and heterogeneous grouping structures. The author surveyed teachers and administrators to
determine their preferences of heterogeneous or homogeneous groupings in classrooms. According to Petrello’s (2000) research, eighty-four percent of the teachers responded as preferring homogeneously designed classes. One rationale stated referred to the meeting the needs of a wide range of abilities within a classroom. Others felt that when high achievers were placed with at-risk or lower achieving students, the at-risk students pulled the high achievers down. In homogeneously designed classes, fifty-two percent of the teachers advocated grouped instruction over whole class instruction. Many believed that grouping provided more individualized instruction. According to Petrello (2000), within classes heterogeneously designed, grouping was considered to be an essential element to teaching. Petrello’s research data showed that the lower ability group benefited from heterogeneous designs and ability grouping.

On a consistent basis, school leaders and teachers within the school community made decisions on how to organize students for instruction (Davidson, 2009; Gamoran, Nystrand, Berends, & LePore, 1995). Student diversity became a topic of discussion as the landscape in the classroom has changed (Boaler, 2007). Ireson and Hallam (2001) found that ability grouping enabled teachers and their lessons, to be more effectively geared to meeting the needs of diverse abilities. An EL study conducted by Kim (2012) found that teachers believed that providing classes for different levels of students was helpful for their learning process. The research concluded that students showed more improvement when taught in ability groups. For school leaders, decisions concerning student placement practices were influenced by beliefs about student learning, external pressures, and prior experiences (Hallinan, 1994; Lee & Bryck, 1988). Archbald and Keleher (2008) stated that schools needed to use appropriate data in order to group students. Additionally, the researchers argued that flexibility should be applied to allow students
to move in and out of groups as they progressed. Archbald and Keleher (2008) described data as
the critical component that enhanced school organization and school improvement.

Given the national discussions on decreasing the achievement gap, the importance on
how grouping was factored in closing or widening the achievement gap. A number of studies
investigated that grouping was favored for high achieving students but was detrimental to lower
Lleras and Rangel’s (2009) research investigated the impact of ability grouping practices on
achievement gains among African Americans and Hispanics during elementary school. The
research results indicated that lower-grouped students have significantly lower achievement
gains and that higher-grouped students have greater achievement gains by first grade and third
grade compared to non-grouped students. Some results suggested that the practice of grouping
does benefit African American students slightly if placed in higher reading groups within
classrooms. Overall, the results indicated that grouping exacerbated achievement gaps among
African American students in the earliest years of schooling. The pattern for Hispanic students
was relatively the same.

Lleras and Rangel (2009) challenged the theory of grouping for instruction was effective
for all students and found it detrimental to the early reading trajectories of African American and
Hispanic students who are lower grouped for reading instruction in first and third grade.
Additional results specified that students being lower grouped in low ability classrooms
constituted a double disadvantage for these students.

Abadzi’s (1985) research examined ability grouping effects on academic achievement
and self-esteem. Students in high achieving groups showed gains on achievement scores after a
year of ability grouping but did not maintain the performance gains they made in the first year.
The high achieving students’ self-esteem showed an increase while other groups showed a drop in self-esteem scores. Students scoring slightly above the criterion showed some increases in performance, while students who had scored just below the criterion showed a decrease in performance after a year in regular ability classes. The results showed little support for complete ability grouping.

Summary

Based on the literature review, there was an abundance of research relating the connections of PLCs to improved instructional practices. However, there was limited research that linked sustained innovation through implementing the attributes of PLCs to improved school culture and student learning outcomes. To guide this study, the literature review included literature on organizational culture, leadership, educational change process, professional learning communities, departmentalization, and ability grouping. Each section reviewed was directly linked to the conceptual framework of this study. The literature sections were necessary for understanding links to the overall concept of the research study.

Organizational Culture

Schein (1985) defined the organizational culture as

An organization’s culture is its pattern of basic assumptions that are invented, discovered by the group as it copes with its primary interdependent tasks of external adaptation and internal integration. These assumptions have worked well enough over time to be considered valid by the group and therefore important to be taught to new members as the correct way to perceive, think, and feel in response to new problems. (p. 12)

Schein (1983) also stated that “cultural assumptions are experienced at the subconscious level so that many may not even be aware of them, although there has been some disagreement with this
notion” (p. 2). In reference to school culture, Schein (1985) emphasized that “leadership and organizational culture were two sides of the same coin” (p. 15). Schein found that “the only thing of real importance that leaders do is to create and manage culture and that the unique talent of leaders is to work with culture” (p. 2). Deal and Peterson (1990) stated “it is clear that school culture is closely linked to productivity such as (a) collaborative planning and collegial relationships, (b) teacher turnover, (c) teacher morale and motivation, (d) order and discipline, (e) test scores, and (f) a sense of community” (p. 12).

Leadership

Many leadership theories contributed to the foundational aspects of defined leadership styles and approaches, all of which helped shape and inform the diversity of leadership in the educational setting. Overall, the variety of leadership approaches considered leadership as a process of influencing other to achieve a common goal. Several leadership concepts explored were distributed leadership, instructional leadership, and transformational leadership. Spillane et al. (2003) stated that distributed leadership decentralized the leadership functions so that belong to the group not solely vested with the principal. Leithwood et al. (2004) referred to instructional leadership describes the principal as vested more with the instructional and professional development aspects of a school setting, not on traditional managerial tasks. Additionally, Leithwood et al. (2004) defined transformational leadership was concerned with the charismatic and affective elements of leadership and how leaders inspired followers to accomplish great things.

Change Process

In looking for way to help individuals and organizations to grow and learn, we must not ignore the forces of change and the impact they have as we seek new ways of working together.
Fullan (1993) warned that “Change is ubiquitous and relentless, forcing itself on us at every turn” (p. vii). Change is about a shift in our thinking and in the way we do things (Fullan, 2007). Fullan (2007) believed that educators must become skilled agents of change. If our educational system is to grow, the capacity for change is vital. Fullan (1991) stated “one of the most fundamental problems in education today is that people do not have a clear, coherent sense of the meaning about what educational change is for, what it is, and how it proceeds” (p. 4). Fullan (2007) suggested that educational change occurs in three phases. Initiation was the first phase and occurred when the need for change and innovation was recognized. Implementation was the second phase, the process of commitment to the change, and carrying out the use of the innovation. Institutionalization was the third phase and the change became an integral part of the way the organization functioned.

**Professional Learning Communities**

DuFour (2004) professed that professional learning communities have the capacity and the potential to empower teachers and improve their practice. DuFour et al. (2008) suggested that teachers in effective PLCs focused on how their students learn, which strategies and interventions worked to help students, and what they had to do to enhance student’s learning. DuFour et al. (2008) defined a PLC as a group of

Educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve.

Professional learning communities operate under the assumption that they key to improved learning for students is continuous, job-embedded learning for educators. (p. 14)
Hipp and Huffman (2010) believed that PLCs were “Professional educators working collectively and purposefully to create and sustain a culture of learning for all students and adults” (p. 12). Darling-Hammond noted collaboration associated with a professional community of teachers was a key element for successful schools. Additionally, Fullan (2007) stated

Active PLCs with schools in which teachers observe one another’s teaching, and work with school leadership to make ongoing improvements, the greater the consistency and quality of teaching across the whole school, at which point all students in the school benefit. (p. 54)

The conceptual framework of the present case study was based on the five attributes of the PLCs identified through the work of Shirley M. Hord (2004) and Michael Fullan’s (2007) Educational Change Theory. Hord’s five attributes were: 1) supportive and shared leadership, 2) shared values and vision, 3) collective learning and application of learning, 4) shared practice, and 5) supportive conditions. Fullan’s educational change theory has three phases: Phase I – Initiation, Phase II – Implementation, and Phase III – Institutionalization.

The literature review demonstrated that there are many variables that play an active part in the educational change process. Research indicated that the attributes of the Professional Learning Community which are supportive and shared leadership, shared values and beliefs, collective group learning, supportive conditions, and shared personal practice provide the context for improving collaboration and organizational learning. However, a deficit in the research remains related to the correlations among implementing innovation, changing school culture, improving instructional practices and student learning outcomes for continuous improvement efforts through teacher engagement in the five attributes of a learning community.
CHAPTER 3: METHODOLOGY

Purpose of the Study

The researcher investigated the degree to which school culture and student learning outcomes changed as a result of the implementation of the innovation of a hybrid schedule. Departmentalization at an elementary school has been controversial because many believe it does not lend to teaching the whole child (Becker, 1987; Chang et al., 2008; Dropsey, 2004; Harris, 1996). Departmentalization is not a new concept in education. Middle schools and high schools have utilized a departmentalized organizational structure for years. However, applying the idea to elementary school has seemed to be a break from tradition, a long held belief that an elementary school should have a one teacher per classroom model. This traditional school of thought has been held because some believe that younger students benefit from the relationships established because the students are with the same teacher, same students all day every day for the entire school year. Elementary school teachers are trained to be generalists that teach all of the core subjects of math, reading, science, social studies, and language arts (Chan & Jarman, 2004; Chang et al., 2008; Contreras, 2009; Delviscio & Muffs, 2007; Dropsey, 2004; Hampton, 2007; Hood, 2009; McGrath & Rust, 2002; McPartland, 1987). The current research available on departmentalizing at the elementary school level is still unclear as it relates to improving student learning outcomes, improving instructional practice, and teacher effectiveness and school culture. With the implementation of the rigorous, complex Alabama College and Career Ready
Standards, a deeper understanding of subject matter will be required, and the complexities of these standards will require specialized content instruction.

However, some elementary schools have adopted a hybrid schedule to allow teachers to maintain their student relationships, while still engaging in some departmentalization. The hybrid schedule evolved and became a variation of departmentalization coupled with ability grouping. This innovative hybrid schedule has allowed teachers to become specialists in one content area and individualize instruction through use of small group leveled instruction. The formulation of the hybrid schedule offered the opportunity for teachers to discuss their content areas and participate in a learning community to improve their instructional practice. The teachers planned and collaborated vertically with other subject specific teachers as well as worked collectively within their grade levels. In this mixed methods case study, I have interviewed teacher participants at Stella Elementary in Eagle City Schools’ System and analyzed diagnostic stakeholder climate surveys, Stages of Concern’s Questionnaires, and student learning outcome data in order to evaluate the effectiveness of the innovative hybrid schedule in improving school culture and student learning outcomes.

**Research Design**

This research study employed a mixed method case study utilizing a convergent design. The school, which was the subject of the study, had implemented an innovative hybrid schedule over a two-year period. In addition, the selected school site implemented the different components of professional learning communities in an effort to strengthen collaboration and improve school culture. Purposeful sampling was used for this study.

The purpose of the mixed method case study was trifold. First, research was conducted to examine the implementation of an innovation and whether the school culture changed as a
result of the innovation. Second, research was conducted to determine the level of teachers’ concerns about implementing the innovative hybrid schedule. Third, the study was conducted to determine perceived program outcomes and if school culture and student learning outcomes improved. Creswell (2015) viewed mixed methods as

An approach to research in the social, behavioral, and health sciences in which the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems. (p. 2)

Utilizing mixed methods permitted expansion of results allowing for greater richness and detail to the study through exploring specific features of each method (Trochim, 2002). A noted disadvantage of mixed method design is the length of time that it is involved in data collection (Creswell, 2003, 2015; Morse, 1997). Creswell (2003) elaborated on some of the challenges of mixed methods research as “including the need for extensive data collection, the time-intensive nature of analyzing both text to numeric data, and the requirement for the researcher to be familiar with both quantitative and qualitative forms of research” (p. 210).

Creswell (2015) confirmed that combining both quantitative and qualitative research was advantageous for multiple reasons:

Obtain two different perspectives, one drawn from closed-ended response data (quantitative) and one drawn from open-ended personal data (qualitative); obtain a more comprehensive view and more data about the problem than either the quantitative or the qualitative perspective; add to instrument data (quantitative information) details about the setting, place, and context of personal experiences (qualitative information); conduct preliminary exploration with individuals (qualitative research) to ensure that instruments,
measures, and interventions (quantitative research) correlate with the participants and the site being studied; and add qualitative data to our experimental trials (quantitative research) by, for example, identifying to participants to recruit and interventions to use, assessing the personal experiences of participants during the trial, in carrying out the follow up to further explain the outcomes. (p. 15)

Johnson, Onwuegbuzie, and Turner (2007) suggest that using mixed methods provided contextual understanding and multi-level perspectives, utilized multiple methods and data, and employed rigorous constructs from both qualitative and quantitative methods. When used in combination, quantitative and qualitative methods complemented each other and allowed for a more complete analysis (Green, Caracelli & Graham, 1989; Tashakkori & Teddlie, 1998).

The rationale for using the case study design was the fact that this design provided significant insights and perspectives from participants in a bounded system (Creswell, 2012, 2015; Gillham, 2010; Merriam, 2009). Using a case study methodology, allowed the researcher to discover and identify the perspectives of the participants, along with other sources of evidence, the impact the innovative hybrid schedule had on changing teaching practices, school culture, and student learning outcomes. Yin (2011) declared that seeking answers to what, how, and why a particular phenomenon occurred was an advantage of using a case study approach.

Gillham (2010) described case study methodology as the case from the participants’ point of view or looking at the problem through the lenses of the participants. The emphasis of the case study was relative to how the process happened, rather than reaching a particular outcome, particularly in telling of what happened form many viewpoints (Bodgan & Biklen, 2007). Furthermore, a case study provided descriptions of how a school culture functioned from those participants that were actively involved. This approach served my research paradigm and
conceptual framework for understanding the relationships how implementing an innovation effected school culture and drove the process for continuous improvement by utilizing the attributes of professional learning communities. Being able to gain a comprehensive and holistic view of the case within a bounded system provided for a deeper understanding of how change happened. Additionally, it included the context as well as details related to the case being studied. According to Yin (1984), a case study can “contribute uniquely to our knowledge of individual, organizational, social, and political phenomena” (p. 14). Due to this case study being an intervention of utilizing the attributes of the professional learning community, employed in the larger convergent design of implementing an innovative hybrid schedule, and in essence transpired a change in school culture in a real-life context, was determined to be descriptive in nature.

The qualitative data used in this case study were collected through in-depth interviews. Additional artifacts and documents were collected. The quantitative data were collected over a two-year period. The survey data were collected at the beginning and end of each school year. The survey used was AdvancED’s® stakeholder feedback diagnostic tool that was used to measure the school climate. The surveys were administered to address the Standards for Quality Schools and was electronically formatted through the AdvancED® Assist portal. Additional quantitative data were gathered through the questionnaire used based on the Stages of Concern Questionnaire (SoCQ). The SoCQ was administered in a pencil-paper format. The student learning outcome data were generated using ACT Aspire®. These data were state mandated and administered to all third through fifth graders.

Mixed methods researchers must use a combination of quantitative (numeric analysis) and qualitative (thematic analysis) approaches to report findings. A visual model, Figure 2,
provides a sequence to this study indicating that qualitative methods and quantitative methods were used in the convergent design.


Figure 2. Convergent Parallel Design

The collection and mixing of data from two methods allows the researcher to gain a broader perspective from the results (Creswell, 2009). Yin (2003) discussed the advantages of using multiple data collection methods to increase the validity of the data and provides the researcher the opportunity to triangulate the data to verify themes that emerge from the data sources. This case study utilized four data collection procedures to address the three research questions. The collection of data from all instruments served to triangulate the data and verify existing themes and patterns.

**Research Questions**

The research questions that guided this study were:

5. What do teachers perceive as factors that facilitated and/or hindered the implementation of the Innovative Hybrid Schedule?
6. As perceived by the teachers, to what extent has the school culture changed as a result of the implementation of the Innovative Hybrid Schedule?

7. To what extent have student learning outcomes changed with the implementation of the Innovative Hybrid Schedule?

8. What are the perceived program outcomes related to the implementation of the Innovative Hybrid Schedule?

**Setting**

The school used in this study was selected due to its implementation of an innovative hybrid schedule. Within this school setting, the attributes for professional learning communities were established to support teachers through the implementation process of the *Alabama College and Career Standards* for Math and Reading. The study allowed the researcher to create an in-depth understanding of the educational change process and continuous improvement cycle from the individuals that had constructed meaning from their participation in that school context, setting, and interactions within the professional learning community.

The study occurred at Stella Elementary School. This is a kindergarten through fifth grade school, one of eleven elementary schools in the Eagle City Schools’ System. The school serves approximately 410 students. The student population served is primarily from low socio-economic households. Ninety-six percent of the students receive free and reduced lunches. Due to the high number of students living at or below poverty status, Stella also receives school wide Title I funding. In addition to high poverty, Stella’s student population is highly transient. The transient rate was thirty-nine percent. Lastly, Stella has thirty-three percent of the students being served under the special education umbrella.
Stella Elementary School’s organizational purpose and educational goal is centered on student growth. In order for students to be successful, as well as be college and career ready, Stella’s staff is charged with the establishment of strong educational foundation for students by emphasizing analytical skills, a deeper understanding of concepts, and applied knowledge rather than simple recall of facts. For many years the school system’s curriculum has been a mile-wide and an inch-deep approach to subject matter. However, changes in the curriculum with the Alabama College and Career Ready Standards (ACCRS) has required a deeper level of knowledge, critical thinking, and application of skills for both teachers and students. Ultimately, every student needs to think critically and analytically to successfully master the new ACCRS for Math and English Language Arts. Thus, implementing the ACCRS required changes in the instructional and planning processes. These components are essential and critical to continuous improvement an improving student learning outcomes.

Eagle City Schools is required to adhere to the AdvancED® continuous school improvement standards for accreditation. Under AdvancED® guidelines, schools are required to review school improvement standards and provided documentation of adherence to the five Quality School Standards (1) Purpose and Direction; (2) Governance and Leadership; (3) Teaching and Assessing for Learning; (4) Resources; and (5) Support Systems. Embedded throughout the Quality School Standards are the common themes of continuous improvement, stakeholder involvement, student engagement, collaboration, equity, and personalization. Additionally, included within each standard is a strong focus on teaching and learning. Furthermore, the standards address how the school prepares students with skills needed for the future and analyzed the schools’ high expectation for professional practice.
At Stella Elementary School, the term continuous improvement is defined as constant review and evaluation of every factor that affects teaching and learning. In order to evaluate, a comprehensive needs assessment is conducted that analyzes programs, methods, instructional strategies, organizational structure, and culture indicators within the school. At the end of the 2012–2013 school year, Stella’s Building Leadership Team (BLT) intensely analyzed the AdvancED® stakeholder feedback diagnostic that reported and determined that the school’s morale, climate, and culture were in need of improvement. Further analysis revealed that teachers’ believed they were not meeting the needs of the various levels of students due to the fact that they had multiple subject areas and student ability levels for which to plan. Additionally, the implementation process for initiatives such as Alabama College and Career Ready Standards and RTI was making planning alarmingly difficult to nearly impossible. It was determined that the school morale and climate were stifled by the number of new curricular expectations and documentation requirements.

**Role of the Researcher**

The researcher acknowledged in-depth knowledge about the various components and aspects involved in this case study. Therefore, the researcher had intimate knowledge and understanding of the data, data collection, and lived experiences of this study and potential biases needed to be addressed (Creswell, 2012). Freeman (2011) argued that understanding must not be viewed as fixed but transformed as knowledge is generated. Giorgi (2011) suggested that a researcher must have an open mind to discover unexpected meaning in emerging data. Through the process of bracketing, the researcher set aside personal experiences that potentially influenced the participants’ understanding of data. This required the researcher to set aside beliefs or previous knowledge about the subject throughout the investigation. Ahern (1999)
explained that bracketing provided validity of data collection and process to be demonstrated. A researcher must be aware of their perceptions, beliefs, values, interests, and thoughts in order to bracket them during the research process (Crotty, 1996). In order to use the bracketing process, the researcher adhered to the process of reflexivity. Reflexivity was a key thinking activity that helped the researcher identify the possible biases and influences that encroached the work being done in the study (Primeau, 2003).

**Participants**

In order to begin the research study, the researcher submitted the proposed case study to Auburn’s Institutional Review Board and Eagle City Schools’ Board of Education. Once the approval came from both entities, the researcher distributed letters of consent to the participants of the study once Auburn’s Institutional Review Board and Eagle City Schools’ Board of Education approved the research study. The procedure for gaining access to the participants began with the letters of agreement for participation in the study. The consent forms included the research study’s guiding questions and goals of gaining an understanding the relationship between the implementation of an innovative hybrid schedule and how the attributes of PLCs changed school culture and student learning outcomes which served as a catalyst to continuous improvement.

The participants selected in the study were the members of the Building Leadership Team and the teachers that have taught in the innovative hybrid schedule venue. In this case study, surveys were administered and reviewed, followed by the interviews (Creswell, 2003). Also, following the recommendation of Creswell (2012), purposeful sampling was used for this study. The teachers were selected from the accessible population for the interviews since the researcher wanted a broad range of opinions from all teachers in the school at a high response right.
According to Patton (1990), the “logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposeful sampling” (p. 168). Table 1 identifies the participants by grade level and subjects they taught in the study representing the pilot year and year one of implementation year.

Table 1

Participants Involved in the Implementation of the Innovative Hybrid Schedule

<table>
<thead>
<tr>
<th>Grade Level Teachers Pilot Year</th>
<th>Grade Level Teachers Year One</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Grade Teachers – 3 Teachers</td>
<td>First Grade Teachers – 5 Teachers</td>
</tr>
<tr>
<td>Math, Reading, Literacy Skills</td>
<td>Math/Science, Reading/Social Studies, 1 Self-contained Classroom (All subjects)</td>
</tr>
<tr>
<td>Second Grade Teachers – 3 Teachers</td>
<td>Second Grade Teachers – 3 Teachers</td>
</tr>
<tr>
<td>Math, Reading, Literacy Skills</td>
<td>Math, Reading, Literacy Skills</td>
</tr>
<tr>
<td>Third Grade Teachers – 2 Teachers</td>
<td>Third Grade Teachers- 3 Teachers</td>
</tr>
<tr>
<td>Math/ Science, ELA/ Social Studies</td>
<td>Math, Reading, Literacy Skills</td>
</tr>
<tr>
<td>Fourth Grade Teachers – 3 Teachers</td>
<td>Fourth Grade Teachers- 3 Teachers</td>
</tr>
<tr>
<td>Math, Reading, Literacy Skills</td>
<td>Math, Reading, Literacy Skills</td>
</tr>
<tr>
<td>Fifth Grade Teachers – 2 Teachers</td>
<td>Fifth Grade Teachers – 3 Teachers</td>
</tr>
</tbody>
</table>
Ethical Conditions

The underpinning for conducting meaningful research is providing a solid foundation of ethical conditions to protect the rights of the participants and the research process. The researcher adheres to established ethical standards and principles. Ethical considerations and protections were practiced throughout the research process. As aforementioned, the researcher employed the technique of bracketing to minimize personal biases and influences (Creswell, 2012).

The researcher successfully completed all Collaborative Institutional Training Initiative requirements. The study follows outlined institutional requirements for ethical research. Prior to any data collection, letters of consent were distributed and explained that the research study was being conducted on a voluntary basis and they were able to remove themselves from the study at any point if they felt compelled to do so. The research explained the processes of the research study through the informed consent form. The participants signed the consent form if they agreed to the procedures and were willing to participate. In addition, they were informed there were no foreseeable risks involved in this type of study. The researcher emphasized the matter of confidentiality and assured that their information and identity would remain anonymous throughout the study (Creswell, 2012; Saldana, 2013). Lastly, all forms of data collected were stored in a safe, locked environment within the researcher’s office.

Limitations

The present study had certain limitations that need to be taken into account when considering the study and its contributions. The small sample size was a limiting factor in this
study. Several aspects of the research threaten the generalizability. A criticism of case study research concerns the lack of generalizability, or external validity, beyond the case being studied. However, Yin (2003) states that case studies rely on analytical generalizations in which the researcher tries “to generalize a particular set of results to some broader theory” (p. 37). The survey instrument, the teachers, and the interviews all had inherent impediments. The survey was in terms of the instrument, there was a risk of misinterpretation of questions from the participants or lack of understanding of terms used in the survey. In addition, the data analyzed were subject to misinterpretation bias, and error of the researcher.

**Data Collection**

The quantitative procedures came from the collection of a survey instrument. The survey given was *AdvancED®’s* stakeholder’s feedback diagnostic tool that measured school climate factors and addressed the cultural components as well as the continual improvement aspects of the school. This is a web-based survey retrieved and taken through the *AdvancED® Assist* portal. Additionally, the *Stages of Concern Questionnaire (SoCQ)* was used to collect quantitative data which analyzed the concerns teachers had implementing the innovative hybrid schedule change initiative. Lastly, student data were collected and input into SPSS for analysis using descriptive statistics.

The qualitative portion of the study included one-on-one interviews conducted with teachers from the school site that provided a deeper understanding of the change process. The researcher explored teacher perceptions concerning the program outcomes of the implementation of the Innovative Hybrid Schedule, the school culture and the attributes of PLCs. The interview data was collected from listening, probing, observing, recording, and organizing interviewee’s
responses. Interviews, documents, and artifacts were used to gain insight to perceptions and changes in instructional practices.

**Stages of Concern Questionnaire (SoCQ)**

The instrument used in this study was the *Stages of Concern Questionnaire (SoCQ)* which was initially developed and validated in the 1970s to score the seven stages of concern about an innovation (George, Hall, & Stiegelbauer, 2006). The SoCQ is one of three attributes of the *Concerns-Based Adoption Model (CBAM)*. Before the initial publication of the instrument, the SoCQ was tested by a team of researchers at the Research and Development Center for Teacher Education at the University of Texas at Austin for estimates of reliability, internal consistency, and validity through 11 different innovations (George, Hall, & Stiegelbauer, 2006). The SoCQ has been used and tested a numerous of times in educational and non-educational innovations (George, Hall, & Stiegelbauer, 2006). The SoCQ utilized thirty-five items that represented seven stages of concerns the address the intensity levels that individuals feel and perceive involved in the implementation of an innovation or change.

The SoCQ contains 35 items in a Likert scale model that represent participants’ perceptions (Hall, 1977). The Likert scale represent the stages from 0–Irrelevant, 1-2= Not True of Me Now, 3-5=Somewhat True of Me Now, and 6=Very True of Me Now. The SoCQ is a tool with high internal reliability. Table 2 shows the alpha coefficients of internal consistency for each of the seven *Stages of Concern* scales. According to George, Hall, and Stiegelbauer (2006), the coefficients reflect the degree of reliability among items on a scale in terms of overlapping variance computed using a stratified sample of 830 teachers in 1974.
Table 2

Internal Reliability Ranges

<table>
<thead>
<tr>
<th>Stage</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>.64</td>
<td>.78</td>
<td>.83</td>
<td>75</td>
<td>.76</td>
<td>.82</td>
<td>.71</td>
</tr>
</tbody>
</table>

Test-Retest Correlations on the SoCQ

<table>
<thead>
<tr>
<th>Stage</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>.65</td>
<td>.86</td>
<td>.82</td>
<td>.81</td>
<td>.76</td>
<td>.84</td>
<td>.71</td>
</tr>
</tbody>
</table>

(George, Hall, & Stiegelbauer, 2006, p. 20)

ACT Aspire®

Student data for grades three through five will be input into SPSS to determine if there were statistical gains in test scores.

Interview

An interview was a purposeful conversation designed to obtain specific information from people who provided certain insights (Charmez, 2006; Merriam, 1998). In this study, the interview method was employed to explore the case study teachers’ perceptions of the innovation of hybrid schedule, their improved teaching practices for the participation in the professional learning community, and perceptions about improved school culture.

Semi-structured, open-ended and informal interviews were conducted with teachers directly responsible for implementing the innovative hybrid schedule. This allowed the
researcher to gain an in-depth insight into the perspectives and experiences related to the innovative hybrid schedule. Each teacher was formally interviewed in 15 to 30 minute segments in a quiet setting. The interviews were spaced across the semester. Each interview was audio recorded using a digital audio-recorder. The protocol for the interview questions were based on the research study’s questions concerning teacher perceptions about the innovative hybrid schedule, changes in their teaching practices, beliefs about student learning outcomes, the impact of professional learning communities, and the effect the change had on school culture.

Artifacts

Documents have been recognized by researcher as being valuable sources of data and information for qualitative research studies because they provide a source of text and contextual data for analysis (Merriam, 2009; Creswell, 2012). These documents include lesson plans, professional learning community’s agendas, meeting, peer-to-peer observations, and feedback forms. The collection of archival documents was gathered with IRB approval. Scanning provided a digital record of archival data and documents. The documents will be organized chronologically and examined for completeness, accuracy, and relevance for addressing the guiding research question of this mixed methods case study (Creswell, 2012).

Creswell (2012) recognized observations as a valuable source of data. The rationale for using observations is due to the researcher being engaged with the study’s participants. Merriam (2009) equates field-notes, the written account of observations, as valuable as the transcripts from interviews. Yin (2011) agreed that observations recorded the experiences and perspective of participants within the context of the natural setting.
Data Collection Procedures

This mixed methods case study utilized various data collection instruments. The combination of quantitative and qualitative data collection made mixed methods a strong design to utilize (Creswell, 2015). Table 3 shows the specific data collection instrument used to answer each of the research questions. The use of multiple quantitative and qualitative instruments provided the researcher the data sources to demonstrate triangulation of data and strengthen the inquiry (Creswell, 2012, 2015).

Table 3

Data Collection Instruments and Research Questions

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Collection Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What do teachers perceive as factors that facilitated and/or hindered the implementation of the Innovative Hybrid Schedule?</td>
<td>1. <em>Stages of Concern Questionnaire</em> 2. Interviews 3. Artifact- Qualtrics Departmentalized Surveys</td>
</tr>
<tr>
<td>2. As perceived by the teachers, to what extent has the school culture changed as a result of the implementation of the Innovative Hybrid Schedule?</td>
<td>1. <em>AdvancED's®</em> stakeholder feedback diagnostic survey 2. Interviews 3. Artifact- Qualtrics Departmentalized Surveys</td>
</tr>
<tr>
<td>3. Have student learning outcomes changed with the implementation of the innovative hybrid schedule?</td>
<td>1. <em>ACT Aspire®</em> Test Scores 1. Interviews</td>
</tr>
<tr>
<td>4. What are the perceived program outcomes related to the implementation of the Innovative Hybrid Schedule?</td>
<td>2. Artifact- Qualtrics Departmentalized Surveys</td>
</tr>
</tbody>
</table>
Summary

This case study investigated the effectiveness of implementing an innovation to bring about a change in school culture and student learning outcomes. The researcher attempted to deepen the understanding of the relationships among educational change, school culture, student learning outcomes and continuous improvement. The setting of the study was Stella Elementary School which serves kindergarten through fifth grade. Stella Elementary School is located in Dothan, Alabama and is a part of the Dothan City School Board of Education. The participants included teachers who had been a part of the implementation of the innovative hybrid schedule. The participants were active members of the established professional learning community. Multiple data sources were collected including questionnaires, surveys, interviews, documents and artifacts, observations, and student learning outcomes data.

Chapter IV will present the results of the findings of this case study.
CHAPTER 4: RESULTS

Introduction

This mixed methods case study was conducted at an elementary school located in Eagle, Al. Stella Elementary School is a kindergarten through fifth grade elementary school, one of eleven elementary schools in the Eagle City Schools’ System. The school serves approximately 410 students. The student population served is primarily from low socio-economic households and highly transient. Since the beginning of the 2013–2014 school year, first through fifth grades have implemented the Innovative Hybrid Schedule. Student test data, perceptional and process data, as well as school culture indicators were collected and analyzed to determine whether the implementation of the Innovative Hybrid Schedule had a positive impact on student learning outcomes and school culture. The conceptual framework for this study was based on the five attributes of the PLCs identified through the work of Shirley M. Hord (2004) and Michael Fullan’s (2007) Educational Change Theory. Hord’s five attributes were as follows: 1) Shared Values and Vision, 2) Intentional Collective Learning, 3) Supportive and Shared Leadership, 4) Supportive Conditions, and 5) Shared Personal Practice. Fullan’s educational change theory has three phases — Phase I – Initiation; Phase II – Implementation; and Phase III – Institutionalization — that supported creating a context for change for continuous improvement. Stella Elementary School adheres to AdvancEd®’s Standards for Quality Schools for Continuous Improvement so it remained the center of the framework.
According to Fullan (2007) educational change, in this case the adoption of the innovation of the Hybrid Schedule, focused on the initiation and implementation phases within his Educational Change Theory. In order to reach the institutionalization and sustain change, the five attributes of PLCs — shared values and beliefs, supportive and shared leadership, collective group learning, supportive conditions, and shared personal practices — were an integral part of the change and continuous improvement process. The research supported the correlation and connection between the change process and Hord’s five attributes of PLCs for this conceptual framework.

**Purpose of the Study**

The purpose of this study was to determine the degree to which the implementation of the Innovative Hybrid Schedule had on improving instructional practice, student learning outcomes, and school culture. The study focused on teacher perceptions of the elements within the school’s culture that facilitated and hindered the implementation of the Innovative Hybrid Schedule. The degree to which teachers perceived their instructional practices changed, and the outcomes of engaging in the PLC practices. Additionally, the study investigated to what extent the Innovative Hybrid Schedule increased teacher collaboration in professional learning using the five attributes (shared values and beliefs, supportive and shared leadership, collective group learning, supportive conditions, shared personal practices) and affected the change process and culture within the school. Fullan (2007) described educational change as “technically simple and socially complex” (p.84). Fullan’s Educational Change Theory was primarily based upon the premise that organizations can be prepared for a change in practice through providing opportunities for collaboration to collectively create a context for change. Change was initiated when organizations increase their capacity for shared meaning, through the cultivation of
relationships, rather than mandated reform imposed by administrators (Fullan, 2007). Additionally, Fullan (2007) suggested that genuine change, regardless of desire, represents a thoughtful personal and collective experience, which is characterized by ambivalence and hesitation; however, when positive outcomes are actualized because of this change initiative, pride, mastery and personal growth emerge, enabling educational change to occur.

**Research Questions**

The research questions that guided this study were:

1. What do teachers perceive as factors that facilitated and/or hindered the implementation of the Innovative Hybrid Schedule?

2. As perceived by the teachers, to what extent has the school culture changed as a result of the implementation of the Innovative Hybrid Schedule?

3. To what extent have student learning outcomes changed with the implementation of the Innovative Hybrid Schedule?

4. What are the perceived program outcomes related to the implementation of the Innovative Hybrid Schedule?

**Context of Study and Demographics**

**The Community**

The city of Eagle is the county seat of Houston County and has a population of approximately 67,525. Eagle is located in the southeast corner of Alabama. Eagle’s demographics indicated that the city is made up of sixty-seven percent White, thirty percent Black, two percent Hispanic, and one percent other populations. The largest companies in this area are Southeast Alabama Medical Center Hospital with 2500 employees, Eagle and Houston County School Systems that employs 1,973 members, and Southern Nuclear (Farley) Power
Plant with 1,000 employees. Additional large employers were Flower’s Hospital with 1,200 employees and the City of Eagle with over 1,100 employees. The median income was $42,934 dollars and approximately twenty-one percent of the population live below the poverty level.

Eagle has a diverse economy. Agriculture has remained the largest industry for the constituents of Eagle, Alabama, though retail sales and restaurants have experienced a rapid growth in recent years. Although peanut production has remained a mainstay of the agricultural sector, cotton is gaining in importance. These agricultural crops have created a large majority of transient workers.

Eagle is home to the “Yes We Can! Eagle” education movement, which is a community-based organization that worked to improve Eagle’s public schools. Through community engagement, this movement has helped improve schools with a theme of “Better Schools. Better Eagle”, and has received state and national recognition.

The School

Stella Elementary School is located in Eagle, Alabama. During the period of the study, Stella Elementary School served students in kindergarten through fifth grades and had an enrollment of 390 students. The enrollment and class size at Stella Elementary School fluctuated within the year due to the high number of transient students. Of the students enrolled at Stella Elementary School, approximately ninety-five percent received free or reduced price meals. African-American students composed seventy-six percent of the school population, Caucasians represented sixteen percent of the population, and five percent of the population is represented by other nationalities. Stella has twenty classrooms, an enrichment resource room, and three special education resource rooms. The faculty consisted of the following full time faculty members: one principal, one counselor, one media specialist, one physical education teacher, one
speech and language pathologist that was shared with the high school, four kindergarten teachers, four first grade teachers, four second grade teachers, two third grade teachers, three fourth grade teachers, two fifth grade teachers, one instructional coach, one resource specialist, three special education teachers and one full time nurse. Part-time staff members included: a program specialist, a parent involvement specialist, a music teacher, and an ESL teacher. The support staff included a secretary, clerk, one full time custodian, four lunchroom workers, a computer lab teaching assistant, two special education teaching assistants, one PE aide, two behavioral aides, and four tutorial assistants.

Stella Elementary School’s Building Leadership Team (BLT) was considered the decision-making body at the school. The team consisted of a teacher representative from each grade level and special area staff, the principal, the guidance counselor, the media specialist, the program specialist, one paraprofessional, a community representative, and a parent. This committee was a vital component in improving all aspects of the school. The BLT analyzed climate survey and student data to formulate a needs assessment that identified strengths and weaknesses. These are used to determine goals, objective, and strategies to write the Continuous Improvement Plan and Parent Involvement Plan. Students received academic instruction one hundred seventy-four days each school year. The highly-qualified teachers were employed for one hundred eighty-four contract days. Teachers adhered to the state curriculum which was the College and Career Readiness Standards (CCRS) for Alabama in each specified academic subject. Teachers were provided with a minimum of thirty minutes each school day for planning. Staff professional development was provided throughout the school year. Professional Learning activities included participation in content specific professional learning, as well as system-wide, on-site school, state and out-of-state conferences and training sessions.
Stella Elementary School’s focus was on increasing student engagement, high expectations, digital classrooms, equitable learning, supportive learning, progress monitoring, and well-managed learning using the Eleot tool. Professional learning activities were funded through Title I, Title II, and general fund professional development budgets. The Alabama Reading Initiative and AMSTI provided job-embedded professional learning activities on scientifically-based reading research practices.

Parental support at Stella Elementary School was low with less than thirty percent of the parents participating in school functions such as the PTO, Awards Day, Parent-Teacher conferences, Field Day, and volunteer work. In order to increase parental involvement this year Stella’s Building Leadership Team developed the “Stella Service Incentive Program”. This program encouraged parent participation at home and school. Students earned points and awards when their parents participated in the school activities.

Stella Elementary School’s faculty and staff lead by example. The school continued to guide students on the premise of our beliefs that every child regardless of economic background, ethnicity, or gender deserved the opportunity to receive a quality education. Additionally, Stella Elementary School administration, faculty, and staff employed every effort to ensure students are prepared for middle school. All decisions were made to ensure a student-centered focus. Being student focused, ensures that all students have the opportunity to achieve their full potential and prepared to be successful at the next level in their education.

Stella Elementary School’s goals included utilizing authentic assessments of student learning, developing a strong instructional programs, strengthening the reading and math curriculum, cultivating teacher performance through participation in professional learning communities, increasing parental involvement, and improving school climate. A comprehensive
needs assessment was completed at the end of each school year in order to identify strengths and weaknesses in the school's current programs. The AdvancEd®’s Stakeholder Feedback Survey was administered to the faculty to analyze school culture.

As a state requirement, the ACT Aspire® achievement tests were administered. Eagle City School’s students were required to take the ACT Aspire® in third through fifth grade. The Dynamic Indicator of Basic Early Literacy Skills® (DIBELS) was given to students in kindergarten through second grade. Stella’s Building Leadership Team analyzed the test results when they were released from the state department to individual schools. The results of the ACT Aspire® were used to determine if the established goals were achieved.

A school-wide consistent plan was established to ensure that a developmentally appropriate and rigorous curriculum is provided to all learners. This instructional model was focused on delivering standards based content and programs that are implemented are all scientifically research based from AMSTI and ARI guidelines. Students’ needs and learning outcomes were addressed through small and large group instruction. Grades one through five departmentalized classes in order for teachers to specialize in one subject matter. Each grade level worked and planned together as a team and collaborated frequently about students and different strategies implemented for every student’s success. Additionally, each department was allocated vertical planning time for teachers to participate in professional learning communities. These provided a meaningful way for teachers to collaborate and share best instructional practices to foster student learning outcomes.

Stella Elementary School was comprised of approximately 408 students. The student population was highly transient and fluctuated during the school year. Table 4 provides the student make-up for last three years.
<table>
<thead>
<tr>
<th></th>
<th>Black/</th>
<th></th>
<th></th>
<th>Pacific</th>
<th>Multi-Race</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Asian</td>
<td>Indian</td>
<td>American</td>
<td>Islander</td>
<td>Race</td>
<td>White</td>
<td>Hispanic</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SY 2013</td>
<td>6</td>
<td>0</td>
<td>219</td>
<td>1</td>
<td>7</td>
<td>66</td>
<td>19</td>
<td>318</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SY 2014</td>
<td>5</td>
<td>2</td>
<td>198</td>
<td>1</td>
<td>13</td>
<td>68</td>
<td>21</td>
<td>308</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SY 2015</td>
<td>3</td>
<td>0</td>
<td>276</td>
<td>1</td>
<td>18</td>
<td>83</td>
<td>23</td>
<td>404</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 displays the enrollment patterns of Stella Elementary School by grade level and gender.

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten Total</td>
<td>48</td>
<td>63</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>24</td>
<td>34</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>24</td>
<td>29</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Grade Total</td>
<td>62</td>
<td>57</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>41</td>
<td>29</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>28</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(table continues)
Table 5 (continued)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second Grade Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>25</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td><strong>Third Grade Total</strong></td>
<td>70</td>
<td>42</td>
<td>55</td>
</tr>
<tr>
<td>Male</td>
<td>44</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>Female</td>
<td>26</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td><strong>Fourth Grade Total</strong></td>
<td>40</td>
<td>59</td>
<td>56</td>
</tr>
<tr>
<td>Male</td>
<td>22</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>24</td>
<td>21</td>
</tr>
<tr>
<td><strong>Fifth Grade Total</strong></td>
<td>50</td>
<td>40</td>
<td>70</td>
</tr>
<tr>
<td>Male</td>
<td>27</td>
<td>23</td>
<td>40</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>318</td>
<td>308</td>
<td>404</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>183</td>
<td>168</td>
<td>224</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>135</td>
<td>140</td>
<td>180</td>
</tr>
</tbody>
</table>

**Participating Teachers**

Eleven certified teachers were represented in this mixed methods case study. The teachers were selected because of their involvement in the implementation of the Innovative Hybrid Schedule. In addition, each participant took part in the professional learning practices
throughout the entire implementation process. Table 6 represents the teacher demographics at Stella Elementary during the research study.

Table 6
Teacher Demographics

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>No. Years Teaching</th>
<th>Years at Cloverdale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>9</td>
<td>F</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>F</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>26</td>
<td>13</td>
</tr>
</tbody>
</table>
Participant total years of experience ranged from three to thirty. The number of years that the participant group worked in the school district in which Stella Elementary School ranged from three to thirty and the number of years the participant group worked in their current position ranged from two to thirty.

**Timeline**

The initiative to adopt the Innovative Hybrid Schedule in first through fifth grade occurred as a part of the Continuous Improvement process. Survey results at the end of 2012 school year indicated that the school culture needed improvement. At the beginning of the 2012–2013 school year, Stella’s Building Leadership Team conveyed several concerns regarding the *Alabama College and Career Ready Standards (CCRS)*. Many of the concerns stemmed from the amount of preparation and planning that was required with the implementation of the *ACCRS Mathematics Standards*. All collaborative parties were concerned about the looming implementation of the *ACCRS Reading Standards* and how teachers would be able to implement both content standards effectively. One strong indicator for the possible decline in school culture was the fact that teachers were feeling overwhelmed. Thus, discussions ensued about the possibility of restructuring that organization pattern for the 2013–2014 school year using a hybrid schedule. After careful consideration, a noteworthy option of implementing the Innovative Hybrid Schedule that allowed for teachers to become specialists in a content area was solidified through consensus from the Building Leadership Team, teachers, and administration.

Opportunities were provided for teams of teachers to observe at schools that had similar organizational patterns. This observational data was necessary in order to obtain insight and feedback on how other elementary schools implemented a hybrid schedule effectively. Additionally, the BLT desired to understand teacher’s perceptions about the non-traditional
schedule and whether they believed student learning was fostered through the ability to focus in the planning of one content area, provide additional opportunities to engage students in rigorous activities, and increase differentiated instruction into the curriculum experiences.

At the end of the 2013 school year, the faculty decided to implement the Innovative Hybrid Schedule and believed it would be viable option to allow teachers to plan for and master only one subject area of the Alabama College and Career Ready Standards. Teachers believed that they could become a master teacher of that subject area, plan more effectively in one content area. The administration agreed and a scheduling committee was established to develop a schedule based on research and observation data that had been collected from the school visits. Using the scheduling data and observations gathered, Stella Elementary School implemented the new schedule at the beginning of the 2013–2014 school year. Table 7 provides the organization of teacher and content areas taught within each grade level and across the implementation.
Table 7

Participants Involved in the Implementation of the Innovative Hybrid Schedule

<table>
<thead>
<tr>
<th>Grade Level Teachers Pilot Year</th>
<th>Grade Level Teachers Year One</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Grade Teachers – 3 Teachers</td>
<td>First Grade Teachers – 5 Teachers</td>
</tr>
<tr>
<td>Math, Reading, Literacy Skills</td>
<td>Math/Science, Reading/Social Studies,</td>
</tr>
<tr>
<td>1 Self-contained Classroom (All subjects)</td>
<td>1 Self-contained Classroom (All subjects)</td>
</tr>
<tr>
<td>Second Grade Teachers – 3 Teachers</td>
<td>Second Grade Teachers – 3 Teachers</td>
</tr>
<tr>
<td>Math, Reading, Literacy Skills</td>
<td>Math, Reading, Literacy Skills</td>
</tr>
<tr>
<td>Third Grade Teachers – 2 Years</td>
<td>Third Grade Teachers – 3 Teachers</td>
</tr>
<tr>
<td>Math/ Science, ELA/ Social Studies</td>
<td>Math, Reading, Literacy Skills</td>
</tr>
<tr>
<td>Fourth Grade Teachers – 3 Teachers</td>
<td>Fourth Grade Teachers – 3 Teachers</td>
</tr>
<tr>
<td>Math, Reading, Literacy Skills</td>
<td>Math, Reading, Literacy Skills</td>
</tr>
<tr>
<td>Fifth Grade Teachers – 2 Teachers</td>
<td>Fifth Grade Teachers – 3 Teachers</td>
</tr>
<tr>
<td>Math/Science, ELA/Social Studies</td>
<td>Math, Reading, Literacy Skills</td>
</tr>
</tbody>
</table>

**Data Collection Instruments**

This mixed methods case study utilized a variety of data collection instruments. Mixed methods design involves the intentional collection of both quantitative and qualitative data and the combination of the strengths of each to answer research questions (Creswell & Clark, 2007).
Table 8 shows which data collection instruments were specifically used to answer each individual research question. This mixed methods case study utilized various data collection instruments and techniques. Data was collected at the beginning of the year (BOY) and end of the year (EOY) using the SoCQ, AdvancEd®’s Stakeholders Feedback Survey, and ACT Aspire® student test data. Additional data sources were the teacher interviews, as well as documents that provided student voice from an open-ended Qualtrics survey. In order to receive teacher feedback, a Qualtrics departmentalization survey was given to the teachers that focused on their perceived beliefs about the Innovative Hybrid Schedule. All forms of data collected focused on instructional practices, school culture, and student learning outcomes. Alignment of the research question with data sources (Table 8) demonstrated triangulation of the data.

Johnson, Onwuegbuzie, and Turner (2007) added that using mixed methods provided contextual understanding and multi-level perspectives, utilized multiple methods and data, and employed rigorous constructs from both qualitative and quantitative methods. When used in combination, quantitative and qualitative methods complemented each other and allowed for a more complete analysis (Green, Caracelli & Graham, 1989; Tashakkori & Teddlie, 1998).
Table 8

Data Collection and Research Questions

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Collection Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What do teachers perceive as factors that facilitated and/or hindered the implementation of the Innovative Hybrid Schedule?</td>
<td>SoCQ, Interviews, Artifacts – Qualtrics, Departmentalization Surveys</td>
</tr>
<tr>
<td>2. As perceived by the teachers, to what extent has the school culture changed as a result of the implementation of the Innovative Hybrid Schedule?</td>
<td>AdvancEd®’s Stakeholder Feedback Survey, Diagnostic, Interviews, Artifacts – Qualtrics, Departmentalization Surveys</td>
</tr>
<tr>
<td>3. To what extent have student learning outcomes changed with the implementation of the Innovative Hybrid Schedule?</td>
<td>ACT Aspire® Test Results for grades 3–5</td>
</tr>
<tr>
<td>4. What are the perceived program outcomes related to the implementation of the Innovative Hybrid Schedule?</td>
<td>Interviews, Artifacts – Qualtrics, Departmentalization Surveys</td>
</tr>
</tbody>
</table>

AdvancEd®’s Stakeholder Feedback Survey

The AdvancEd®’s Stakeholder Feedback Survey addressed the areas of a school’s Continuous Improvement Standards of Purpose and Direction, Governance and Leadership, Teaching and Assessing Learning, Allocation of Resources, and Continuous Improvement. The
survey was administered at the end of the 2014 and 2015 school years. The survey was sent through the AdvancEd®’s Assist portal using an email link attached for teachers access the survey. The questions included in the survey were categorized into Quality School Standards to Continuous Improvement for schools. The questions for each standard are addressed and can be found in the appendices section.

Teachers responded to each question in each section by choosing their responses from a Likert-type scale. The selection reflected their level of agreement with the statement according to whether they strongly agree, agree, or if they felt neutral, or disagree with the question.

**Stages of Concern Questionnaire (SoCQ)**

The SoCQ was developed through research conducted by Hall and Hord (1987) and the Southwest Educational Development Laboratory (SEDL). The questionnaire served as the corner-stone of the Concerns-based Adoption Model (CBAM). The SoCQ was designed to provide a framework from which to understand the personal side of the change process by asking participants to respond to thirty-five items related to their levels of concern pertaining to new change using a 0-6 scale. The SoCQ was administered at the beginning and the end of the Innovative Hybrid Schedule implementation and included statements determined teacher perceptions of the implementation of the Innovative Hybrid Schedule.

The stages of concern are awareness, information, personal, management, consequence, collaboration, and refocusing. These stages are assigned numbers 0-6. The stages of concern were determined by the teachers selecting and circling numbers on a Likert-type scale ranging from 0-7, with 0 being Irrelevant, 1-2 Not True, 3-5 Somewhat True, 6-7 Very True. Table 9 provides a description of the each of the stages of concern and gives a brief definition of each level of concern.
Table 9
Description of Stages of Concern

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td><strong>Unconcerned</strong>: Little concern about or involvement with the innovation.</td>
</tr>
<tr>
<td>1</td>
<td><strong>Informational</strong>: General awareness of the innovation and interest in learning more detail about it.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Personal</strong>: Uncertain about the demands of the innovation, adequacy to meet those demands, and personal role with the innovation.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Management</strong>: Attention is focused on the processes and tasks of using the innovation and the best use of information and resources</td>
</tr>
<tr>
<td>4</td>
<td><strong>Consequence</strong>: Attention focuses on impact of the innovation on students in immediate sphere of influence.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Collaboration</strong>: Focus is on coordination and cooperation with others regarding use of the innovation.</td>
</tr>
<tr>
<td>6</td>
<td><strong>Refocusing</strong>: Focus is on exploring ways to reap more universal benefits from the innovation, including the possibility of making major changes to it or replacing it with a more powerful alternative.</td>
</tr>
</tbody>
</table>

Each stage of concern included five questions of the thirty-five total questions. Table 10 correlated each questionnaire item with the specific stage of concern with which it is aligned.
Table 10
Questionnaire Items Related to Each Stage of Concern

<table>
<thead>
<tr>
<th>Questionnaire Items</th>
<th>Stages of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>21</td>
<td>15</td>
</tr>
<tr>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>30</td>
<td>35</td>
</tr>
</tbody>
</table>

ACT Aspire®

Student learning data were generated through the administration of the ACT Aspire®. The ACT Aspire® is the accountability test measure mandated by the Alabama State Department of Education. The ACT Aspire® was administered to all third through fifth grade students. The ACT Aspire® data was collected and analyzed from the end of the 2013–2014 and the end of the 2014–2015 school years.

Interviews and Artifacts—Qualtrics Departmentalization Surveys

Structured interviews, including questions pertained to participant demographics, as well as questions related to the research questions were conducted in the Spring of 2014 and 2015 school years. Data collection instruments for this study also included artifacts such as documents in the form of a Qualtrics survey that included responses from teachers and students.
concerning the first year of implementation of the hybrid schedule. Interview data were categorized and coded and analyzed to develop emergent themes.

Interviews were conducted with eleven teachers. The researcher included only the teachers that were involved in the implementation of the hybrid schedule. The interviewee groups were all inclusive of the participant group. First, the interview data were transcribed and categorized into codes using MAXQDA12. MAXQDA12 software program was used to organize the code data collected from the interviews. The emergent themes that were extrapolated from the codes were: Benefits of Changing Classes, Teacher Collaboration through Professional Learning Communities, Improvement in School Culture, and Teachers as Content Specialist. For the purpose of reporting participant interview responses, the teachers were referred to as Teacher 1, Teacher 2, Teacher 3, Teacher 4, Teacher 5, Teacher 6, Teacher 7, Teacher 8, Teacher 9, Teacher 10, and Teacher 11.

Results

Research Question 1: What do teachers perceive as factors that facilitated and/or hindered the implementation of the Innovative Hybrid Schedule?

Stages of concern questionnaire. The SoCQ was designed to provide a framework from which to understand the personal side of the change process by asking participants to respond to thirty-five items related to their levels of concern pertaining to an implementation of new instructional practices. The SoCQ was developed through research conducted by Hall and Hord (1987) and the Southwest Educational Development Laboratory (SEDL) and has served as the cornerstone of the Concern-based Adoption Model (CBAM). According to this model, innovative change in curriculum and teaching practices requires a significant amount of time and support. The model suggests for innovations such as the current research project, teacher change
will take five to seven years to fully implement and embed the change in the school organization (George, Hall, & Stiegelbauer, 2006). Theoretically, in the beginning, the teacher will be more concerned about how the change affects them individually and personally. As times goes by, and the innovation becomes more comfortable, the teacher will begin to explore reaching out to others, supporting the work of others and sharing what they have learned with their colleagues.

In Figure 3 the means for each of the stages of concern were reported. Interpretation suggested teacher were unconcerned about the Innovative Hybrid Schedule as Stage 0 – Unconcerned was relatively the same across time. The researcher found that there was a decrease in the mean score for Stage 1 – Information, Stage 2 – Personal, and Stage 3 – Management. This indicated that overtime the teachers had enough information about the innovation, they were less concerned about how it affected them personally, and they were comfortable managing the innovation. However, Stage 4, Consequence, showed that overtime teachers remained concerned about the impact the Innovative Hybrid Schedule had on their students. Stage 5, Collaboration, indicated teachers wanted to focus on coordination and cooperation with others involved with the Innovative Hybrid Schedule. Lastly, Stage 6 – Refocusing decreased as well overtime.
Figure 3. Means Scores for Each Stage

The SoCQ results for the two administrations indicated that participants were still concerned about how the innovation affects their students concerning the Innovative Hybrid Schedule. Some results of the SoCQ indicated teachers wanted to collaborate and share ideas with other teachers using the Innovative Hybrid Schedule and concerns still existed on how the Innovative Hybrid schedule affected their students. Lastly, teachers became more concerned about exploring the universal benefits and possibly making improvements or changes to the innovation. Percentile means, standard deviations, and results of the Multivariate F-test for two administrations of the seven stages addressed in the SoCQ (Stage 0 – Unconcerned, Stage 1 – Informational, Stage 2 – Personal, Stage 3 – Management, Stage 4 – Consequence, Stage 5 – Collaboration, and Stage 6 – Refocusing) are given in Table 11. Eta square, F value, and p
values were also reported. No statistical significance was reported at any stage when comparing
the two administration periods.

Table 11
Means, Standard Deviations, Eta Square, F value, and p value on the SoCQ

<table>
<thead>
<tr>
<th>Stage</th>
<th>Beginning Mean</th>
<th>Beginning SD</th>
<th>End Mean</th>
<th>End SD</th>
<th>F</th>
<th>Eta Square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 – Informational</td>
<td>4.20</td>
<td>1.36</td>
<td>3.09</td>
<td>1.93</td>
<td>4.310</td>
<td>.235</td>
<td>.057</td>
</tr>
<tr>
<td>Stage 2 – Personal</td>
<td>4.40</td>
<td>1.67</td>
<td>3.31</td>
<td>2.12</td>
<td>3.714</td>
<td>.210</td>
<td>.074</td>
</tr>
<tr>
<td>Stage 3 – Management</td>
<td>3.25</td>
<td>1.78</td>
<td>2.83</td>
<td>1.31</td>
<td>1.008</td>
<td>.067</td>
<td>.332</td>
</tr>
<tr>
<td>Stage 4 – Consequences</td>
<td>3.93</td>
<td>1.18</td>
<td>3.61</td>
<td>1.71</td>
<td>.407</td>
<td>.028</td>
<td>.534</td>
</tr>
<tr>
<td>Stage 5 – Collaboration</td>
<td>4.49</td>
<td>1.43</td>
<td>3.85</td>
<td>1.54</td>
<td>2.028</td>
<td>.127</td>
<td>.176</td>
</tr>
<tr>
<td>Stage 6 – Refocusing</td>
<td>3.49</td>
<td>1.31</td>
<td>2.80</td>
<td>1.48</td>
<td>1.939</td>
<td>.122</td>
<td>.186</td>
</tr>
</tbody>
</table>

In comparing the results from this study to other research studies using the SoCQ similar
results were reported. The SoCQ can be reported in two ways. It can be reported as a whole
group analysis, as in this study, or it can be reported as individual results. In this case, statistical
significance was not reached.

However, it is important to note that Stage 1 – Informational had a large effect size of
.235 and Stage 2 – Personal had a large effect size of .210. Additionally, Stage 5 – Collaboration
had a medium to large effect size of .127 and Stage 6 – Refocusing had a medium to large effect size of .122. This suggested that even though statistical significance was not reached within the timeframe of the study, there was a change in the concerns of teachers that showed a decrease the need for information, how it would affect them personally, and management of the innovation was not as prevalent. This may be contributed to the power size having a small number of participants and with a larger power size possible statistical significance could be reached in these areas.

**Interview**

The researcher discovered during the interview process, three of the four overarching themes of benefits of changing classes, teachers as content specialists and teacher collaboration through PLCs and vertical planning were facilitating factors for the implementation of the Innovative Hybrid Schedule.

Building educator capacity for change, innovation, and successful institutionalization requires a significant amount of professional learning. Professional learning and collaborative cultures were the keys to changing practice and ultimately affected student learning and supported the sustainability of implemented innovations overtime (Andrews & Crowther, 2006; Booth & Rowell, 2007; Louis, 2007). Fullan and Hord (2015) suggested that professional learning that increased educator effectiveness and sustained support for implementation was required for long-term change.

Teacher collaboration was a resounding point that Stella teachers found as facilitating factor and provided the key to successful implementation of the Innovative Hybrid Schedule. As Teacher 3 established:
I think what mostly helped the implementation process is the vertical planning where we all got together and we were able to look at our standards and look at the amount of time we had and look at the curriculum we had, even though we've been through two different curriculums, it was still beneficial for me to look with other people to see, okay, this is how this is going, and just to change where needed and give and take suggestions from each person.

Teacher 1 pointed out:

The main thing is we can plan with other teachers. We can bounce ideas off each other to help differentiate for our students. We're also able to kind of, in small group settings, group some of our lower kids, and then our more gifted kids together. That way we can really enhance the lesson, or slow down the lesson for those students.

The interviews established that teachers believed allowing students to change classes was a facilitating factor in the process of implementing the change at Stella. Teacher 9 stated:

The students rotate to different classes throughout the day instead of staying with their same teacher all day long.

Teacher 5 elaborated on this benefit:

It is very innovative, obviously. I think the schedule itself provides opportunity for the students to be able to have movement. It’s different than most schools in our area, which provides I think, a learning opportunity that is unique to Cloverdale and to our students that we have.

Teacher 10 agreed:

I think it's a schedule that functions systematically, we go about our system and we know our schedule times and we rotate and it works effectively for us. Being in first grade, it
really helps out because our kids are able to move around a lot and it helps them being able to focus on what they're doing in the classroom.

Teacher 1 provided this input:

We change classes with 45 minute blocks, depending on hall breaks and small breaks. Then, cover the other subject areas later in the afternoons. I thoroughly enjoy changing classes. I believe that the students strongly benefit from it.

Eidietis and Jewkes (2011) examined the impact of teacher preparedness when focused on a particular topic. They discovered that teachers were going to spend less time teaching a subject they were not prepared to teach. Additionally, Eidietis and Jewkes used statistics to analyze teachers taught subjects in which they were most knowledgeable and prepared. Departmentalized teachers experience repetition with fewer subject areas than self-contained teachers, potentially giving them more practice and opportunities for reflection through repeated lessons. Schools using teachers as content specialists in team-teaching settings reported that teachers had more time to plan effective instruction and to focus their professional development efforts to concentrate on improving delivery of the content (Andrews, 2006; Becker, 1987; Gerretson, et al., 2008; Page, 2009)

Participants also reported that focusing on a few subjects and becoming a teacher content specialist was overwhelming key factor for implementing the Innovative Hybrid Schedule. The participants – Teacher 6, Teacher 7, Teacher 8, and Teacher 9 – expressed that they can focus deeply on the one or two subjects they teach and master the content and skills needed to teach their subject areas. Teacher 2 explained the initial facilitating factors in her statement:

This process happened through our building leadership team, they were looking at how we were fixing to implement common core standards and they needed a way for each
teacher to be able to focus in on standards that they were going to be able to teach and teachers were stressed out trying to figure out how they were going to learn to implement all these standards at one time. They come up with a plan to have this hybrid schedule so that they could implement a new plan where the teachers could really focus in on each part of the standards.

Teacher 8 stated:

We can provide individualized instruction in a content area, characteristic to a middle or high school setting, but more hands-on, small group, group work, time for peers to interact. Certainly for myself as the educator, a lot of room to really perfect the area that I’m instructing. Teachers are being better prepared. Instead of covering so many subjects and being well prepared or not as prepared and all of those subjects. I think it allows for the child to get the best instruction and because it is a tight schedule and you do have to make the best use of your time.

Teacher 4 indicated:

Teachers are able to concentrate on their areas of strength, for instance, mine being math. I can focus on more in-depth studies of the math curriculum and I’m not spread thin over reading, math, and all of the other content areas. Because I feel like I’m a better math teacher now and I can focus on the areas of strength now.

Teacher 1 stated:

I believe that it’s very effective for all students and teachers. Like I said earlier, we are able to focus on our sole curriculum or sole strengths and building on that we can find the gaps and scaffold instruction within that particular content area.

Teacher 6 discussed:
Teachers are focused on depending on how many units they have in their grade level, either with one subject that they’re focused on like myself, I teach math. Or at the most depending on how the units are split up, some of the teachers teach maybe science, social studies and language arts. Maybe about, maximum of about three subjects depending on how many units are within the grade level. I think both from a teacher and student perspective it’s been very effective, I know personally, ever so often, at least once a week, but several times more I think, how in the world did I ever handle teaching all the subjects. I’m sure I did an okay job at dividing my time up between all the subjects but, I don’t think that you can do just an okay job as teachers. I think I’ve done, I feel a lot more confident about focusing on one subject and therefore I feel like my students are benefiting from that.

Teacher 7 concurred:

Teaching specific content areas, I believe really allows a lot of confidence for the teachers, the instructors, for perfecting their curriculum and perfecting the standards and understanding exactly what their content area is. I’m a proponent of it, by all means. I do think about what would it be like to go back, and I don’t know if I could wrap my head around that.

In particular, to this key point, the teachers felt that becoming a teacher content specialist allowed them to improve on planning for instruction and instructional practices. Several interview participants noted this:

Teacher 8 stated:
Therefore, just teaching those few subjects and being very prepared and, I guess, being a master of what you are teaching and being able to focus on that, which is going to have an effect on what is passed onto the kids, the instruction that is passed onto your students.

Teacher 5 explained:

I feel like I know my students better. Even though I have more students that I see throughout the day, I feel like I can know exactly where they are in math instead of having a broad general idea of where they are as a student as a whole. Well, obviously when you don’t have to spread yourself so thin over all the different content areas. And you really can hone in on your skills and instead of being a jack of all trades you can become a master of one or two. That’s kind of what I feel like I’ve been able to do. I think strengthen my knowledge, especially with the implementation of our new program this year, it has caused me to study a little bit more and to have to work with my partner more and to really focus and study ahead of time, so I can be ready to teach the content especially with the new program we have this year because it’s different.

Teacher 2 stated:

I think that hybrid schedule has helped enhance teacher planning because I’m able to differentiate instruction just in reading because that’s what I teach. I can spend more time looking for ways to help students one on one. I don’t have to worry about planning for every subject within the classroom, I can really focus in on just the subject that I teach. I can find new and innovative ways to help those students in that area. Additionally, the hybrid schedule has helped with strengthening my knowledge and skills because I’m focusing all of my time of just that one subject every, the language arts part
of it. I can attend training's that just pertain to my content are and I can really focus on what I’m working on at school and not have to worry about everything as a whole.

During the interview process, several hindrances were addressed by teachers. One hindrance concerned changing classes in the lower grades was the lack of teacher-student relationships. The limited number of hindrances noted in the interviews may not have been found due to the fact that they were in the second year of implementation and teachers were more satisfied. This was evident in the following Teacher 9 and Teacher 10 responses because they believed

Sometimes I’ve seen with the changing of class in the lower grades, more movement seems to be not good for them because they do not have one teacher for building a strong relationship with them. They need the one teacher connection.

I think with the regular schedule I had more time to really get to know my children, that core group, that 18 or 19. I got to know more about them on a personal level.

Another participant reported that discipline issues were a concern of Teacher 10 in the following statements:

Probably a con would be just the time issue of going from class to class, sometimes you get some discipline issues walking from class to class. Overall, I’ve learned to enjoy it.

Two of the following facilitating factors — the benefits of changing classes and teachers as content specialists — emerged through the administration of the Qualtrics survey. The data revealed that the benefit of changing classes was shown in that 90% of the teachers believed that they saw some to an extreme amount of improvement in students’ attention span. In question 12 from the Qualtrics survey, 86% of the teachers believed that there was no change to a much stronger affect in teacher-student relationships due to the Innovative Hybrid Schedule.
Regarding teacher as content specialist, Questions 3, 5, and 11 reflect the positive effects of the hybrid schedule. Question 3 illustrated that 80% of the teachers believed that the hybrid schedule improved the quality of lesson, specifically planning and implementation, in the classroom. Question 5 demonstrated that 86% of teachers concurred that the hybrid schedule made the most effective use of instructional time. Finally, question 11 illustrated that 79% of teachers felt that departmentalizing improved their knowledge and skills of the subject matter they taught.

2. What percent of students’ attention improved in class with the departmentalized schedule?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None</td>
<td>2</td>
<td>14%</td>
</tr>
<tr>
<td>2</td>
<td>Some</td>
<td>2</td>
<td>14%</td>
</tr>
<tr>
<td>3</td>
<td>Quite a Bit</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td>4</td>
<td>An Extreme Amount</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td>5</td>
<td>All</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
<td>100%</td>
</tr>
</tbody>
</table>
12. To what degree do you believe that changing classes has affected student-teacher relationships?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Much Weaker</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>Weaker</td>
<td>2</td>
<td>14%</td>
</tr>
<tr>
<td>3</td>
<td>No Change</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>4</td>
<td>Stronger</td>
<td>6</td>
<td>43%</td>
</tr>
<tr>
<td>5</td>
<td>Much Stronger</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
<td>100%</td>
</tr>
</tbody>
</table>

3. To what extent do you agree or disagree with this statement: “Our departmentalized schedule has improved the quality of lessons I plan and deliver in the classroom.”

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>5</td>
<td>Strongly Agree</td>
<td>10</td>
<td>67%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>

5. To what extent do you agree or disagree that the departmentalized schedule is making the most effective use of instructional time?
11. To what degree do you feel that departmentalizing has improved your knowledge and skills of the subject matter you teach?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>7</td>
<td>47%</td>
</tr>
<tr>
<td>5</td>
<td>Strongly Agree</td>
<td>4</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>

Research Question 2: As perceived by the teachers, to what extent has the school culture changed as a result of the implementation of the Innovative Hybrid Schedule?

The AdvancEd®’s Stakeholder Feedback Survey teacher percentages to the question responses for each section on the survey were used to assist in answering the second research questions. Additionally, the researcher used interviews as an additional data source for the second research question.
The AdvancEd®’s Stakeholder Feedback survey was administered to the teachers in the Spring of 2014, the pilot year of the Innovative Hybrid Schedule and in the Spring of 2015, after the implementation of the innovation. The data collected from the AdvancEd®’s Stakeholder Feedback Survey in 2014 served as baseline data in determining the initial level of school culture at the beginning of the implementation of the Innovative Hybrid Schedule. The Spring 2015 administration of the survey indicated that all elements pertaining to school culture at the end of the second year of implementation had significantly improved.

As seen in Table 12, collective participant responses from Spring 2014, baseline data, and the second administration of the survey in Spring 2015, indicated a statistically significant change occurred in all areas. Individual scores were not available so repeated measures was completed on scaled means. Means for each of the five standards: Purpose and Direction, Governance and Leadership, Teaching and Assessing for Learning, Resources and Support Systems, and Using Results for Continuous Improvement are reported in Table 12.
Table 12

Means, Standard Deviations and $n$ on the AdvancEd®’s Stakeholder Feedback Survey during the Implementation of the Innovative Hybrid Schedule

<table>
<thead>
<tr>
<th>Quality Schools Section</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose/Direction</td>
<td>5</td>
<td>4.1960</td>
<td>.14707</td>
</tr>
<tr>
<td>Governance/Leadership</td>
<td>10</td>
<td>4.1590</td>
<td>.13577</td>
</tr>
<tr>
<td>Teaching/Assessing</td>
<td>20</td>
<td>4.1085</td>
<td>.12840</td>
</tr>
<tr>
<td>Resources/Support</td>
<td>11</td>
<td>4.1100</td>
<td>.19147</td>
</tr>
<tr>
<td>Improvement</td>
<td>7</td>
<td>4.2229</td>
<td>.08826</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>4.1417</td>
<td>.14384</td>
</tr>
<tr>
<td>Purpose/Direction</td>
<td>5</td>
<td>4.2260</td>
<td>.13831</td>
</tr>
<tr>
<td>Governance/Leadership</td>
<td>10</td>
<td>4.3570</td>
<td>.16378</td>
</tr>
<tr>
<td>Teaching/Assessing</td>
<td>20</td>
<td>4.2155</td>
<td>.14489</td>
</tr>
<tr>
<td>Resources/Support</td>
<td>11</td>
<td>4.3573</td>
<td>.13727</td>
</tr>
<tr>
<td>Improvement</td>
<td>7</td>
<td>4.3257</td>
<td>.09744</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>4.2872</td>
<td>.15171</td>
</tr>
</tbody>
</table>

Means, standard deviations and results of the Spring 2014 and Spring 2015 administration of the AdvancEd®’s Stakeholders Feedback Survey were reported for each of the
five standards addressed in the AdvancEd®’s Stakeholder Feedback Survey. These were reported in Table 13 as Purpose and Direction, Governance and Leadership, Teaching and Assessing for Learning, Resources and Support Systems, and Using Results for Continuous Improvement. The correlations, Eta Square between the Spring 2014 and Spring 2015 of the AdvancEd®’s Stakeholder Feedback Survey ranged from .382 to .183. This was interpreted as a large effect size. In order to assess whether or not school culture and climate changed during the implementation of the Innovative Hybrid Schedule the researcher completed a two level within subjects Analysis of Variance (ANOVA). The five standards’ average resulted in a statistically significant change, F(1,4) = 29.718, p <.001 with the mean scores for the Spring 2014 lower than Spring 2015 for all five sections identifying school culture and climate indicators.

Table 13
Means, Standard Deviations, Eta Square, and p values for Purpose and Direction, Governance and Leadership, Teaching and Assessing for Learning, Resources and Support Systems, and Using Results for Continuous Improvement addressed by AdvancEd®’s Stakeholder Feedback Survey

<table>
<thead>
<tr>
<th>AdvancEd®’s Stakeholder Feedback Survey</th>
<th>Spring 2014</th>
<th></th>
<th>Spring 2015</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>F</td>
<td>Eta Square</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td>4.1417</td>
<td>.14384</td>
<td>4.2872</td>
<td>.15171</td>
<td>29.718</td>
<td>.382</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

145
In interpreting the AdvancEd®’s Stakeholder Feedback Survey in relation to Research Question 2, the Innovative Hybrid Schedule promoted a positive school culture. Additionally, the effect size was large, partial eta\(^2\) = .382. This could indicate the possibility that the school culture was significantly improving in a positive direction and the school culture was perceived by teachers in a positive manner after the implementation of the Innovative Hybrid Schedule.

**School culture.** The process of data triangulation revealed the emergent theme of improvement in school culture that was identified in the interview process supported the quantitative findings that indicated school culture is moving in a positive direction and was positively impacted by the implementation of the Innovative Hybrid Schedule. One of the challenges of today’s school administrators is to design a systemic organizational framework which can transform their school’s traditional hierarchal infrastructures to one of ongoing collective inquiry that produces a spiral of continuous improvement thereby supporting a self-sustaining culture of change (DuFour & Eaker, 2004; Fullan, 1993; Marzano, 2003). When questioned during the interview process Teacher 7 stated:

> It has helped certainly by being able to connect with colleagues on specific things, because we're so individualized as teachers that we’re focused on our content area, so it’s been actually very helpful, very beneficial, to discuss what works, what doesn’t work, sharing information, and sharing strategies with other teachers. I’ve noticed that significantly, it’s not just grade level across the school, which is good, to see what’s working for first grade, may work for fifth grade, just changing content and material. It’s nice to collaborate.

Teacher 9 shared:
I think it’s created a positive school culture. I feel like teachers are competent in the area that they’re teaching, especially the math teachers.

Teacher 6 supported the findings:

It has definitely had an overwhelming positive effect, we can definitely spend time focusing on becoming experts on our subject matter and not have to be so fragmented. I also think it’s been positive in morale, which is kind of dealing with children, we’re not stuck in the same room with the same behavior problems, the same children all day. As soon as, you know, within our time period to teach it’s time to get a new bunch of kids in our room and I think that’s been positive for both students and teachers that it worked like that.

**Collaboration.** Through the interview process, the researcher also discovered that a second emergent theme of collaboration among teachers promoted a positive change in school culture. Additionally, the effects of collaboration improved school and teacher morale because the organizational structure promotes professional learning in which the teachers share instructional practices. Undeniably, school culture is attributed to school success (Brown, 2004; Leithwood et al., 2004; Marzano, 2005; Waters, 2007). Teacher 1 who was an active participant in the implementation process at Stella Elementary School explained:

I think it’s had a great effect on school morale and teachers, because we are encouraged to work together. We have to collaborate with each other for our students, and for our classrooms to be effective, and to run effectively. I think that teachers enjoy working together, and not being so isolated in their own classrooms.

Teacher 2 supported this finding:
I think the morale at the school is excellent since we started hybrid schedule, you have teachers that are able to be specialized in what they love teaching. Coming from a third grade classroom where I had to teach every subject, you know there were some subjects I struggled in teaching because it was a struggle for me in school and being able to teach some subjects that I really love and know that I can help students learn in. That’s beneficial to me and I can invest in that and really look forward to coming to work every day and the teachers love working together to finding new ways to solving the problems that we see.

Understanding of the school’s culture is critical in identifying how it will react to implementing an innovation. Educational research provided examples of the connections of successful schools and the influence of culture on its success. Fullan and Hord (2015) suggested this stating that “professional learning that is embedded in changing culture, has sustainability built-in” (p. 20).

The researcher utilized a Qualtrics survey at the end of the first year of implementation of the Innovative Hybrid Schedule and several items supported a perceived change in the school culture and learning environment. Questions 1, 5, 7, and 13 supported how the hybrid schedule improved the learning environment, teacher morale, teacher satisfaction, and teacher workload. In question 1, 73% of teachers found that the hybrid schedule improved the school’s learning environment. Question 5 showed that 80% of teachers felt that the hybrid schedule improved morale. Question 7 indicated that 94% of teachers were satisfied to very satisfied with the hybrid schedule. Finally, question 13 revealed that 100% of teachers agreed that the hybrid schedule improved their workload.
1. To what extent do you agree or disagree that departmentalization has made an improvement on the school’s learning environment?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>5</td>
<td>Strongly Agree</td>
<td>8</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>

5. To what extent do you agree or disagree that departmentalization has improved teacher morale?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>4</td>
<td>27%</td>
</tr>
<tr>
<td>5</td>
<td>Strongly Agree</td>
<td>8</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>
7. To what extent do you agree or disagree with the overall level of satisfaction regarding the departmentalized schedule?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very Dissatisfied</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Dissatisfied</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>Somewhat Dissatisfied</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Somewhat Satisfied</td>
<td>4</td>
<td>27%</td>
</tr>
<tr>
<td>5</td>
<td>Satisfied</td>
<td>4</td>
<td>27%</td>
</tr>
<tr>
<td>6</td>
<td>Very Satisfied</td>
<td>6</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>

13. To what degree has departmentalizing improved your work load?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>Little</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td>3</td>
<td>Some</td>
<td>3</td>
<td>21%</td>
</tr>
<tr>
<td>4</td>
<td>A Lot</td>
<td>6</td>
<td>43%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
<td>100%</td>
</tr>
</tbody>
</table>

Building positive relationships influenced change within an organization. Stoll (2009) stated that capacity building through the implementation process was a result of the development of relationships and trust. It was imperative to provide opportunities for teachers that connected them together and strengthened their skills in order to build that capacity for change. Many researchers believed that professional learning communities fostered efforts towards collegial
involvement and development of collaborative cultures (DuFour, Eaker, & DuFour, 2005; Overall, school culture is complex and important in school life (Stoll, 1998).

**Research Question 3: To what extent have student learning outcomes changed with the implementation of the Innovative Hybrid Schedule?**

Student learning outcomes were required to be measured each Spring in Alabama using the *ACT Aspire®* standardized tests. The Stella Elementary school district used the *ACT Aspire®* to monitor school growth and improvement areas. One of the main reasons that Stella Elementary School selected to implement the Innovative Hybrid Schedule was to address the need to improve student learning outcomes. The *ACT Aspire®* data was examined using only students at Stella Elementary School during the implementation of the Innovative Hybrid Schedule to answer Research Question 3. There were 2 data sets examined to answer the third research question.

3a Stella Elementary 3rd – 4th and 4th – 5th grade students ACT Aspire® Mathematics 2014/2015

3b Stella Elementary 3rd – 4th and 4th – 5th grade students ACT Aspire® Reading 2014/2015

Table 14 shows that both data sets for reading and math indicated that there was a significant positive improvement in student learning outcomes.
Table 14
Level of Significance Comparison ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Mathematics</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd to 4th</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4th to 5th</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

After implementation of the Innovative Hybrid Schedule for one year there was a statistically significant positive change the four tested data sets. Table 15 provides the descriptive statistics for the ACT Aspire® Mathematics number tested, mean for each group and the standard deviations. The table shows the 2014 Mathematics 3rd – 4th grade students and 4th – 5th grade students. The total represented the combined grades.

Table 15
Means, Standard Deviations, and Number of Students Tested on the ACT Aspire® Mathematics

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 Math</td>
<td>3 to 4</td>
<td>410.67</td>
<td>3.508</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>4 to 5</td>
<td>413.17</td>
<td>3.238</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>412.19</td>
<td>3.541</td>
<td>69</td>
</tr>
<tr>
<td>2015 Math</td>
<td>3 to 4</td>
<td>414.30</td>
<td>2.584</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>4 to 5</td>
<td>414.62</td>
<td>3.443</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>414.49</td>
<td>3.118</td>
<td>69</td>
</tr>
</tbody>
</table>
On the overall *ACT Aspire*® Mathematics test data, Stella Elementary School tested \( n = 69 \) students in grades one through five. The mathematics data points included *ACT Aspire*® Spring 2014 Mathematics and 2015 Spring Mathematics for 3\(^{rd} – 4\(^{th}\) grade and 4\(^{th} – 5\(^{th}\) grade students. The data indicated statistical significance was reached in both groups. The overall *ACT Aspire*® data set indicated a large effect size of .346. This indicated that student scores on the *ACT Aspire*® test and the Innovative Hybrid Schedule were strongly related. Table 16 provides the means, standard deviations, degrees of freedom, Eta square, and p values for the *ACT Aspire*® Mathematics Test.

### Table 16

Means, Standard Deviations, Degrees of Freedom, Eta Square, and p Values for the ACT Aspire® Mathematics Test

<table>
<thead>
<tr>
<th>ACT Aspire® Mathematics Student Test Scores</th>
<th>Spring 2014</th>
<th>Spring 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>412.19</td>
<td>3.541</td>
</tr>
</tbody>
</table>

Stella Elementary School tested \( n = 69, 3^{rd} – 4^{th} \) and \( 4^{th} – 5^{th} \) grade students on the *ACT Aspire*® Reading (data set 3b). The 2014 Spring administration of the *ACT Aspire*® were the baseline scores. Only the students that completed both testing sessions at Stella Elementary School were used in the data sets. The data revealed that statistical significance was reached in the *ACT Aspire*® Reading test scores. Table 17 provides the descriptive statistics for *ACT Aspire*® Reading test data.
Table 17

Means, Standard Deviations, and Number of Students Tested on the ACT Aspire® Reading Test

<table>
<thead>
<tr>
<th>Group</th>
<th>2014 Reading</th>
<th></th>
<th>2015 Reading</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 to 4</td>
<td>410.04</td>
<td>4.081</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>4 to 5</td>
<td>412.07</td>
<td>4.692</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>411.28</td>
<td>4.544</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>4 to 5</td>
<td>413.52</td>
<td>4.336</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>4 to 5</td>
<td>414.38</td>
<td>4.690</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>414.04</td>
<td>4.542</td>
<td>69</td>
</tr>
</tbody>
</table>

Stella Elementary School tested n = 69 students in 3rd through 5th grade on the ACT Aspire® reading test (3b data set). The data points represented are the ACT Aspire® 2014 Spring and 2015 Spring, Reading test scores. The data indicated statistical significance was reached. There was a large effect size eta = .407 indicated a strong relationship between the implementation of the Innovative Hybrid Schedule. Table 18 provided the means, standard deviations, degrees of freedom, Eta square, and p values for the ACT Aspire® Reading Test.

Table 18

Means, Standard Deviations, Eta Square, and p Values for the ACT Aspire® Reading Test

<table>
<thead>
<tr>
<th>ACT Aspire® Reading Student Test Scores</th>
<th>Spring 2014</th>
<th>Spring 2015</th>
<th>F</th>
<th>Eta Square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>411.26</td>
<td>4.544</td>
<td>414.04</td>
<td>.4.542</td>
<td>45.946</td>
</tr>
</tbody>
</table>
Based upon the statistical analysis, each data set showed statistical significance. The overall data for mathematics and reading showed that statistical significance was reached after the implementation of the Innovative Hybrid Schedule.

**Research Question 4: What are the perceived program outcomes related to the implementation of the Innovative Hybrid Schedule?**

When determining the perceived outcomes of the Innovative Hybrid Schedule, the researcher utilized the responses that were collected during the faculty interviews and artifact data from the Qualtric’s teacher and student survey responses. The researcher used interview data to identify the perceived outcomes of the implementation of the Innovative Hybrid Schedule. Participant interview responses and emergent themes provided the researcher with the identification of the perceived outcomes of the Innovative Hybrid Schedule. These outcomes identified in the interviews were: Benefits of Changing Classes, Teacher Collaboration, Improvement in School Culture, and Teachers as Content Specialist.

**Teachers as content specialists.** Overwhelmingly, several participants stated that the Innovative Hybrid Schedule has helped them become content specialist. Teacher 1 stated:

> I am able to focus just on 1 to 3 subject areas instead of all 6 or 7. I’ve been able to do deeper research and being able to focus on the turn-around training that gives different information to that person content they are teaching. I am actually able to apply what I've learned in that content area to build on the web technology and things like that. It allows me more time to focus on the new curriculum and figure out where the gaps are and to pull other resources where needed.
Teacher 2 explained:

I have time to really see how to plan. I’m not planning tutorial for 6 different things that can go into in-depth planning for one major area. I am the one responsible for the math so if I’ve got to understand my content to deliver to all the kids. I’ve looked more at the programs in-depth.

Teacher 8 agreed:

Therefore, just teaching those few subjects and being very prepared and, I guess, being a master of what you are teaching and being able to focus on that, which is going to have an effect on what is passed onto the kids, the instruction that is passed onto your students. With using the hybrid has helped time. Time. It’s given me more time to focus. When I’m doing my lesson planning, which I usually do my lesson planning at home so I can have time to sit and think about what I'm doing, I’m not pulling out this manual and that manual and this manual and saying where am I going to put this in and put that in. I know I have a more concise, compact schedule, and I know exactly what I’m putting into that content. I’m not trying to fit 5 or 6 subjects into that schedule for this year.

Teacher 7 supported:

It’s helped significantly. Especially with focusing on standards-based teaching, which I’m a huge proponent of, it really allows you room to really teach to the high, scaffold to the low, but also to go above and beyond. Well, it’s helpful to have that time set aside to really bridge that communication. For me, we’re busy and don’t stop until we’re told we have to stop, so it’s nice to have that time to hear, to meet, to talk, what works, what doesn’t work, even when from grade level to grade level the curriculum is so different.
Yet as far as approaches for things that we can generalize, it’s really been helpful to have that collaboration time.

**Teacher collaboration.** Teachers expressed that the innovation allowed them to form collaborative teams through opportunities to vertically plan and participate in professional learning. Teacher 1 addressed this in her interview:

Definitely, because I think, we do that planning it’s more focused on, right now we’re focused on what else do we need to get in before testing. But beyond that I know when I meet with third grade and fifth grade math teachers, we kind of are a sounding board for each other but we also are like, it's like a morale booster to say.

But I think vertical planning and participating in PLCs have definitely helped because before all I was doing with my mentor teacher when I first came here was just listening to how she taught and just saying, “okay, I’ve got to be on page 592 tomorrow because you’re on page 592. Okay I’ll do it.” I was just like teaching for the sake of being on the same page as someone else, literally you know. Now it’s like, okay, how are we going to fit in these 12 fraction standards within a month. Okay, and have them really understand it. We’re more batting ideas off each other to help with student learning than just saying, “okay, I’ve got to get through chapter 5.” I definitely love that, I wish, I mean I’m a school nerd, so I can sit in anyone’s classroom and sit there with a notebook all day long and take notes about how I need to improve my life. Because I like all those suggestions, but I loved when Mrs. Kent was in fifth grade, I got to go and see what my previous fourth graders were learning and then I could go back to my room and say, “I know why I’m teaching this, I just found Mrs. Kent’s fifth grade class and they’re
learning about graphing these points. We’re only learning about finding the points, they’re doing something totally different.”

Teacher 5 stated:

Obviously, when you can learn from other colleagues, everybody has really good ideas so you’re able to have that comradery and share ideas and see what maybe they implemented that you’d like to try and be able to share those experiences with each other.

Teacher 1 explained:

I think professional learning communities have made me stronger. There’s always something new to learn. I’m never going to be at a point where I’m perfect at everything I teach. Having other people that have been doing this a lot longer than I have, and knows what works, and have new ideas for our always changing students, is a great way to become a better teacher, each and every year. I definitely think the vertical planning has tremendously helped, because we can see what gaps we have, that we would have not seen otherwise, or known of.

**Benefits of changing classes.** Participant interview responses related to program outcomes believed that student learning outcome were a benefit of changing classes. Teachers stated that the Innovative Hybrid Schedule has had a positive impact on student engagement and learning outcomes.

Teacher 5 expressed:

I think the students are more engaged, since they can rotate around and not sit in the same classroom and not be in front of the same teacher. I mean like it or not, not all kids like that one teacher, you know and if they get a chance to move from that teacher it does
help. I think the students are more engaged because they know that block time. They pretty much know this is about how long we have and if I can stay focused for just this amount of time, soon I’ll get to change what I’m doing.

Teacher 10 deciphered:
I think the students enjoy rotating and having the two teachers. Sometimes even the three teachers, what we did last year, I think they enjoy getting to know the different teachers.

Teacher 7 discovered:
Student engagement I think has been a huge bonus, a huge plus, for me, for being the EL teacher, I’ve been able to really set the stage, and then the students are able to take that information and those expectations and turn it around to each other. It makes it more fun and it eliminates negative behavior. I think that too, along with just switching and having different teachers for different core areas has really, in my opinion, eliminated, I don’t want to say behaviors in a negative way, but burnout and changing classes and timing is really perfected pretty perfectly as far as student engagement.

Additionally, the researcher used artifact data from a Qualtric’s survey taken by both the teachers and students at the end of the first pilot year to triangulate and support the program outcomes. The survey contained the following questions and results concerning program benefits and outcomes.

The survey was administered to teachers at the end of the first pilot year revealed data concerning perceived outcomes related to the Innovative Hybrid Schedule. Each question supported the emergent themes throughout the research study. Question:
2. What percent of students’ attention improved in class with the departmentalized schedule?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>5</td>
<td>Strongly Agree</td>
<td>10</td>
<td>67%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>

4. What percent of students have responded to departmentalization with improved engagement in the classroom?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>None</td>
<td>2</td>
<td>14%</td>
</tr>
<tr>
<td>2</td>
<td>Some</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>Quite a Bit</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td>4</td>
<td>An Extreme Amount</td>
<td>5</td>
<td>36%</td>
</tr>
<tr>
<td>5</td>
<td>All</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
<td>100%</td>
</tr>
</tbody>
</table>
8. To what extent do you agree or disagree that the departmentalized schedule allows educators to provide more individualized instruction?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Much Lower</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>2</td>
<td>Slightly Lower</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>3</td>
<td>About the Same</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>4</td>
<td>Higher</td>
<td>7</td>
<td>47%</td>
</tr>
<tr>
<td>5</td>
<td>Much Higher</td>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>

9. To what extent do you feel that departmentalization has impacted student learning outcomes?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Much Lower</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>Slightly Lower</td>
<td>1</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>About the Same</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>4</td>
<td>Higher</td>
<td>10</td>
<td>67%</td>
</tr>
<tr>
<td>5</td>
<td>Much Higher</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>
14. To what extent do you agree or disagree that departmentalizing is meeting the needs of our school?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>Neither Agree nor Disagree</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>6</td>
<td>40%</td>
</tr>
<tr>
<td>5</td>
<td>Strongly Agree</td>
<td>7</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>

11. Do you like changing classes?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>147</td>
<td>69%</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>67</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>214</td>
<td>100%</td>
</tr>
</tbody>
</table>

12. Do you like having more than one teacher?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>158</td>
<td>76%</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>51</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>209</td>
<td>100%</td>
</tr>
</tbody>
</table>
13. Do you feel like you changing classes has helped you learn more this year?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>176</td>
<td>84%</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>33</td>
<td>16%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>209</td>
<td>100%</td>
</tr>
</tbody>
</table>

14. Do you feel like school more since we started changing classes?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>155</td>
<td>74%</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>54</td>
<td>26%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>209</td>
<td>100%</td>
</tr>
</tbody>
</table>

15. Do you want to continue to change classes next year?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>141</td>
<td>70%</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>61</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>202</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Conclusion**

Results of the data analysis reveal a statistically significant correlation between the Innovative Hybrid Schedule and improvement in student learning outcomes based on the ACT Aspire® test scores. Statistically significant gains were shown in both data sets of 3rd to 4th grade reading and math and 4th to 5th reading and math scores. Additionally, statistically significant gains were shown in the AdvancEd®’s Stakeholder Feedback Survey results with each of the
following Quality School Standards: Purpose and Direction, Governance and Leadership, Teaching and Assessing for Learning, Resources and Support Systems, and Using Results for Continuous Improvement. Teacher interviews supported the findings from the quantitative data.

Four consistent themes emerged from the interviews to validate the quantitative data. They were as follows: Benefits of Changing Classes, Teacher Collaboration, Improvement in School Culture, and Teachers as Content Specialist.

Regardless of the type of innovation, literature on leadership suggests the principals’ understanding of organizational change and organizational learning as guides for effectively implementing the innovation. The literature identified that a key to successful implementation of an innovation or change is create a context that supports practices that foster professional learning within an organization. The interviews with Stella teachers described how the structure of the Innovative Hybrid Schedule supported professional learning opportunities. It provided the structure and organization for increased collaboration such as participating in content specific professional learning activities and vertical planning teams. Teachers described the Innovative Hybrid Schedule enabled teachers to engage in collaboration, problem-solve, and improve their instructional practices. Dufour et al. (2008) argued that reculturing a school is the only way to have the changes and innovation to be sustainable. They provided insight into the way to reculture a school. This requires changing the behaviors of teachers within a school engage in, the assumptions, beliefs, and values that the teachers have will begin to change. Thus, creating a context for making a cultural shift.

Chapter Five will address the findings, implications and recommendations for future research.
CHAPTER 5: SUMMARY, INTERPRETATIONS, CONCLUSIONS, AND RECOMMENDATIONS

Chapter Five of this mixed methods case study provides the analysis of data collected and used to determine the effectiveness of the innovative hybrid schedule in improving school culture and student learning outcomes. The study focused on the elements of the change process and what factors facilitated and hindered the implementation of the Innovative Hybrid Schedule. This study evaluated how the implementation of the Innovative Hybrid Schedule affected the school culture. Additionally, the researcher analyzed how student learning outcomes were affected with the implementation of the Innovative Hybrid Schedule. The researcher investigated what teachers perceived to be program outcomes of the implementation of the Innovative Hybrid Schedule. Finally, the study explored what teachers believed and perceived the program outcomes were as a result of the change imitative and how implementation of the Innovative Hybrid Schedule effected school culture and student learning outcomes.

A review of the literature regarding organizational change, leadership, change process, and professional learning communities was conducted. These components were fundamental aspects investigated in this study. The findings from this study will greatly contribute to the existing literature pertaining to implementing educational innovation, as well as, add insight to the literature related to the influence the five attributes of PLCs have on creating a context to support a culture of innovation to improve schools and learning for students.
Summary

In Alabama, Dr. Tommy Bice, State Superintendent of Education, encouraged schools and school systems to become more creative and innovative with the adoption of Alabama’s Plan 20/20. Plan 20/20 was adopted by the ALSDE in 2012 and approved by USDOE in 2013. Dr. Bice encouraged local school and school systems to think innovatively about how they “do” school and how they provide opportunities for all students when policies, rules, and procedures get in the way of what is best for students. Plan 20/20 allowed schools to leverage new or unproven methods or tools to improve practice or solve persistent problems; and identify tools or practices from another area to be applied in a new context. Consequently, schools are working hard to be innovative and creative, providing more personalized learning options such as the Innovative Hybrid Schedule for accelerating students, at-risk students, and non-traditional students. Moreover, school leaders, researchers and educational stakeholders can utilize the findings of this study to gain insight on how schools can be organized as learning communities can cultivate a culture that inspires teaching and learning improvements to meet the needs of students.

The study assessed the effectiveness of implementing an innovation to bring about a change in school culture. The researcher attempted to deepen the understanding of the relationship of educational change and school culture. Although there is a vast amount of research on educational change as related to school improvement, there was a void concerning on the relationships among the five attributes of professional learning communities, creating a context for change through innovation and how it affects teaching practices, student learning outcomes and school culture. This study expanded the research on these important areas. It provided valuable information and perspectives for other schools implementing innovations to
bring about change. It should help stimulate further research on this important topic by providing potential avenues for further study. Moreover, school leaders, researchers and educational stakeholders can utilize the findings of this study to gain insight on how schools organized to support professional learning and collaboration can cultivate a culture that inspires teaching and learning improvements to meet the needs of students.

The researcher used an AdvancEd® Stakeholder Feedback Survey to identify school culture indicators, the Stages of Concern Questionnaire to determine change in teacher concerns, and interviews to support the AdvancEd® Feedback Survey and the Stages of Concern Questionnaire. Student learning data generated by ACT Aspire® was used to determine if changes in student learning outcomes had occurred. Additional data from a Qualtric’s survey taken by both the teachers and students at the end of the first pilot year supported the findings that emerged through the implementation process of the Innovative Hybrid Schedule.

This study was conducted in an elementary school setting. Stella Elementary School is a public school in southeast Alabama. Stella is one of eleven elementary schools in the Eagle School System. The school served 410 students primarily from low socio-economic households. Ninety-six percent of students were served on a free and reduced status and the student population has a high transient rate. The demographic make-up was diverse to include eighty-eight percent African-American students, twenty percent White, and two percent Hispanic students. In addition, the school served a large special education population, which is approximately one third of the student body. The school had a transient rate of thirty-nine percent.

This mixed methods study addressed the effects that the implementation of an Innovative Hybrid schedule had on school culture and student learning outcomes. A convergent parallel
mixed methods design was used in order to collect both qualitative and quantitative data in parallel with each other and analyzed separately. Triangulation of data through mixed methods served to strengthen and offset any potential weaknesses of using either quantitative or qualitative approach. The qualitative data were collected through teacher interviews and survey artifacts collected the first year of the implementation of the Innovative Hybrid Schedule. The data was interpreted to determine correlated items and those items that diverged from expected outcomes. Quantitative data were collected from the beginning and end of the implementation of the Innovative Hybrid Schedule through the administration of the SoCQ. Additionally, the AdvancEd® Stakeholder Feedback Survey data were collected at the end of the 2013–2014 school year and the 2014–2015 school year.

The framework of the case study was based on the five attributes of PLCs identified through the work of Hord (1997, 2004): 1) supportive and shared leadership, 2) shared values and vision, 3) collective learning and the application of that learning, 4) shared practice, and 5) supportive conditions. In addition, the case study utilized Fullan’s Educational Change Theory (2007) stating that change occurs in the following three phases: 1) Initiation Phase, 2) Implementation Phase, and 3) Institutionalization Phase.

Eleven certified teachers were represented in the interviews and SoCQ components of this case study. The participants were selected because of their involvement in the implementation of the Innovative Hybrid Schedule as well as participated in the professional learning community activities.

**Research Questions**

The research questions that guided this study were:
1. What do teachers perceive as factors that facilitated and/or hindered the implementation of the Innovative Hybrid Schedule?

2. As perceived by the teachers, to what extent has the school culture changed as a result of the implementation of the Innovative Hybrid Schedule?

3. To what extent have student learning outcomes changed with the implementation of the Innovative Hybrid Schedule?

4. What are the program outcomes related to the implementation of the Innovative Hybrid Schedule?

Table 3 indicates which data sources were used to address each individual research question.
Table 3

Research Questions and Data Collection Instruments

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Collection Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. What do teachers perceive as factors facilitated and/or hindered the</td>
<td>1. <em>Stages of Concern Questionnaire</em></td>
</tr>
<tr>
<td>implementation of the Innovative Hybrid Schedule?</td>
<td>2. Interviews</td>
</tr>
<tr>
<td></td>
<td>3. Artifact – Qualtrics Departmentalized Surveys</td>
</tr>
<tr>
<td>3. As perceived by the teachers, how has the</td>
<td>1. <em>AdvancED®</em> stakeholder feedback diagnostic survey</td>
</tr>
<tr>
<td>school culture changed as a result of the</td>
<td>2. Interviews</td>
</tr>
<tr>
<td>implementation of the Innovative Hybrid Schedule?</td>
<td>3. Artifact – Qualtrics Departmentalized Surveys</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Have student learning outcomes changed</td>
<td>1. <em>ACT Aspire®</em> Test Scores</td>
</tr>
<tr>
<td>with the implementation of the innovative hybrid schedule?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Interviews</td>
</tr>
<tr>
<td>6. What are the perceived program outcomes related to the implementation of the</td>
<td>5. Interviews</td>
</tr>
<tr>
<td>Innovative Hybrid Schedule?</td>
<td>6. Artifact – Qualtrics Departmentalized Surveys</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Implications of Key Findings

Research Question 1: What do teachers perceive as factors that facilitated and/or hindered the implementation of the Innovative Hybrid Schedule?

The researcher used the data generated from the pre- and post-test administrations of the *Stages of Concern Questionnaire* to determine factors that facilitated or hindered the implementation of the Innovative Hybrid Schedule at Stella Elementary School. Regardless of how well a change approach is planned, organizations face multiple obstacles when creating change (Cuban, 1990; Darling-Hammond, 2004; Murphy, 2008; Tyack & Cuban, 1995). Schools are no different than any other organizations that have complex systems. For change to be successful leaders must pay attention to the details of meeting people’s needs, produce positive outcomes, deal with individual and group interests and conflicts, and create a culture of meaning (Bolman & Deal, 2010).

There are many factors to evaluate as organizations facilitate the change process. Hall and Hord (2011) discussed the importance of analyzing the feelings, emotions, and perceptions of those individuals affected by the change. They found that teachers experienced certain feelings and reactions whenever change occurred in curriculum, instruction, or policies.

The *SoCQ* survey was used to analyze Stella Elementary School teachers to determine if the level of concern changed over time with implementing the Innovative Hybrid Schedule. It addressed seven stages that measure teachers’ level of concern about a new innovation: Stage 0 – Awareness, Stage 1 – Informational, Stage 2 – Personal, Stage 3 – Management, Stage 4 – Consequence, Stage 5 – Collaboration, and Stage 6 – Refocusing. As concerns at Stages 0 – Awareness through Stage 3 – Management were reduced, typically teacher began to express higher concerns at Stages 4 – Consequence through Stage 6 – Refocusing. The administration of
the SoCQ at the beginning and end of the implementation of the Innovative Hybrid Schedule did not show a statistically significant change. However, there were several of the stages that showed a decrease in the mean scores indicating there were changes in teacher concerns.

The analysis of data collected from the SoCQ suggested that there was a decrease in the mean scores for the Stage 1 – Informational from 4.2 to 3.0933. This indicates that teachers are knowledgeable in the substantive aspects of the innovation. Stage 2 – Personal mean scores declined from 4.4 to 3.3067 signifying that the teachers were aware of the demands the innovation entails and were less worried how it will affect them on a personal and professional basis. Finally, Stage 3 – Management mean scores were lower from 3.2533 to 2.8267 suggesting that teachers understand the processes and tasks of using the innovation. The peak and highest mean was in Stage 5 even though it dropped from the first administration from 4.4933 to 3.8533. A peak in Stage 5 – Collaboration revealed that the teachers are interested in working with others in coordinating use of the innovation. The lowest mean was at Stage 0 – Unconcerned, 2.62672, an indication that the innovation is of high priority and central to the thinking and work of the teachers (Hall & Hord, 2006).

**Facilitating factors.** The researcher discovered during the interview process that the overall facilitating factors related to the benefits of changing classes, teacher collaboration, improvement in school culture, and teachers as content specialists. This led the researcher to believe that through the implementation process teachers recognized the value of collaboration and began to take advantage of professional learning opportunities as a way to collaborate and share ideas concerning their subject matter and instructional practices. The interview data supported this from multiple teachers where they specifically stated that they became more of a teacher content specialist instead of being a “jack of trades”. The Hybrid Schedule allowed them
to strengthen their knowledge and skills. Another interviewed teacher addressed how the schedule enhanced her planning and ability to differentiate instruction because she can focus on one content area.

**Hindrances.** There were only a few hindrances to the implementation of the Innovative Hybrid Schedule. These were identified through the analysis of the interview data. Data indicated that teachers believed that there was a need for changing classes in the lower grades due to student and teacher relationships. Organizational structure, class transitions, and change were additional items that were mentioned. Interview responses indicated that transitional time should be reviewed to be more proactive with disciplinary problems. Two teacher stated that changing classes in the younger grades hindered the one-teacher connection and getting to know fewer students on a more personal level. A rationale for the few hindrances mentioned may be that the teachers were more satisfied and less concerned at the end of the second year of implementation. A veteran teacher stated that in the beginning just the idea of change was a hindrance because people are scared of change and it is not the way it has always been done.

In summary, data collected through the administration of the *SoCQ* indicated teachers were not concerned that the Innovative Hybrid Schedule effects them personally or concerned about management of the schedule. *SoCQ* data indicated that teachers were knowledgeable about the aspects of the innovation. Overwhelming in the interviews, a facilitating factor of Innovative Hybrid Schedule was the provision for teachers to become content specialist because they are focused on only a few content areas. Collaboration and vertical planning with content area teachers were noted in the interviews as facilitating factors, which led to improving learning outcomes and school culture.
The most predominate hindrances to the implementation process were related to the changes in the organizational structure that they believed affected early childhood teacher-student relationships and difficulties during transitional times. Teachers indicated that there was a need for addressing discipline issues during class changes and how to create times for relationship building in the lower grades. *SoCQ* data and interview responses indicated that teachers wanted to collaborate more in coordinating use of the Innovative Hybrid Schedule. A rationale for only finding a few hindrances may be the fact that it was at the end of the second year of the implementation of the innovation and the teachers were more satisfied and less concerned as indicated in the *SoCQ*. The researcher believed that focused discussions around the hindrances would allow teachers to address the issues that stem from changing classes and teacher-student relationships for the lower grades.

**Implications on Findings**

Fullan and Hord (2015) suggested that professional learning that increased educator effectiveness was necessary for sustained change to occur. Additionally, leaders must understand and be able to navigate organizational practices that affect the change process. This was imperative to implement sustainable educational change for school improvement and reform (Bolman & Deal, 2003; Deal & Peterson, 199). The researcher of this study found when examining and implementing change, it was critical to understand the influences of teacher concerns and facilitating factors for the Innovative Hybrid Schedule at Stella Elementary School to be institutionalized.

The researcher found through the adoption and implementation processes, attention to the following standpoints on the change process supported positive, successful change: active participation in the initiation and implementation of the change process must occur. Stella
Elementary School’s Building Leadership was actively involved throughout the entire change process. This allowed the Innovative Hybrid Schedule to evolve through continuous collaboration, support, and ownership by teachers. The teachers’ concern about needing more information, how it would affect them personally, and how to manage the hybrid schedule decreased due to improved collaboration through participation in professional learning and vertical planning.

The emergent themes of Benefits of Changing Classes, Teacher Collaboration, Improvement in School Culture, and Teachers as Content Specialists were established as facilitating factors that supported the implementation of the Innovative Hybrid Schedule. The researcher confirmed that sustainable change has to be introduced, led, adjusted, and supported by establishing Hord’s (2004, 2007, 2011) five attributes of professional learning communities. The practices of engaging teachers in collaboration using the five attributes (shared values and beliefs, supportive and shared leadership, collective group learning, supportive conditions, and shared personal practices) positively affected the change process and culture within the school.

Research Question 2: As perceived by the teachers, to what extent has the school culture changed as a result of the implementation of the innovative hybrid schedule?

The researcher used the AdvancEd® Stakeholder Feedback survey to determine the perceived changes of teachers in school culture as a result of the implementation of the Innovative Hybrid Schedule. Additionally, the researcher used interview data to support the perceived changes in culture as a result of the Innovative Hybrid Schedule. Survey data collected indicated that statistical significance was achieved in every Quality School Standard. The Standards for Quality Schools are: Standard 1: Purpose and Direction; Standard 2: Governance and Leadership; Standard 3: Teaching and Assessing for Learning; Standard 4:
Resources and Support Systems; and Standard 5: Using Results for Continuous Improvement. These standards align with the characteristics of Hord’s five attributes of PLCs and innovation and continuous improvements are accomplished through Fullan’s (2007) three phases of educational change.

In each of these categories teachers reported a positive change and was supported through interview data. In their interviews, teachers suggested the Innovative Hybrid Schedule was able to establish a context that supported a positive change in school culture and an increase in teacher collaboration. Teachers believed they were able to work together as a team and colleagues coming together as a whole with a common practice. The school culture improved because teacher perceived themselves as content specialist, planning was focused on one subject, professional learning was targeted, and teachers were able to become collaborators instead of working in isolation.

**Importance of School Culture**

Cultural attributes may not be a written set of rules, but are underlying patterns that guide organizations. Individuals within the organizations are firmly aware of these influences and understand its power. According to Huffman and Hipp (2003), initiatives associated with school reform usually fail when a lack of attention is given to the impact that culture has within a school. Stella Elementary depended on collaboration and paid attention to the details of meeting people’s needs to produce positive results and create a culture of meaning during the implementation of the Innovative Hybrid Schedule.

School culture significantly improved during the implementation process of the Innovative Hybrid Schedule as a result of tapping into people’s commitment and building the capacity to learn at all levels within an organization. Hall and Hord (2011) agreed that actively
seeking involvement of individuals within the organization created a sense of responsibility to assist in facilitating the implementation process. Synergy came from the people’s involvement in the change process and was vital in building the capacity from within the organization to sustain long-term implementation.

The teachers became experts in their specific content areas and there was a statistically significant improvement in school culture through collaboration and becoming a content specialist. Several teachers stated that they were able to specialize in what they loved teaching. Other teachers elaborated on how they were encouraged to work together and the schedule provided the opportunity to collaborate and share ideas and instructional practices.

Assessing the culture of a school is a complex and lengthy process that continuously evolves (Connolly et al., 2011; Kruse & Louis, 2009). As a principal starts to embark on the process of change, it is essential to diagnose the culture of the school and its readiness for change (Hall, 2013). Once a leader understands the culture within a school, then the lengthy process of effecting lasting change on a system can occur (Connolly et al., 2011). It is vital to understand that a school’s culture and the successful implementation of any change initiative are mutually dependent (Russell et al., 2011). The research related to assessing school culture describes a deliberate and systematic process that often includes a survey (Kruse & Louis, 2009). This research study revealed school culture scores, overall, increased from 2014 to 2015 at a statistically significant level.

The following AdvancEd® Quality School Standards are measured by the survey.

**Standard 1: Purpose and Direction:** The school maintains and communicates a purpose and direction that commit to high expectations for learning as well as shared values and beliefs about teaching and learning.
Standard 2: Governance and Leadership: The school operates under governance and leadership that promote and support student performance and school effectiveness.


Standard 4: Resources and Support Systems: The school has resources and provides services that support its purpose and direction to ensure success for all students.

Standard 5: Using Results for Continuous Improvement: The school implements a comprehensive assessment system that generates a range of data about student learning and school effectiveness and uses the results to guide continuous improvement.

Implication of Findings on School Culture

Sustainability is the desired outcome of the change process (Fullan, 2007, 2011; Haregreaves & Fink, 2006). Based upon the results of the survey and interview responses, building collaborative structures such as professional learning opportunities and providing time for teachers to work together in vertical planning provided the necessary foundation for implementation of the Innovative Hybrid Schedule to change the school culture in a statistically positive direction. It was evident from the teacher interviews that building the capacity to learn teachers through content specific professional learning aided in the success of the implementation of the Innovative Hybrid Schedule and the positive change in school culture.
According to this research study, the Innovative Hybrid Schedule was successful in establishing a positive school culture for sustaining change. The researcher established through the triangulation of the data there was a significantly positive change in improving school culture, cultivating teachers as content specialist, and increasing teacher collaboration through professional learning and vertical planning opportunities. These findings were directly linked and related to the fact of school can sustain change by creating a context that supports professional learning and collaboration. These factors impacted and aided in the improvement of the culture and learning environment at Stella Elementary School.

Research Question 3: To what extent have student learning outcomes changed with the implementation of the innovative hybrid schedule?

The ACT Aspire® test was used to determine the extent of change in student learning outcomes with the implementation of the Innovative Hybrid Schedule. The Innovative Hybrid Schedule was implemented to improved student learning outcomes and it was reflected in the ACT Aspire® Test results. At the end of the implementation process, student test scores were compared to the Spring 2014 test results. Results of the data analysis revealed a statistically positive change in the ACT Aspire® scores. While the researcher cannot draw a causal relation between improved scores and the Innovative Hybrid Schedule, it can be said that these events occurred during the same time period. The overall ACT Aspire® scores were statistically significant improvement in both data sets 3rd to 4th grade and 4th to fifth grade for reading and math.

Implication of Findings on Student learning outcomes

Improving student learning outcomes at the elementary is particularly challenging due to the way elementary students and teachers are organized for instruction. The traditional
classroom teacher is assigned to all content areas to organize for instruction and can be considered a generalist (Andrews, 2006; Chang et al., 2008; Gerretson et al., 2008; Hood, 2010; McGrath & Rust, 2002). The findings from this research indicated that when teachers were allowed to focus on a specific content area, student learning outcomes in grade 3 through grade 5 in both reading and mathematics improved. Hill, Rowan, and Ball’s (2005) research supported this study’s finding in that a correlation can be made between teachers’ knowledge in mathematics and improved student learning outcomes.

Several previous research findings on the same topic revealed statistically significant differences in student learning outcomes based on varying organizational structures (Chang et al., 2008; McGrath & Rust, 2002; Moore, 2008; Williams, 2009; Yearwood, 2011). Rey and Fennell’s (2003) research study supported the findings in this study, particularly in math instruction, that students were able to achieve at a higher rate when instructed by a content specialist. Additionally, Gerretson et al. (2008) stated that teachers in a content specific organizational setting provide more effective instruction, positively improving student-learning outcomes. With the push for globally competitive schools and college and career ready students, schools are being challenged to implement deeper and more rigorous standards. Innovation and change are at the forefront of improvement efforts to successfully increase student growth and achievement. Decades of research studies have proven the connection between teacher effectiveness and student learning. The Innovative Hybrid Schedule provided Stella Elementary School teachers the opportunity to become more knowledgeable about their specific content matter. Since there was a strong relationship between improving student learning outcomes and the implementation of the Innovative Hybrid Schedule, educational leaders may want to utilize this type of organizational structure in other school settings.
Research Question 4: What are the perceived program outcomes related to the implementation of the Innovative Hybrid Schedule?

Interviews and artifact data were used to determine the perceived program outcomes of the Innovative Hybrid Schedule. The interview data collected indicated that Benefits of Changing Classes, Teacher Collaboration, Improvement in School Culture, Teachers as Content Specialists, and improved student learning outcomes emerged from the implementation of the Innovative Hybrid Schedule. The teachers believed that focusing on one subject to teacher rather than teaching all subjects gave them the ability to become teacher experts in their content standards. Interview responses that strongly supported these were teachers believed that focusing on one area contributed to improved instructional practices. They felt they became stronger teachers in their subject areas and collaboration through professional learning communities and vertical planning with other teachers who supported their improvement in the instructional process.

In addition, interview data supported the belief that the implementation of the Innovative Hybrid Schedule supported improvement in student learning outcomes. Teachers addressed that being a content specialist they were able to go deeper in their subject and deliver better instruction that impacted learning for students. Additionally, teachers reiterated that professional learning opportunities and collaboration improved student learning outcomes. Lastly, teachers and student data from the Qualtrics survey supported these same findings. In particular, student responses revealed they not only enjoyed changing classes but believed it helped them learn more and wanted to continue the hybrid schedule.

Implication of Findings on Perceived Outcomes
The current research study found that teachers believed that being able to focus on one specific content area allowed them to be more effective teaching the standards they were responsible for teaching. Furthermore, teachers stated they were able to concentrate their professional learning experiences in specific areas as well. Previous research found that when teachers understood their content at deeper levels, they were to address instructional gaps and differentiate instruction for students (Gerretson, 2008; Varma, 2008). This study suggested that the implementation of the Innovative Hybrid Schedule created a context for teachers to collaborate on specific content and enhance their own instructional practices to become more effective teachers.

Collaboration and participation in professional learning were found to be vital components and benefits expressed in this research study to successfully implementing the Innovative Hybrid Schedule. The researcher has concluded that the interview data supports that teachers perceived that participating and applying the five attributes in the professional learning opportunities strengthened the implementation of the Innovative Hybrid Schedule. The researcher was convinced that initiating change at Stella Elementary School with the support of Hord’s (2004, 2007, 2011) five attributes of professional learning communities: 1) supportive and shared leadership, 2) shared values and vision, 3) collective learning and the application of that learning, 4) shared practice, and 5) supportive conditions ensured the successful implementation and sustainability of the Innovative Hybrid Schedule.

**Conceptual Framework**

This study was organized and aligned utilizing the five attributes of the PLCs identified through the work of Shirley M. Hord (2004, 2007) and Michael Fullan’s Educational Change Theory (2007). Hord’s five attributes were: 1) supportive and shared leadership, 2) shared...
values and vision, 3) collective learning and application of learning, 4) shared practice, and 5) supportive conditions. Fullan’s educational change theory has three phases: Phase I – Initiation; Phase II – Implementation; and Phase III – Institutionalization.

Figure 4 shows the conceptual framework utilized by Stella Elementary School to implement the Innovative Hybrid Schedule. The conceptual framework for this study was based on Hord’s (2004, 2007, 2011), Fullan and Hord’s (2015) research and AdvancEd®’s Quality School Standards that support creating a context for change for continuous improvement.
Figure 4. Conceptual Framework used to implement the Innovative Hybrid Schedule.
Stella Elementary School adhered to *AdvancEd®* Standards for Quality Schools for Continuous Improvement so it remained at the center of the framework. According to Fullan (2007), educational change (the left side of the framework), in this case the adoption of the innovation of the Hybrid Schedule, occurs in the Three Phases of Initiation, Implementation, and Institutionalization. In order to reach the institutionalization and sustain change, the five attributes of PLCs (shared values and beliefs, supportive and shared leadership, collective group learning, supportive conditions, and shared personal practices) must be an integral part of the change and continuous improvement process.

At the beginning of the study, the researcher applied the concept of Hord’s five attributes of professional learning communities and Fullan’s (2007) Educational Change Theory to Stella Elementary School’s school-wide change initiative of implementing an Innovative Hybrid Schedule. The framework provided a strategic method to create a context for change in school culture, student learning, and school improvement efforts. It was imperative to the researcher to identify and assess the relationships that create conditions necessary to foster and sustain positive change in teaching practices, school culture, and student learning outcomes.

In this research study, Fullan’s (2007) Phase I – Initiation consisted of the need for Stella Elementary School to create a context for change that would impact school culture and student learning outcomes. Fullan (2007) stated the need for change was realized and encompassed “the process leading up to and the decision to proceed with implementation” (p. 69). This occurred at Stella Elementary School when the Building Leadership Team suggested a new innovation, the Innovative Hybrid Schedule, was necessary to change the school culture and student learning outcomes. Teachers were implementing new curriculum standards and other mandates that left
them feeling overwhelmed by the workload, isolated, ineffective due to planning for multiple subjects, and struggling to meet the needs of all students.

Phase II, the implementation stage, occurred as Stella Elementary School’s adopted the Innovative Hybrid School change initiative and began the change process. Need, clarity, complexity, and quality of the innovation were taken into consideration as a part of this phase. Teachers worked together collaboratively to assign content areas according to teacher strengths within grade levels. The faculty developed school-wide schedules that consisted of whole group instructional time and small groups that provided for leveled instruction according to students’ ability. Additionally, the five attributes related to PLCs provided a structure for improvement efforts that enhanced vertical content planning opportunities that strengthened collaboration, reduced isolation, and enhanced instructional practices.

The positive results this study leads the researcher to conclude that Stella Elementary school has established a context for change and provides the necessary components for phase III, institutionalization of the Innovative Hybrid Schedule, to occur within Stella Elementary School. Institutionalization or sustainability is connected to the effectiveness of the implementation of the innovation. This can be justified by the change being effectively embedded into the organization’s structures and procedures (Fullan, 2007; Huberman & Miles, 1984). The AdvancEd Stakeholder Feedback Survey data showed a statistically significant improvement in school culture indicators. As well as, teacher interviews indicated they believed the Innovative Hybrid Schedule has had a positive impact on school culture, collaboration, teacher focus, and student learning outcomes.

This study revealed and affirmed that change involves the creation of meaning of the relationship to new ideas, programs, or reforms. The researcher believes that Hord’s (2004,
2007, 2011) five attributes of PLCs were purposeful in cultivating and building the capacity for learning and collaboration at Stella Elementary School which are necessary for sustainable change efforts. Within the school setting, educational change is driven by new innovations. Fullan (2007) emphasized that innovation in the school setting not only involved the adoption process of the innovation, but those that were responsible for implementing the change must be actively involved in the change process. The Innovative Hybrid Schedule required individuals to move through the change process and create new meaning. This was accomplished through the content embedded professional learning, vertical planning, and teacher collaboration. Thereby, increasing Stella Elementary School teachers’ capacity to learn as a critical component for the successful change. Hargreaves and Shirley (2012) advocated that it was a collective responsibility of everyone involved for the adoption of an innovation because they were ultimately responsible for its success or failure.

Figure 5 represents how the attributes of previous research from Hall, Hord and Fullan aligned with current research on implementing effective change that can be sustained through continuous improvement efforts within schools.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hall and Hord 2011</td>
<td>Strategy 1 - Create a Shared Vision of Change When It Has Been Integrated Into Practice in a High-Quality Way</td>
<td>Strategy 3- Plan for Implementation and Identify the Required Resources</td>
<td>Strategy 2 – Invest in Professional Learning</td>
<td>Strategy 4- Monitor Progress</td>
<td>Strategy 5- Provide Ongoing Assistance</td>
<td>Strategy VI- Create a Context Conducive to Change</td>
</tr>
<tr>
<td>Fullan and Hord 2015</td>
<td>Purpose and Direction</td>
<td>Governance and Leadership</td>
<td>Teaching and Assessing for Learning</td>
<td>Resources and Support Systems</td>
<td>Using Results for Continuous Improvement</td>
<td></td>
</tr>
<tr>
<td>AdvancEd Quality School Standards 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5. Alignment of Conceptual Framework, past research with current Quality School Standards for continuous school improvement
**Recommendation for Future Research**

This study provided the researcher with an opportunity to investigate how an educational innovation such as the Innovative Hybrid Schedule can effectively implement and sustain a positive change in school culture and increase student learning outcomes. In addition, the researcher was able to explore the relationship that the five attributes of professional learning had on the change initiative and implementation process at Stella Elementary School. While all data were found to be valid and reliable and did provide valuable insight related to educational innovation and change, further research is recommended. Given the single mixed method research study, the conclusions are specific to Stella Elementary School.

1. Further research should be conducted in other schools and school districts that have implemented change initiatives to determine if the findings can be replicated outside of Stella Elementary School with different innovations being implemented.

2. Second, future researchers could determine which of the five attributes of PLCs had the greatest impact on sustaining educational change.

3. Additional research could be explored to investigate the role of teacher leadership as it relates to implementing and sustaining effective school change.

4. Finally, future studies could explore how implementing educational change influenced teacher efficacy. Teacher efficacy could improve as a result of participation in the implementation process and participation in PLCs.

**Concluding Remarks**

The researcher of this study was interested in determining if an Innovative Hybrid Schedule would improve school culture and impact student learning outcomes. The researcher sought to investigate if teachers perceived the Innovative Hybrid Schedule created a context for
collaboration which supported cultivating their instructional practices that ultimately improved student learning outcomes.

The researcher believes that student learning outcomes should be the most important element concerning teachers, administrators, and educational leaders. While improving student learning is the ultimate goal of schools, it is necessary to recognize there are many factors such as school culture, organizational structure, and leadership styles that effect the student learning outcomes. The researcher recognizes the role that positive school culture and teacher collaboration have on improving student learning. When teachers collaborate with other teachers and become a content specialist by focusing on one content area, then the students and staff benefit from the positive outcomes.

Results suggested that because teachers were able to implement an educational change through an innovation, the two variables of student learning outcomes and school culture improved at the same time. Findings from this study will greatly contribute to the existing literature pertaining to implementing educational innovation, as well as, add insight to the literature related to the influences that the five attributes of professional learning have on sustaining a culture of innovation to improve schools and learning for students. Moreover, school leaders, researchers and educational stakeholders can utilize the findings of this study to gain insight on how schools organized to create a context for change can cultivate a culture that inspires teaching and learning improvements to meet the needs of students.

While there is no causal link, it is obvious that the professional learning community improved and student learning improved during the implementation of the Innovative Hybrid Schedule. The study indicated that the relationships between implementing an innovative change such as the Innovative Hybrid Schedule and applying the five attributes of professional learning
had a positive impact on the teacher collaboration, school culture, and providing the opportunities for teachers to become content specialist. The researcher confirmed that implementing a positive change in school culture improved student-learning outcomes. Teachers believed that the Innovative Hybrid Schedule was the connection that created a context for change. Additionally, it provided the context for collaborative opportunities for professional learning and vertical planning which were perceived as positive outcomes of the change initiative. Lastly, the Innovative Hybrid Schedule allowed teachers to focus on one content area and become content specialist which ultimately factored in to the improvement in student learning outcomes.
REFERENCES


Baker, B. A. (2011). The role of institution, ideology, interests, and information in the decision to departmentalize in elementary schools. Retrieved from

file:///C:/Users/Lyn/Downloads/BetsyABakerDissertation.pdf


Carroll, B. (1977). A study to inform principals about an instructional design, looping, and its influence on student learning outcomes, 2012-06-05


Reed, P. (2013). Leadership skills for implementing the common core. Principal Leadership, 13(6), 56


Ross, J. A. (1994). Beliefs that make a difference: The origins and impacts of teacher efficacy. A paper presented to the annual meeting of the Canadian Association for Curriculum Studies, Alberta, Canada.


Sergiovanni, T. J. (1986). Leadership as cultural expression. In J. E. Corbally & T. J. 
Sergiovanni (Eds.), Leadership and organizational culture: New perspectives on 


Sheppard, B., & Brown, J. (1996). Leadership approach, the new work of teachers and successful 
change. Paper presented at the Annual Meeting of the American Educational Research 
Association (Montreal, Quebec, Canada, April 19-23, 1999). Retrieved from ERIC 
Database. (ED431229).

14.

Slavin, R. (1987). Ability grouping and student learning outcomes in elementary schools: A best- 


Sowers, P. (1968). Let’s team teach in our elementary school. NASEC Monograph Series, 
Spectrum. Retrieved from ERIC database. (ED030941)

DuFour, R. Eaker, & R. DuFour (Eds.), On common ground: The power of professional 
learning communities (pp. 155–175). Bloomington, IN: Solution Tree.


AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
RESEARCH PROTOCOL REVIEW FORM
FULL BOARD or EXPEDITED

For information or help contact THE OFFICE OF RESEARCH COMPLIANCE (ORC), 115 Ramsey Hall, Auburn University
Phone: 334-544-9666 e-mail: IRBAdmin@auburn.edu Web Address: http://www.auburn.edu/research/uphre/index.html

Revised 3.1.2014 Submit completed form to IRBadmin@auburn.edu or 115 Ramsey Hall, Auburn University 36849.
Form must be populated using Adobe Acrobat Pro 8 or greater standalone program (do not fill out in browser). Hand written forms will not be accepted.

1. PROPOSED START DATE OF STUDY: February 1, 2016

PROPOSED REVIEW CATEGORY (Check one): ☐ FULL BOARD ☑ EXPEDITED
SUBMISSION STATUS (Check one): ☐ NEW ☐ REVISIONS (be address IRB Review Comments)

2. PROJECT TITLE: Leading School Change Through Innovation: The Hybrid Schedule

3. Anita Walker Graduate Student EFTL
PRINCIPAL INVESTIGATOR TITLE
1502 Springlehill Terrace DEPT
MAILING ADDRESS PHONE
☐ N/A ☐ Internal ☐ External Agency: __________________________
4. FUNDING SUPPORT: ☐ Pending ☐ Received
For federal funding, list agency and grant number (if available). NA

a. List any contractors, sub-contractors, other entities associated with this project: NA

b. List any other IRBs associated with this project (Including Reviewed, Deferred, Determination, etc.): NA

PROTOCOL PACKET CHECKLIST

All protocols must include the following items:
☑ Research Protocol Review Form (All signatures included and all sections completed)
(Examples of appended documents are found on the OHRF website: http://www.auburn.edu/research/uphre/sample.htm)
☐ CITI Training Certificates for all Key Personnel.
☐ Consent Form or Information Letter and any Releases (audio, video or photo) that the participant will sign.
☐ Appendix A, ‘Reference List’
☐ Appendix B if e-mails, flyers, advertisements, generalized announcements or scripts, etc., are used to recruit participants.
☐ Appendix C if data collection sheets, surveys, tests, other recording instruments, interview scripts, etc. will be used for data collection. Be sure to attach them in the order in which they are listed in # 13c.
☐ Appendix D if you will be using a debriefing form or include emergency plans/procedures and medical referral lists
( A referral list may be attached to the consent document).
☐ Appendix E if research is being conducted at sites other than Auburn University or in cooperation with other entities. A permission letter from the site / program director must be included indicating their cooperation or involvement in the project. Please include a copy of the letter.
☐ Appendix F - Written evidence of acceptance by the host country if research is conducted outside the United States.

The Auburn University Institutional Review Board has approved this
Document for use from 05/03/2016 to 05/02/2017
Protocol # 16-057 EP 1605

DATE RECEIVED IN ORC: __________________ by __________________ PROTOCOL
DATE OF IRB REVIEW: __________________ by __________________ APPROVAL
DATE OF IRB APPROVAL: __________________ by __________________ INTERVAL
COMMENTS: ________________________________________________________________

218
GENERAL RESEARCH PROJECT CHARACTERISTICS

6A. Research Methodology

Please check all descriptors that best apply to the research methodology.

- Data Source(s): ☑ New Data ☐ Existing Data
- Will recorded data directly or indirectly identify participants? ☑ Yes ☐ No

Data collection will involve the use of:

- Educational Tests (cognitive, diagnostic, capacity, etc.)
- Observation
- Location or Tracking Measures
- Physical / Physiological Measures or Specimens (see Section 6E)
- Surveys / Questionnaires
- Internet / Electronic
- Audio
- Video
- Photos
- Digital Images
- Private records or files

6B. Participant Information

Please check all descriptors that apply to the target population.

- ☑ Males ☑ Females ☐ AU students
- Vulnerable Populations:
  - ☐ Pregnant Women/Patients
  - ☐ Prisoners
  - ☐ Institutionalized
  - ☐ Children and/or Adolescents (under age 19 in AL)
- Persons with:
  - ☐ Economic Disadvantages
  - ☐ Physical Disabilities
  - ☐ Educational Disadvantages
  - ☐ Intellectual Disabilities
- Do you plan to compensate your participants? ☑ Yes ☐ No

6C. Risks to Participants

Please identify all risks that participants might encounter in this research.

- ☑ Breach of Confidentiality*
- ☐ Coercion
- ☐ Deception
- ☐ Psychological
- ☐ None
- ☐ Other:

*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.

6D. Corresponding Approval/Oversight

- Do you need IRB Approval for this study? ☑ Yes ☐ No
  
  If yes, IRB #: ___________________________________ Expiration date ______________

- Do you need IACUC Approval for this study? ☑ Yes ☐ No
  
  If yes, IRB #: ___________________________________ Expiration date ______________

- Does this study involve the Auburn University MRI Center? ☑ Yes ☐ No
  
  Which MRI(s) will be used for this project? (Check all that apply)
  - ☑ 3T
  - ☐ 7T
  
  Does any portion of this project require review by the MRI Safety Advisory Council? ☑ Yes ☐ No

Signature of MRI Center Representative:
Required for all projects involving the AU MRI Center:

Appropriate MRI Center Representative:
Dr. Thomas G. Denney, Director AU MRI Center
Dr. Ron Beyers, MR Safety Officer
A. PRINCIPAL INVESTIGATOR’S ASSURANCES

1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to all stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
   a. Conducting the project by qualified personnel according to the approved protocol
   b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Research Compliance
   c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
   d. Promptly reporting significant adverse events and/or effects to the Office of Research Compliance in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise ORC, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and supply all supporting documents to the Office of Research Compliance before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

My signature indicates that I have read, understand, and agree to conduct this research project in accordance with the assurances listed above.

Anita Walker
Printed name of Principal Investigator

Principle Investigator’s Signature

Date

B. FACULTY ADVISOR/SPONSOR’S ASSURANCES

1. I have read the protocol submitted for this project for content, clarity, and methodology.
2. By my signature as faculty advisor/sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
3. I agree to meet with the Investigator on a regular basis to monitor study progress. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
4. I assure that the investigator will promptly report significant incidents and/or adverse events and/or effects to the ORC in writing within 5 working days of the occurrence.
5. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the ORC by letter of such arrangements. If the investigator is unable to fulfill requirements for submission of renewals, modifications, or the final report, I will assume that responsibility.

Dr. Ellen Reames
Printed name of Faculty Advisor/Sponsor

Faculty Advisor's Signature

Date

C. DEPARTMENT HEAD’S ASSURANCE

By my signature as department head, I certify that I will cooperate with the administration in the application and enforcement of all Auburn University policies and procedures, as well as all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants by researchers in my department.

Sherida Downer
Printed name of Department Head

Department Head’s Signature

Date
8. PROJECT OVERVIEW: Prepare an abstract that includes:
(350 word maximum; in language understandable to someone who is not familiar with your area of study):

a) A summary of relevant research findings leading to this research proposal:
   (Cite sources; include a "References List" as Appendix A.)

b) A brief description of the methodology, including design, population, and variables of interest

I. During the 2013-2014 school year, Cloverdale Elementary School implemented an innovative hybrid schedule change initiative. The innovation focused on bringing about change that improved school culture, instructional strategies, and student learning outcomes when teachers were provided support through participation in professional learning communities. Fullan (2002) addressed the issue concerning culture and organizational change that he describes as "retooling." Reculturing was defined as a way to bring about successful lasting change. In addition, he believes the cultural change is difficult but that it is the most important job of the school leader (p.13). According to Patterson, Purkey, and Parker (1968) culture is established through relationships. Depending on how well leaders understand the importance of relationships and interactions will either assist in positive change or become a barrier to change. Eaker, DuFour, and DuFour (1998) stated in Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement that for substantive improvement schools must develop and grow the capacity of its personnel to function as a professional learning community (PLC). II. The conceptual framework of the present case study was based on the five attributes of the PLCs identified through the work of Shirley M. Hord (2004) and Michael Fullan’s Educational Change Theory (2007). Hord’s five attributes were: 1) supportive and shared leadership, 2) shared values and vision, 3) collective learning and application of learning, 4) shared practice, and 5) supportive conditions. Fullan’s educational change theory has three phases: Phase I - Inflation; Phase II - Implementation; and Phase III - Institutionalization.

III. Population of Study: The research study subject population would include the faculty members of Cloverdale Elementary School. The ages range from 25 to 60 years of age with a minimum of three years of experience to 28 years of experience. The grade levels involved in the innovative hybrid schedule are first through fifth grades. IV. Methodology and design: This mixed method case study will be investigating three components. First, research will examine the implementation of an innovation and whether the school culture changed as a result of the innovation through the use of survey data that will be collected using AdvancEd’s stakeholder diagnostic. Second, research will seek to determine the level of teachers’ concerns about implementing the innovative hybrid schedule by having the teachers complete Hord’s (2004) Stages of Concern Questionnaire. Third, the study will explore the perceptions of the teachers’ concerns about implementing the innovative hybrid schedule through Hord’s Stages of Concern Questionnaire. Third, the study will explore the perceptions of the teachers to determine if instructional practices improved and if student outcomes improved through closed ended interviews. V. The expected results is that a change initiative will positively affect a school’s culture, instructional practices, and learning outcomes when teachers are supported through professional learning communities.

9. PURPOSE:

a. Clearly state the purpose of this project and all research questions, or aims.

The primary purpose of this mixed method case study is to investigate sustaining a change initiative in a school organization in an effort to improve school culture, instructional practices, and student learning outcomes when utilizing professional learning community attributes to support teachers.

Research Questions
The research questions that guided this study were:
1. What factors facilitated and/or hindered the implementation of the innovative hybrid schedule?
2. As perceived by the teachers, to what extent have instructional practices changed as a result of the implementation of the innovative hybrid scheduling?
3. Have student learning outcomes changed with the implementation of the innovative hybrid schedule?

b. How will the results of this project be used? (e.g., Presentation? Publication? Thesis? Dissertation?)

Dissertation
10. KEY PERSONNEL. Describe responsibilities. Include information on research, training or certifications related to this project. CITT is required. Be as specific as possible. (Include additional personnel in an attachment.) All key personnel must attach CITT certificates of completion.

Principle Investigator: Aneta Walker  Title: Graduate Student  E-mail address: ahw0007@live.ualberta.ca

Depts / Affiliation: EFLT

Roles / Responsibilities:
The purpose of this individual will be to serve as a researcher gathering data in order to investigate the outcomes of this study. Surveys and questionnaires will be used to collect quantitative data. Interviews will be used for qualitative data. The researcher will triangulate data to strengthen the study's findings and outcomes. CITT training has been completed. Dr.

Individual: Dr. Ellen Reames  Title: Chair  E-mail address: reamseh@auburn.edu

Depts / Affiliation: EFLT

Roles / Responsibilities:
The faculty advisor will oversee the advisement of the study and provide assistance with data collection, analysis, and reporting of findings.

Individual:  Title:  E-mail address: 

Depts / Affiliation: 

Roles / Responsibilities:

Individual:  Title:  E-mail address: 

Depts / Affiliation: 

Roles / Responsibilities:

Individual:  Title:  E-mail address: 

Depts / Affiliation: 

Roles / Responsibilities:

11. LOCATION OF RESEARCH. List all locations where data collection will take place. (School systems, organizations, businesses, buildings and room numbers, servers for web surveys, etc.) Be as specific as possible. Attach permission letters in Appendix E. (See sample letters at http://www.ualberta.ca/Research/ResearchSample)

Cloverdale Elementary School will be the location of data collection. The survey data that will be used will be collected through the AdvancEd Assist Portal. The questionnaire will be in paper and pencil format. It will be collected and stored in a secured filing system. Interviews will be conducted at Cloverdale Elementary School.
12. PARTICIPANTS.
   a. Describe the participant population you have chosen for this project including inclusion or exclusion criteria for participant selection.

   □ Check here if using existing data, describe the population from whom data was collected, & include the # of data files.

   The research study subject population would include the faculty members of Cloverdale Elementary School. The teachers selected to participate in the study were active participants in the implementation of the innovative hybrid schedule and participation in the professional learning communities. The ages range from 25 to 60 years of age. The grade levels involved in the innovative hybrid schedule are first through fifth grades. The following chart will provide the faculty grade level breakdown with the experience level of each faculty member involved:

   - 1st Gr.: 1 = 18 yrs; 2 = 26 yrs; 3 = 6 yrs; and 4 = 5 yrs;
   - 2nd Gr.: 1 = 16 yrs; 2 = 26 yrs; 3 = 2 yrs; and 4 = 6 yrs; 3rd Gr.: 1 = 2 yrs; 2 = 5 yrs; 4th Gr.: 1 = 15 yrs; 2 = 6 yrs; 3 = 4 yrs; 5th Gr.: 1 = 3 yrs; 2 = 8 yrs. Prog.Spec. 1 = 4 yrs; Media = 1–6 yrs

   b. Describe, step-by-step, in layman's terms, all procedures you will use to recruit participants. Include in Appendix B a copy of all e-mails, flyers, advertisements, recruiting scripts, invitations, etc., that will be used to invite people to participate.

   (See sample documents at http://www.auburn.edu/research/forms/sample.htm.)

   I will mail and explanation letter and consent form to potential participants. The letter will explain the purpose and format of their role in the study. Participants will be informed in the letter that they are not committed to answering every question during the interview or on the survey and have the right to withdraw from the study at any time. My contact information along with the district superintendent will be included and potential participants will be encouraged to ask questions and seek answers that may arise at any time during the study.

   c. What is the minimum number of participants you need to validate the study? 10

   How many participants do you expect to recruit? 16

   Is there a limit on the number of participants you will include in the study? □ No □ Yes – the # is 16

   d. Describe the type, amount and method of compensation and/or incentives for participants.

   (If no compensation will be given, check here. □ )

   Select the type of compensation: □ Monetary □ Incentives

   □ Raffle or Drawing incentive (Include the chances of winning.)
   □ Extra Credit (State the value)
   □ Other

   Description:
13. PROJECT DESIGN & METHODS.

a. Describe step-by-step, all procedures and methods that will be used to consent participants. If a waiver is being requested, check each waiver you are requesting, describe how the project meets the criteria for the waiver.

- Waiver of Consent (including using existing data)
- Waiver of Documentation of Consent (use of Information Letter)
- Waiver of Parental Permission (for college students)

I will contact Dr. Charles Ledbettar, Superintendent of Dothan City Schools, to receive permission to interview school personnel. I will also meet with the faculty members to set up time frames that will be convenient for scheduling the interviews. I will meet with the faculty and staff to discuss the importance of the study and how the data will determine the success of the implementation of the innovative hybrid schedule. It will be clear to all faculty that they are not required to answer any questions and can decline participation at any time. In addition, I will mail an explanation letter and consent form to potential participants. The letter will explain the purpose and format of their role in the study. Participants will be informed in the letter that they are not committed to answering every question during the interviews or on the survey and that they are only to withdraw from the study at any time. My contact information along with that of the district superintendent will be included and potential participants will be encouraged to seek answers to any questions that may arise at any time.

b. Describe the research design and methods you will use to address your purpose. Include a clear description of when, where and how you will collect all data for this project. Include specific information about the participants' time and effort commitment. (Note: Use languages that would be understandable to someone who is not familiar with your area of study. Without a complete description of all procedures, the Auburn University IRB will not be able to review this protocol. If additional space is needed for this section, save the information as a .PDF file and insert after page 9 of this form.)

This mixed method case study will be trifold. First, research will examine the implementation of an innovation and whether the school culture changed as a result of the innovation through the use of survey data that will be collected using AdvancEd's stakeholder diagnostic. Second, research will seek to determine the level of teachers' concerns about implementing the innovative hybrid schedule by having the teachers complete Hord's (2004) Stages of Concern Questionnaire. Third, the study will explore the perceptions of the teachers to determine if instructional practices improved and if student learning outcomes improved through the use of closed-ended interviews. Research Questions: The research questions that guided this study were:

1. What factors facilitated and/or hindered the implementation of the innovative hybrid schedule?
2. As perceived by the teachers, to what extent have instructional practices changed as a result of the implementation of the innovative hybrid schedule?
3. Have student learning outcomes changed with the implementation of the innovative hybrid schedule? Shirley Hord (2004) five attributes for implementing PLCs: 1. Supportive and Shared Leadership — The act of teams of teachers and administrators collaborate and work together to focus on improving student achievement and school improvement results. 2. Shared values and beliefs — Student learning and the success of all students was the focus of all PLC members. 3. Collective group learning and building learning community reflects the efforts focused on building the learning capacity of the members. All members of the learning organization are engaged in structured and deliberate collaboration focused on improving student learning. 4. Supportive conditions — Important and necessary component for leadership to plan for opportunities for members to meet. The second condition necessary is the space for relationships to develop and build trust and confidence among participants. 5. Shared personal practice — Teachers working together to improve instruction. Fullan's (2007) Phases of Educational Change: Within the first phase, initiation, a change is adopted or initiated. Phase I occurred when a need was realized by individuals or groups within an organization. Phase II, the Implementation phase, involved the change process after an adopted change occurred. Phase III, institutionalization, referred to the sustainability of the innovation within the organization. The interviews will be conducted over a week after school hours in a private setting within the school for the teachers. The interviews will be audio recorded, transcribed for analysis, and secured in a locking filing system. The surveys will be conducted electronically through the AdvancEd Assess Portal. Teachers will be given a week to complete the survey. The SoCQ questionnaire will be paper and pencil format at the beginning and end of the school year. Student data collected from the ACT Aspire in grades 3-5 will be used. This data will remain anonymous and no student identifiers or individual data will be used. This data will be analyzed to determine if student outcomes improved. No other data will be used in this research study. All interviews will remain confidential. The data will be triangulated to support and validate the findings of the qualitative and quantitative data sources.
13. PROJECT DESIGN & METHODS, Continued

c. List all data collection instruments used in this project, in the order they appear in Appendix C.
   (e.g., surveys and questionnaires in the format that will be presented to participants, educational tests, data collection sheets,
   interview questions, audio/video taping methods etc.)

The quantitative procedures will be from the collection of a survey instrument which is the AdvancEd's
stakeholder's feedback survey. This measures school climate factors, addresses the cultural components, as
well as the continual improvement aspects of the school. Additionally, the Stages of Concern Questionnaire
(SoCQ) will be used to collect quantitative data and will be analyzed to determine the concerns that teachers had
implementing the innovative hybrid schedule. Lastly, student data will be collected in an aggregate form using
the ACT Aspire and a statistical analysis through SPSS will be used to determine if student outcome improved.
The qualitative portion of the study will include one-on-one interviews conducted with teachers from the school
site to provide a deeper understanding of the change process and perceptions concerning the school culture and
PLC involvement. The interview data will be collected and will remain confidential from listening, probing,
observing, recording, and organizing interviewee's responses. Interviews will be used to gain insight to
perceptions and changes in instructional practices. No other data collection method will be used.

d. Data analysis: Explain how the data will be analyzed.

The researcher will use interviews based on the Bond's (2004) attributes of PLCs, Fullan's (2007) Educational
Change Theory, AdvancEd's stakeholder feedback diagnostic, to analyze perceptions of the change by using a
digital recorder and thematic code will be used to analyze interview data. Questionnaire and survey data will
analyzed using SPSS. Aggregate student test scores will be analyzed using SPSS and will remain anonymous.

14. RISKS & DISCOMFORTS: List and describe all of the risks that participants might encounter in this research. If you are using
decletion in this study, please justify the use of deception and be sure to attach a copy of the debriefing form you plan to use in
Appendix C. (Examples of possible risks are in section #60 on page 2)

There should be no discomforts by participants because they can withdraw at any time and student achievement
is only generated as school wide aggregate data and individual student's names, personal information, or
identification will not be used in the data collection process or dissemination of findings. Due to the fact that
face-to-face interviews and audio recordings will be conducted a breach of confidentiality is a possible risk.
15. PRECAUTIONS. Identify and describe all precautions you have taken to eliminate or reduce risks as listed in #14. If the participants can be classified as a "vulnerable" population, please describe additional safeguards that you will use to assure the ethical treatment of these individuals. Provide a copy of any emergency plans/procedures and medical referral lists in Appendix B. (Samples can be found online at http://www.auburn.edu/research/prolink/sample.html/precautions)

The participants are not vulnerable populations. All participants will be informed through the cover letter that they do not have to answer any questions they do not want to answer and can withdraw at any time. I will use no real names of participants and interview data will remain confidential. Due to the fact that face-to-face interviews and audio recordings will be conducted a breach of confidentiality is a possible risk. To mitigate the risk of a breach of confidentiality, teacher names will be replaced with pseudonym names.

If using the Internet or other electronic means to collect data, what confidentiality or security precautions are in place to protect (or not collect) identifiable data? Include protections used during both the collection and transfer of data.

The survey data will be generated from the secure website of AdvancEd Assist portal. The survey data that is collected and aggregated to specific question that pertains to the AdvancEd's Quality School Standards. No names are connected to the survey. The questionnaire will be coded in number format so that names of participants will not be used. The files will be secured on one computer and password protected with compression software.

16. BENEFITS.

a. List all realistic direct benefits participants can expect by participating in this specific study.
   (Do not include "compensation" listed in #14) Check here if there are no direct benefits to participants. □

Because the study takes place during the implementation and institutionalization process of the change initiative, participants will have the opportunity to learn alongside the researcher. Participants will:
1. Broaden understanding and deepen knowledge of innovations.
2. Broaden understanding of how the attributes of PLCs support innovation and change.
3. Receive training in and have opportunities to participate in PLCs.
4. Broaden understanding and knowledge of the importance of school culture plays in improving instructional practices and student learning outcomes.

b. List all realistic benefits for the general population that may be generated from this study.

Participants will have opportunities to participate in professional learning communities which could lead to improved instructional practices and improved student learning outcomes. Participants will also be provided the opportunity to work in an improved school culture that embraces collaboration and trust to improve collective teaching practices to improve their students’ learning.
17. PROTECTION OF DATA.

a. Data are collected:

☐ Anonymously with no direct or indirect coding, link, or awareness of who participated in the study (Skip to e)

☐ Confidentially, but without a link of participant's data to any identifying information (collected as "confidential" but recorded and analyzed as "anonymous") (Skip to e)

☐ Confidentially with collection and protection of linkages to identifiable information

b. If data are collected with identifiers or as coded or linked to identifying information, describe the identifiers collected and how they are linked to the participant's data.

There will not be a link between the different forms of data collected through the research study which consists of anonymous surveys, teacher interviews using pseudonym names, and aggregate student data that has no names or identifiers listed.

c. Justify your need to code participants' data or link the data with identifying information.

There is not a need to code participants with data collected. The different research instruments used, the data collected from them, or the participants will not be linked or connected in any way.

d. Describe how and where identifying data and/or code data will be stored. (Building, room number?) Describe how the location where data is stored will be secured in your absence. For electronic data, describe security. If applicable, state specifically where any IRB-approved and participant-signed consent documents will be kept on campus for 3 years after the study ends.

e. Describe how and where the data will be stored (e.g. hard copy, audio cassette, electronic data, etc.), and how the location where data is stored is separated from identifying data and will be secured in your absence. For electronic data, describe security.

Non-digital materials will be kept in locked and secured filing cabinet in the investigator's office at Clovisdale Elementary School. All data and transcriptions of recordings will be located on one password protected computer. The files will be encrypted. All files will be destroyed and deleted June 1, 2017.

f. Who will have access to participants' data?
(The faculty advisor should have full access and be able to produce the data in the case of a federal or institutional audit.)

The investigator and advisor.

g. When is the latest date that identifying information or links will be retained and how will that information or links be destroyed?
(If only anonymous data will be retained, check here.)

All data will be confidential; however, non-digital data will be shredded and recordings and digital data will be deleted on June 1, 2017.
November 9, 2015

Institutional Review Board c/o
Office of Research Compliance
115 Ramsay Hall
Auburn University, Al. 36849

Dear IRB Members:

After reviewing the proposed study, "Leading School Change through Innovation: The Hybrid Schedule", presented by Mrs. Aneta H. Walker, a graduate student at Auburn University, I have granted permission for the study to be conducted at Cloverdale Elementary School.

The purpose of the study is to determine if an innovative hybrid schedule and attributes of a Professional Learning Community had a positive impact on school culture, instructional practices, and student learning outcomes. The primary activity will be to collect and analyze survey, questionnaire data, student testing data, review artifacts and documents, and interview participants. Students will not be involved in the study.

I understand that interviews will occur for three weeks after school for those teachers that consent to the interview process. Additionally, all data collection, document and artifact analysis will be conducted after school hours. I expect the project to end by February 28, 2016.

I understand that Mrs. Aneta H. Walker will receive consent from all participants, and have confirmed that she has the cooperation of the participant teachers. Mrs. Aneta H. Walker has agreed to provide to my office a copy of all Auburn University IRB-approved, stamped consent documents before she recruits participants at Cloverdale Elementary School. Any data collected by Ms. Aneta H. Walker will be kept confidential and will be stored in a locked filing cabinet in her AU advisor’s office. Ms. Aneta H. Walker has also agreed to provide to us a copy of the aggregate results from her study.

If the IRB has any concerns about the permission being granted by this letter, please contact me at 334-
Sincerely,

Dr. Charles Ledbetter
Superintendent
Dothan City Schools
(Note: Do not agree to participate unless and IRB approval stamp with current dates has been applied to these documents.)

INFORMED CONSENT

for a Research Study entitled

"Leading Change Through Innovation: The Hybrid Schedule"

You are invited to participate in a research study. The study is being conducted by Mrs. Aneta H. Walker, under the direction of Dr. Ellen Reames in the Auburn University Department of Educational Leadership. You are invited to participate because you are Cloverdale Elementary School Teacher and are age 19 or older.

In you decide to participate in this research study, you will be asked to participate in an interview and complete a survey and questionnaire. At the time that the interviews are conducted, they will be audio recorded and kept in a locked filing system in the investigator’s office. The reason for the audio recording of the interviews is for the investigator to collect all data addressed in the interview so that a thorough analysis can be conducted. This is imperative to determine themes and codes within the interview data. Your total time commitment will be approximately three hours. The audio recording will not be destroyed after the results and findings are completed but will be retained for a year after the research is completed. These will be securely locked in a filing system within the investigator’s office.

There are no risks or discomforts associated with this study. Due to the interviews being audio recorded, there is a risk of a breach of confidentiality.

If you participate in this study, you can expect to increase your understanding of the components of the Hybrid Schedule and Educational Change Through Innovation. We/I cannot promise you that you will receive any or all of the benefits described.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Education Leadership or at Cloverdale Elementary School.

4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

w w w . a u b u r n . e d u

230
Your privacy will be protected. Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by using pseudonym names and confidential records will remain locked in a secure filing system. Information collected through your participation may be used to fulfill an educational requirement.

If you have any questions about this study, contact Ms. Aneta H. Walker at anwalker@dothan.k12.al.us or Dr. Ellen Reames, Auburn University, at reamesh@auburn.edu.

If you have any questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334)844-5966 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THE RESEARCH STUDY. IF YOU DECIDE TO PARTICIPATE, YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

__________________________________________________________________________
Investigator’s Signature Date

__________________________________________________________________________
Aneta H. Walker

__________________________________________________________________________
Participant’s signature Date

__________________________________________________________________________
Printed Name

The Auburn University Institutional Review Board has approved this Document for use from 05/03/2016 to 05/02/2017
Protocol # 16-057 EP 1605
AUDIO RELEASE

During your participation in this research study, "Leading Change Through Innovation: The Hybrid Schedule", you will be audio recorded. Your signature on the informed consent gives us permission to do so.

Your signature on this document gives us permission to use the audio recording(s) for the additional purposes of publications or training beyond the immediate needs of this study. These audio tapes will not be destroyed at the end of this research but will be retained for a year after the research is completed.

Your privacy will be protected. Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by using pseudonym names and confidential records will remain locked in a secure filing system. Information collected through your participation may be used to fulfill an educational requirement.

If you have any questions about this study, contact Ms. Aneta H. Walker at anwalker@downtown.dothan.k12.al.us or Dr. Ellen Reames, Auburn University, at reamesh@auburn.edu.

If you have any questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at IRRadmin@auburn.edu or IRRChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THE RESEARCH STUDY. IF YOU DECIDE TO PARTICIPATE, YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

Your permission:

I give my permission for audio recordings produced in the study, "Leading Change Through Innovation: The Hybrid Schedule" to be used for the purposes listed above, and to also be retained for a year after the research is completed.

___________________________________________________________
Participant's Signature          Date      Investigator's Signature     Date

___________________________________________________________
Participant's Printed Name
4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

www.auburn.edu
Implementation of the Innovative Hybrid Schedule to support to Continuous School Improvement Goals for Math and Reading

Stages of Concern Questionnaire

The purpose of this questionnaire is to determine what people who are using or thinking about using various programs are concerned about at various times during the adoption process.

The items were developed from typical responses of school and college teachers who ranged from no knowledge at all about various programs to many years' experience using them. Therefore, many of the items on this questionnaire may appear to be of little relevance or irrelevant to you at this time. For the completely irrelevant items, please circle "0" on the scale. Other items will represent those concerns you do have, in varying degrees of intensity, and should be marked higher on the scale.

For example:

This statement is very true of me at this time. 0 1 2 3 4 5 6 7
This statement is somewhat true of me now. 0 1 2 3 4 5 6 7
This statement is not at all true of me at this time. 0 1 2 3 4 5 6 7
This statement seems irrelevant to me. 0 1 2 3 4 5 6 7

Please respond to the items in terms of your present concerns, or how you feel about your involvement with this innovation. We do not hold to any one definition of the innovation so please think of it in terms of your own perception of what it involves. Phrases such as "this approach" and "the new system" all refer to the same innovation. Remember to respond to each item in terms of your present concerns about your involvement or potential involvement with the innovation.

Thank you for taking time to complete this task.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrelevant now</td>
<td>Not true of me now</td>
<td>Somewhat true of me now</td>
<td>Very true of me</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Circle One Number For Each Item

<table>
<thead>
<tr>
<th>1. I am concerned about students' attitudes toward the innovation.</th>
<th>0 1 2 3 4 5 6 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I now know of some other approaches that might work better.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>3. I am more concerned about another innovation.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>4. I am concerned about not having enough time to organize myself each day.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>5. I would like to help other faculty in their use of the innovation.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>6. I have a very limited knowledge of the innovation.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
7. I would like to know the effect of reorganization on my professional status. | 0 1 2 3 4 5 6 7
8. I am concerned about conflict between my interests and my responsibilities. | 0 1 2 3 4 5 6 7
9. I am concerned about revising my use of the innovation. | 0 1 2 3 4 5 6 7
10. I would like to develop working relationships with both our faculty and outside faculty using this innovation. | 0 1 2 3 4 5 6 7
11. I am concerned about how the innovation affects students. | 0 1 2 3 4 5 6 7
12. I am not concerned about the innovation at this time. | 0 1 2 3 4 5 6 7
13. I would like to know who will make the decisions in the new system. | 0 1 2 3 4 5 6 7
14. I would like to discuss the possibility of using the innovation. | 0 1 2 3 4 5 6 7
16. I would like to know what resources are available if we decide to adopt the innovation. | 0 1 2 3 4 5 6 7
16. I am concerned about my inability to manage all that the innovation requires. | 0 1 2 3 4 5 6 7
17. I would like to know how my teaching or administration is supposed to change. | 0 1 2 3 4 5 6 7
18. I would like to familiarize other departments or persons with the progress of this new approach. | 0 1 2 3 4 5 6 7

Concerns Based Systems International

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrelevant</td>
<td>Not true of me now</td>
<td>Somewhat true of me now</td>
<td>Very true of me now</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Southwest Educational Development Laboratory

19. I am concerned about evaluating my impact on students. | 0 1 2 3 4 5 6 7
20. I would like to revise the innovation's approach. | 0 1 2 3 4 5 6 7
21. I am preoccupied with things other than the innovation. | 0 1 2 3 4 5 6 7
22. I would like to modify our use of the innovation based on the experiences of our students. | 0 1 2 3 4 5 6 7
23. I spend little time thinking about the innovation. | 0 1 2 3 4 5 6 7
24. I would like to excite my students about their part in this approach. | 0 1 2 3 4 5 6 7
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>26.</td>
<td>I am concerned about time spent working with nonacademic problems related to the innovation.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>28.</td>
<td>I would like to know what the use of the innovation will require in the immediate future.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>27.</td>
<td>I would like to coordinate my efforts with others to maximize the innovation's effects.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>29.</td>
<td>I would like to have more information on time and energy commitments required by the innovation.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>30.</td>
<td>Currently, other priorities prevent me from focusing my attention on the innovation.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>31.</td>
<td>I would like to determine how to supplement, enhance, or replace the innovation.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>32.</td>
<td>I would like to use feedback from students to change the program.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>33.</td>
<td>I would like to know how my role will change when I am using the innovation.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>34.</td>
<td>Coordination of tasks and people is taking too much of my time.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>35.</td>
<td>I would like to know how the innovation is better than what we have now.</td>
<td>0 1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
AdvancEd’s Survey Questions used for Stakeholder Feedback Diagnostic

Standard I. Section: Purpose and Direction

1. Our school's purpose statement is clearly focused on student success.
2. Our school's purpose statement is formally reviewed and revised with involvement from stakeholders.

3. Our school's purpose statement is based on shared values and beliefs that guide decision-making.

4. Our school's purpose statement is supported by the policies and practices adopted by the school board or governing body.

5. Our school has a continuous improvement process based on data, goals, actions, and measures for growth.

Standard II. Section: Governance and Leadership

6. Our school's governing body or school board complies with all policies, procedures, laws, and regulations.

7. Our school's governing body or school board maintains a distinction between its roles and responsibilities and those of school leadership.

8. Our school's leaders support an innovative and collaborative culture.

9. Our school's leaders expect staff members to hold all students to high academic standards.

10. Our school's leaders hold themselves accountable for student learning.

11. Our school's leaders hold all staff members accountable for student learning.
12. Our school’s leaders regularly evaluate staff members on criteria designed to improve teaching and learning.

13. Our school’s leaders ensure all staff members use supervisory feedback to improve student learning.

14. Our school’s leaders engage effectively with all stakeholders about the school’s purpose and direction.

15. Our school’s leaders provide opportunities for stakeholders to be involved in the school.

**Standard III. Section: Teaching and Assessing for Learning**

16. All teachers in our school monitor and adjust curriculum, instruction, and assessment based on data from student assessments and examination of professional practice.

17. All teachers in our school personalize instructional strategies and interventions to address individual learning needs of students.

18. All teachers in our school regularly use instructional strategies that require student collaboration, self-reflection, and development of critical thinking skills.

19. All teachers in our school use a variety of technologies as instructional resources.

20. All teachers in our school use a process to inform students of their learning expectations and standards of performance.

21. All teachers in our school provide students with specific and timely feedback about their learning.
22. All teachers in our school use multiple types of assessments to modify instruction and to revise the curriculum.

23. All teachers in our school use consistent common grading and reporting policies across grade levels and courses based on clearly defined criteria.

24. All teachers in our school participate in collaborative learning communities that meet both informally and formally across grade levels and content areas.

25. All teachers in our school have been trained to implement a formal process that promotes discussion about student learning (e.g., action research, examination of student work, reflection, study teams, and peer coaching).

26. In our school, challenging curriculum and learning experiences provide equity for all students in the development of learning, thinking, and life skills.

27. In our school, related learning support services are provided for all students based on their needs.

28. In our school, a formal structure exists so that each student is well known by at least one adult advocate in the school who supports that student's educational experience.

29. In our school, all staff members use student data to address the unique learning needs of all students.

30. In our school, staff members provide peer coaching to teachers.

31. In our school, a formal process is in place to support new staff members in their
professional practice.

32. In our school, all staff members participate in continuous professional learning based on identified needs of the school.

33. In our school, a professional learning program is designed to build capacity among all professional and support staff members.

34. In our school, all school personnel regularly engage families in their children's learning progress.

35. In our school, all stakeholders are informed of policies, processes, and procedures related to grading and reporting.

Standard IV. Section: Resources and Support System

36. Our school provides qualified staff members to support student learning.

37. Our school provides instructional time and resources to support our school's goals and priorities.

38. Our school provides sufficient material resources to meet student needs.

39. Our school provides protected instructional time.

40. Our school provides a variety of information resources to support student learning.

41. Our school provides a plan for the acquisition and support of technology to support student learning.
42. Our school provides a plan for the acquisition and support of technology to support the school's operational needs.

43. Our school provides high quality student support services (e.g., counseling, referrals, educational, and career planning).

44. Our school provides opportunities for students to participate in activities that interest them.

45. Our school maintains facilities that support student learning.

46. Our school maintains facilities that contribute to a safe environment.

V. Section: Using Results for Continuous Improvement

47. Our school uses multiple assessment measures to determine student learning and school performance.

48. Our school employs consistent assessment measures across classrooms and courses.

49. Our school has a systematic process for collecting, analyzing, and using data.

50. Our school ensures all staff members are trained in the evaluation, interpretation, and use of data.

51. Our school uses data to monitor student readiness and success at the next level.

52. Our school leaders monitor data related to student achievement.

53. Our school leaders monitor data related to school continuous improvement goals.