

Educational Change: The View From Within

by

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Abstract

The purpose of this dissertation research was to capture the lived experiences of teachers in an independent private school during a four-year period of multiple systemic changes. This was done in a retrospective manner to gain firsthand insights from within the systemic change. The perceptions on change from teachers with varying academic preparation, teaching experience, and tenure at the school provided valuable information concerning the process of simultaneous systemic change within a private independent school.

This retrospective qualitative case study focused on three areas of intentional systemic change over a four-year time span within a private, independent school. This process of change and its effect is documented through the eyes of classroom teachers and the effect that the changes had on them personally, practically, and professionally. The three areas of simultaneous systemic change were: reduction of class size, technology integration, and collaborative leadership of teachers. The following research questions were explored in this study:

1. What are the teachers' perceptions of their contribution to implement and sustain change?
2. What intellectual and emotional work must teachers do to successfully implement and sustain change?
3. What supports do teachers need when implementing and sustaining change?

The researcher conducted interviews with each teacher following a series of constructed questions. These interviews were recorded in order to preserve and document teachers' reflections on an intensive, implementation of three systemic changes, transcribed and then coded using the NVivo 10 Qualitative Data System.

The themes that emerged from the interviews include: (1) clarifying the proposed change and the role of the teacher in change, (2) clarifying the role of the administrator in change, (3) supporting through professional development and pacing of change, (4) building trust and team membership. The findings from this study provide valuable insight into change for teachers and administrators. The participants in this study brought to life the complexities and needs of educators embarking on change.

Based on its findings, this study recommends that further investigation into teacher self-efficacy and emotional intelligence in the change process be conducted. The results of this study suggest that it is valuable for administrators to invest time in the study of the change process. The change process within a school is complex for teachers and all involved. Change is personal and change within an organization is often slow. Even with the best of leadership, change which transforms culture and practice takes years. Addressing the complexities and focusing on the needs of those involved can dramatically influence in a positive manner the experience and outcome of the change process and the culture in which it takes place.

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CHAPTER ONE. INTRODUCTION AND OVERVIEW OF THE STUDY

Description of the Problem

“By definition, change is any significant alteration in the status quo that affects an individual or organization” (Bloom, 2005, p. 21). Change usually calls for an alteration in the roles and responsibilities of people. This happens whether the change is a personal change or an organizational change. Prochaska, Norcross, and DiClemente (2007) devoted years of clinical research to the stages of change, the unfolding of change, and the complexity of change due to dealing with individuals (see Appendix A). Evans (2001) combined a psychological and systemic perspective to study change in educational settings. The research again points to the complexity of the change process. Evans states, “the success of change depends heavily on the readiness of people, the organizational capacity of schools, and the kind of leadership that is exerted” (2001, p. xiv).

Educational change in today’s world is forcing itself on us at every turn, wielding both positive and negative forces. Ebbeck and Chan (2011, as cited in Ebbeck & Waniganayake, 2003) wrote, “Change is an ever present entity and necessity for growth and to meet existing and future demands” (p. 43). The futility of school change is legendary; it is an enormous and intricate task (Evans, 2001). In order to grow and develop, the positive forces must be used to our advantage and the negative forces must be blunted (Fullan, 1993). Educational change faces a paradox: its essential

agents of change—teachers and administrators—are also its targets and, sometimes, its foes (Evans, 2001). Change happens in small amounts at times and in very large waves at other times. The idea and process of educational change is surrounded by questions and increasingly by research. Schools are organizations, made up of individuals, which generate complex problems that cannot be solved by simple solutions (Bloom, 2005) (see Appendix B).

Newmann and Wehlage (1995), for the Center on Organization and Restructuring of the Schools (CORS), closely examined the process of change in schools. Researchers analyzed data from over 1,500 elementary, middle and high schools throughout the United States, and conducted field research in 44 schools in 16 states (Newmann & Wehlage, 1995). The study indicated that with successful change student learning does increase. Another strong indication from the study was the importance of vision and strong learning communities when attempting change. This research examined successful schools that were already up and running with change. The limitation of the study was that it did not reveal how the successful schools got that way. It left unanswered questions, calling for closer examination of change and the problems associated with the change process (Newmann & Wehlage, 1995).

Louis and Kruse (1995) conducted a study on five urban schools that had been attempting reform, or change, for several years. The researchers used their backgrounds in professionalism to delve into the importance of the development of professional community during change. An outcome of this work was a framework for evaluating elements of community often used to aid in the process of change in schools.

This study added to the literature on school change by again emphasizing the complex process of change (Louis & Kruse, 1995).

Bryk (1998) examined the 1989 Chicago Reform Experiment using quantitative and qualitative data. Case studies of six schools actively going through change were examined combining narratives and quantitative analyses. This study resulted in an insightful picture of the decentralization of power and authority in the Chicago Reform Experiment. Bryk (1998) provides a detailed analysis with relevant application to the change process within the school. The findings illustrate how under decentralization the principal's role is recast, social support for change can grow, and ideas and information from external sources are brought to bear on school change initiatives.

Research points to the fact that change is complex and school change is no different. Fullan (1999) writes that complexity makes things "exceedingly difficult, while the answer lies within its natural dynamics" (p. 3). Fullan (1999) also states that those very same dynamics "can be designed and stimulated in the right direction but can never be controlled" (p. 3). Research has shown change to be more attainable for the teachers that are given leadership over their own growth and learning (see Appendix C). An effective teacher makes positive change occur in the classroom (Marzano, 2003; Nye, Konstantopoulos & Hedges, 2004).

The individual classroom teacher plays a pivotal role in educational change. Anderson and White (2011) revealed that helping teachers and administrators develop supportive relationships built on trust was a key ingredient to successful change. Teachers must see the overall plan for change and understand the thinking behind the plan. Change that can be linked to positive results within the classroom for students

stands a much greater chance of being embraced by the classroom teacher. The ultimate purpose of educational change or reform is to benefit all students (Fullan, 1999). No matter what the overall plan for change, the individual teacher will put into play the instructional pieces that bring about the educational change for students.

Even research of educational change at the college level indicates complexity as well as the importance of the classroom instructional leader. In a study by Sin, McGuigan, and Chung (2011), reshaping, or change, of the Australian higher education system was the focus. The case study was conducted within a large and diverse department at Macquarie University. Over a two-year period, Macquarie University enacted a number of teaching and learning policies that required immediate compliance. The changes were aimed at improving the quality of teaching and student learning through enhanced staff engagement in this time of change. These change policies had direct impact on the teaching activities of faculty. The following research questions were asked:

- How does the teaching staff feel about the changes that are brought about by institutional teaching related policies?
- How does the teaching staff comply with teaching related policy requirements and changes that directly impact on their teaching activities?
- How does the teaching staff adjust to making changes in their classrooms that are directly affecting their teaching activities? (Sin, McGuigan, & Chung, 2011, p. 84)

A questionnaire was used for data collection of both quantitative and qualitative data. The questionnaire was designed intentionally with open-ended questions for

individual reflection. A response rate of 30% was achieved on the questionnaire.

Common themes that emerged from this research were as follows:

- Faculty felt that too many changes were implemented at a pace that was too rapid.
- Faculty felt changes were duplications or contradictions.
- Faculty felt that they were not given adequate amount of time to adjust to changes.

A very telling comment from the questionnaire stated, “I don’t have much faith in policies designed by people that don’t do much teaching” (p. 86). The main sources of identified stress fell into the categories of time pressure to adjust to the changes and a sense of skepticism behind aim and motivation of the changes. Findings of this study pointed to the importance in coping with change through peer support and leadership, nurturing a culture of collegiality for the change process. The researchers highlighted that teaching staff are in a critical position “where institutional change directly impacts on their teaching activities and ultimately on the quality of student learning through these activities” (Sin et al., 2011, p. 82).

Systemic change, or system-wide change, is no different. The individual classroom teacher is still the main agent of change. Systemic change is often described as a “paradigm shift” in education. It is a comprehensive approach recognizing fundamental aspects in education. This type of change requires a sophisticated strategic plan and trained personnel. Systemic change also stands a higher chance of success if it is a shared “vision” among a group of committed individuals (Fullan, 1993). Sin, McGuigan, and Chung (2011) state in their study, “one

of the key strategies used by the leaders and managers of the change process was the persistent engagement of all stakeholders” (p. 83). This same study by Sin, McGuigan, and Chung (2011) identifies the importance of leadership in “nurturing collegiality in the work environment for successful change processes and outcomes” (p. 89). Change of a systemic nature is only as good as it plays out effectively in the individual teacher’s classroom, improving education for students (Adelman & Taylor, 2007).

When systemic change does play out effectively in a classroom under the watchful eye of the classroom teacher, the question becomes sustainability. Sustainability at the classroom level and the whole school level is an important goal for overall change. What is the meaning of this word “sustainability”? Fullan (2005) describes it as: “Sustainability is the capacity of a system to engage in the complexities of continuous improvement consistent with deep values of human purpose” (p. ix). Hargreaves and Fink (2000) have a different definition of sustainability: “Sustainability does not simply mean whether something will last. It addresses how particular initiatives can be developed without compromising the development of others in the surrounding environment now and in the future” (p. 30).

Leadership from “system thinkers” is the key to sustainability of systemic change within schools and systems (Fullan, 2005). Fullan refers to these leaders as “the new theoreticians—doers with big minds, who treat moral purpose as a cognitive as well as an emotional calling” (p. xiii). Heifetz and Linsky (2002) use the analogy of a “dance floor” and a “balcony” when describing these new theoreticians. These leaders must stay on the dance floor (exhibit deep leadership for learning) and be on the balcony (step back to get perspective) at the same time. It is easy to see how classroom

teachers, who see change come and go due to a variety of reasons, can get caught up in a “project mentality or projectitis” view of change (Adelman & Taylor, 2007). Fullan (2005) answered this by pointing out the need for “leadership that motivates people to take on the complexities and anxieties of difficult change” (p. 104). Systemic change requires an infrastructure of “champions” to steer the process and become the mechanism for guiding change (Adelman & Taylor, 2007). Adelman and Taylor cited Tom Vander Ark (2002), executive director of education for the Bill and Melinda Gates Foundation, as saying, “Effective practices typically evolve over a long period in high-functioning, fully engaged systems” (p. 323). Stakeholders in change need to experience initiative in ways that produce feelings of collective identity, destiny, and vision (Adelman & Taylor, 2011). A definition that fits this study well combines the work of several change researchers: Sustainability is the capacity of a system to engage in the complexities of continuous improvement (change or innovation) without compromising the development of others in the surrounding environment now and in the future (Fullan, 2005; Hargreaves & Fink, 2006).

Research on change has been plentiful in the past decade. The idea of viewing change from the teacher’s perspective is a fairly fresh area of research. A seminal study examining the change process from within was done using middle school students and their teachers (Bascia & Hargreaves, 2000; Hargreaves, 1986, 1997; Hargreaves, Earl & Ryan, 1996). The study is the basis of the book, *Learning to Change*, written in 2000 by Hargreaves, Earl, Moore, and Manning. The teachers in this study were facing extensive curriculum changes. These changes could also be termed “systemic changes” since they occurred system wide. The teachers interviewed for this

study provided a glimpse into their world of change. Communication with the participants of this study extended well beyond the original two-year period and into a period of five years after the initial study.

The greatest contribution of this study by Hargreaves et al. (2000) lies in using the eyes of the teachers as the conceptual lens. The teachers' views highlighted the following areas that remain critical today in the study of the change process:

- What are the teachers' perceptions of their contribution to implement and sustain change?
- What intellectual and emotional work must teachers do to successfully implement and sustain change?
- What supports do teachers need when implementing and sustaining change?

This research reiterates the idea that teachers are learners as well, and change requires new learning. Change is intellectual and emotional and requires a motivation to change (Bandura, 1986). This study revealed the need for a motivation leading to the steps of making sense of the change, translating what it takes to bring about the change, and implementing the change. These steps were identified as critical through the eyes of the teachers when the pragmatic goal of the change was to take "ideas to reality" (Elmore, 1995).

The richness of gathering the teachers' perspectives of change set forth the goal of representing the successes and frustrations associated with the process of change. Within an honest and open representation, the hope is that others may apply any knowledge gained to their process of change and garner more success and less frustration. This seminal study conducted by Hargreaves, Earl, Moore, and Manning

(2000) provides an excellent framework for my research study of change from the view of the teacher operating within the change. This would begin to fill the existing gap in research from within the change process in education.

Since change is best studied from within the change itself, the opportunity to study simultaneous systemic change occurring during a four-year span at this particular independent school should not be left untouched or unnoticed. The goal of this particular research is for understanding of the change process from the perspective of teachers who lived it. The background of this particular situation lends itself to the need for study as well. Independent schools tend to be an under-researched group as a whole (Boerema, 2009). The change process is often approached quite differently in an independent school than in a public school, once again causing great argument for the need for this research. This particular time at this school provides the perfect research opportunity for investigating the teachers' perceptions of change as seen through their lived experiences.

Statement of the Problem

Change within a school can be viewed in many different ways, especially if the changes are far reaching systemic changes. This study focuses on those types of changes: reduced class size, technology integration, and collaboration. Since people do view and cope with change differently, it is important to acknowledge and understand that there is a process that change takes within a large system such as a school. This process is complex and involves deep human commitment and purpose (Fullan, 1993, 1999, 2003, 2005). Fullan (1993) reminds us that Senge (1990) describes the need for a fundamental shift of mind, or *metanoia*, when implementing change. Education is

historically a conservative system. In order to introduce a theme of continuous change into such a conservative system, there must be a shift of mind, or *metanoia* (Senge, 1990). The idea of introducing reform after reform that does not truly take hold or produce positive outcomes simply gives change a bad name, and it becomes an aggravation (Fullan, 1993). To avoid the negative and move change within a school to the positive, we must look at making the educational system a learning organization that embraces change as a way of life.

Educators become teachers in order to make changes in people's lives for the better. Fullan (1993) describes what teachers do as "making a difference in the lives of students regardless of background, and to help produce citizens who can live and work productively in increasingly dynamically complex societies" (p. 4). He goes on to say that this is not necessarily a new revelation; however, what is new is "the realization that to do this puts teachers precisely in the business of continuous innovations and change" (1993). This makes teachers agents of change and puts them in the business of managing the forces of change on an ongoing basis. Today's world expects students to be prepared to deal with change individually and collaboratively to produce positive outcomes. Fullan (1993) made this statement concerning the potential of education getting this job done:

Of all the institutions in society, education is the only one that potentially has the promise of fundamentally contributing to this goal. Yet, education far from being a hotbed of teaching people to deal with change in basic ways is just the opposite. To break through this impasse, educators must see themselves and be seen as experts in the dynamics of change. To become expert in the

dynamics of change, educators—administrators and teachers alike—must become skilled change agents. If they do become skilled change agents with moral purpose, educators will make a difference in the lives of students from all backgrounds, and by so doing help produce greater capacity in society to cope with change. (pp. 4–5)

The present study focuses on a school that for almost forty years had not undergone planned and intentional systemic change. In a period of four years, three systemic changes were put in place simultaneously in this school culture. This study focuses on these changes of class size reduction, technology integration, and collaborative leadership as seen through the eyes of the teachers who lived it. The value in this study is being able to examine those simultaneous changes through the eyes of five classroom teachers. These teachers shed light on the way real educators deal with real change—they became change agents. The teachers have different background experiences, different levels of training, different tenure at the school, and different grade level experiences. The aspects of change can be captured in the lived experiences of these educators.

Purpose of the Study

The purpose of this study is to capture the lived experience of teachers in an independent school during a four-year period of multiple systemic changes. This was done in a retrospective manner to gain firsthand insights from within the systemic change. The perceptions on change from teachers with varying academic preparation, teaching experience, and tenure at the school provided valuable information concerning the process of simultaneous systemic change within an independent school.

This retrospective qualitative case study focuses on three areas of intentional systemic change over a four-year time span within an independent school. This process of change and its effect is documented through the eyes of classroom teachers and the effect that the changes had on them personally, technology integration, and collaborative leadership. practically, and professionally. The three areas of simultaneous systemic change were: classroom size reduction,

Research Questions

The following research questions were explored in this study. These questions build on the work done by Hargreaves, Earl, Moore, and Manning (2000).

1. What are the teachers' perceptions of their contribution to implement and sustain change?
2. What intellectual and emotional work must teachers do to successfully implement and sustain change?
3. What supports do teachers need when implementing and sustaining change?

Importance of the Study

Change is a complicated process but necessary in the area of education in order for us to keep up with the changing demands of the world for our students. As difficult as change can be for some, the idea that it will help one better prepare young people is enough for a great teacher to engage the process of change. Small changes implemented by individuals can be daunting, and systemic changes tackled by schools loom even larger. It is valuable to look within an organization that has gone through systemic changes to learn from the journey. The value is hidden in the layers of the

change process and the individual and group responses tucked deeply within these layers.

This retrospective qualitative case study explored simultaneous systemic changes within an independent school as documented through the eyes of five classroom teachers with varying backgrounds in academic preparation, teaching experience, and tenure at the school.

Scope of the Study

Change confronts a person where they are with what they have at that time in their arsenal of experiences. Since each person views change differently based on this prior statement, each person reacts to change differently as well. Heifetz and Linsky (2002) state that change requires an individual to experiment, discover, and adjust by changing attitudes, values, and behaviors. In order to lead a group in change improvements of any type, one must consider some givens that come along with change. Change brings with it some form of anxiety for most people. There are many unknowns that lurk within change. The pace at which change expectations are placed on people is extremely important to thoughtfully examine from the standpoint of those being asked to make the changes. Schools are high-powered environments of learning, knowledge, and assessment, and they require great dedication and leadership from the individual teachers within the school itself (Fullan, 2003).

The framework of this study included the following simultaneous systemic changes occurring during a four-year span: class size reduction, technology integration, and collaborative leadership. The teachers involved in this study represent variations in academic preparation, teaching experience, and tenure at the school. It is the goal of

this study to bring understanding to the change process through the description and analysis of a pattern of relationships as represented in the lived experiences of the teachers (Miles & Huberman, 1994) .

A basic logic model uses words and pictures to describe the sequence of activities thought to bring about change (Kellogg, 2004) (see Appendix D). It is a visual way of presenting and sharing the understanding of the relationships among the resource you have to operate your program, the activities you plan, and the changes or results you hope to achieve (Kellogg, 2004). The logic model is used in chapter two to clarify the simultaneous systemic changes in this study and the teachers' journeys into these changes.

Definition of Terms

A list of the definitions of terms is offered to provide the readers an understanding of the context of this study. They are used throughout the study but may vary in other contexts based on the experiences and/or beliefs of the research and referenced researchers (see Appendix E).

Assumptions and Limitations

The following delimitations were made in this study:

- The participant population was composed of teachers at this particular school.
- The bias of the author/researcher may have influenced the teachers' interviews, conducted by me as the author and researcher and administrator at the school.
- The participant population responded accurately and honestly to interview questions.

- The number of participants and the study's qualitative method of investigation limit generalizability of the results.
- Interview questions were stated in a clear, unambiguous manner.

Research indicates the need for continued study of individuals engaged in change within schools. Fullan's (1993) statement, "Systems do not change themselves, people change them" (p. 7), sets the stage. Valuable insights can only be gathered from those within a change process as it unfolds in a situation. Due to the need to study change from within, Vetter (2012) demonstrated the value of conducting qualitative research on one teacher in a practitioner research group. Research conducted by Hargreaves and Fullan (2000) points to the value of reflection from individuals experiencing the change process. Due to the small and unique sample selected for this particular research study, results may not be generalizable beyond the specific population from which the cases were drawn. This study would also help bridge the gap in the literature for research conducted within independent schools (Lubienski & Lubienski, 2005).

Researcher bias is brought to this project due to the fact that I am an administrator within the school involved in the research. Measures were taken to keep this in check and to capitalize on the positive influences of this fact. This was extremely important and positive due to the fact that I was a teacher at the school prior to becoming an administrator. I have a long history of observing and participating in change in this school over a 24-year period both as a teacher (17 years) and an administrator (seven years).

CHAPTER TWO. LITERATURE REVIEW

Theoretical Framework

The future of education in our world is a learning future that is in constant flux with the new tools and new needs appearing each day. Learning how to deal with the forces of change signals growth and development (Fullan, 1993). Much ground has been covered since the 1960s and the beginning of concentrated educational change. Where we are today in educational change reflects a need for a shift in true implementation of change. Educating the students of the future means we must be proactively engaged with change in a positive manner.

In a qualitative study by Vetter (2012), the change process was studied through the eyes of a teacher researcher engaged in a yearlong practitioner research group. Vetter (2012) built upon the education research that addressed teacher change. Three central theorists, Dewey, Schon, and Kegan, were used due to their focus on professional experience and change. The theories of change espoused by these three researchers imply that teachers must acquire new knowledge and implement that new knowledge into practice to increase learning in their classrooms.

Dewey (1991) advocated for educators to participate in methods of intelligent action, or teacher inquiry (see Appendix F). The suggestion was for an educator to begin with a puzzling situation, generate questions, formulate solutions, and produce an evaluation of possible steps of action. For education, this suggested a continual

reflection and change of practice promoting growth for the teacher and the student. Bloom's research on organizational change within educational organizations has a direct link to Dewey's emphasis on teacher inquiry (2005). Bloom reiterates that change is not a one time event but ongoing and must be reflected upon and acted upon (2005)(see Appendix G).

Schon's (1984) theories about learning, change, and reflection promoted the idea that reflection was central for educators to understand their practices. He believed that teacher transformation, or change, occurred through reflection about personal experiences in the classroom. According to Schon, reflection in action and reflection on action informs teacher action as it unfolds (see Appendix H). This theory can be seen in the research of Evans as he mentions the necessity (and pressure) for teachers to be able to innovate, or change, while en-route during their day (Evans, 2001).

Kegan (1998) argues in his constructive developmental theory that as individuals mature experiences are understood in a more complex way (see Appendix I). As teachers are asked to take on educational change, they are also truly being asked to change the way they understand themselves and their world. This theory is evidenced in the research by Schein (2010) which highlights the fact that people's acceptance of a new perspective, or idea, depends much less on its intrinsic validity than on their own readiness to consider and understand new ideas (see Appendix J).

Vetter's (2012) use of the term "architect of transformation" highlights the idea that teachers must see themselves as agents of change (pg. 45). This study draws upon case-study research methods and positioning theory to help better understand the teacher's change process. This study revealed not only findings of change for the

teacher but also findings of change for those around the teacher as well. Vetter's research also points to the more informal professional development opportunities as being the most successful in fostering the change process for teachers. The success may be found in the fact that the practices mentioned (study groups, internships, mentoring, and networks) do incorporate reflection and collaboration. The findings indicated change to be a dynamic, interactive, and complex experience for a teacher (Vetter, 2012).

This is easier said than done since change evokes in each of us a variety of responses—these responses are not always positive or proactive. The reason for this is that change is complex. Pascale (1991) describes educational change as falling somewhere between over-control and chaos. Stacey (1992) adds to this that change is not only complex but also often “unknowable”. This means that unplanned factors associated with change are inevitable. Senge (1990) and Stacey (1992) differentiate change by using these terms: “dynamic complexity” and “detailed complexity”. Detailed complexity refers to identifying all the variables that could influence a problem—which is not truly achievable. The real world of change is dynamic complexity where unplanned factors intervene and are considered normal. This leads Senge (1990) to describe productive change as seeing interrelationships and processes of change—the real leverage for change.

This new way of looking at change becomes increasingly important in the world we live in today. Time cannot be wasted on old paradigms or unproductive ways of dealing with change. Fullan (1993) advises, “Get into the habit of experiencing and thinking about educational change processes as an overlapping series of dynamically

complex phenomena” (p. 21). This allows us to be more practical about introducing change. It allows us to dream in a new language and to think spontaneously concerning terms and constraints of change (Senge, 1990).

The complexity of change is well documented throughout research. A major reason for the complexity is the context that surrounds change. Each context is different depending on the person’s background and what they bring to the table of change. Malcolm Gladwell makes a reference to this in *Tipping Point*; he calls it the “power of context,” and reports that “people are a lot more sensitive to their environment than they seem” (Gladwell, 2000, p. 29). Individuals cannot change their past context, but we can change our immediate context for today—beginning the transformative journey of change—complex as it might be (Hargreaves, 2002).

The journey is aided by impetus that acts as a catalyst. Gladwell (2000) states this in *Tipping Point*. “What most underlies successful epidemics, in the end, is a bedrock of belief that change is possible, that people can radically transform their behavior or beliefs in the face of the right kind of impetus” (p. 258).

A qualitative research study by Altunay, Arli, and Yalcinkaya (2012) used multiple holistic case study design to examine the perception and process of change within eight primary schools (four quality management award winning schools and four not having total quality management awards) in Bornova, Buca, Gariemir, and Karsiyaka from 2009 to 2010. Semi-structured interview form was used based on research questions and literature. This study indicated the importance in the process of change for unification between the purpose of change and those experiencing the change. The qualitative nature of this study by Altunay, Arli, and Yalcinkaya (2012) is useful in helping produce

applicable solutions to the problems involved with the complexities of change in schools.

One of the complexities of change is that the future is often unclear as you embark on change. Heifetz and Linsky (2002) state that during periods of uncertainty with change it is important to give people a glimpse of moral purpose in the future: "... the positive vision that makes the current angst worthwhile ... by making the vision more tangible, reminding people of the values they are fighting for, and showing them how the future might look" (p. 122).

Another complex part of change is that change is embedded in human interaction and relationship (Fullan, 2003). Fullan (2003) cites Stacey (2001) when highlighting human interaction and relationships in change: "Knowledge is always a process, and a relational one at that, which cannot therefore be located simply in an individual head, to be extracted and shared as an organizational asset" (p. 98).

Context for Change

Relationships and community create a context for change to take place. In *Tipping Point* Gladwell (2000) states this in a concise manner: "If you want ... to bring about a fundamental change in people's belief and behavior ... you need to create a community around them, where these new beliefs could be practiced, expressed, and nurtured" (p. 173).

Intellectual unrest and challenge accompany change. For educators this can be very uncomfortable and an unknown. Fullan (2003) cites Hoban (2002) who states, "A sense of uncertainty or intellectual unrest is an inevitable consequence of being

challenged, and is usually accompanied by confusion, uncertainty, anxiety, and stress” (p. 98).

Growth and new ideas come out of healthy debate, discussion, and listening to each other as explained by Stacey (1996):

People do not provoke new insights when their discussions are characterized by orderly equilibrium, conformity, and dependence. People spark new ideas off each other when they argue and disagree—when they are conflicting, confused, and searching for new meaning—yet remain willing to discuss and listen to each other. (p. 120)

Conflict is a natural part of collective human experience but is often avoided or suppressed. Conflict should be used as a means to promote individual and organizational growth and learning (Uline, Tschannen-Moran, & Perez, 2003). This type of relational and collective work is a complex process. Stacey (2001), Fullan (1991), and Morrison (2002) have used the “complexity theory” when describing educational change. Stacey (1996) stated:

Complex adaptive systems consist of a number of components, or agents, that interact with each other according to sets of rules that require them to examine and respond to each other’s behaviour in order to improve their behaviour and thus the behaviour of the system they comprise. (p.10)

This description goes hand in hand with the idea of a learning organization that is ready to embrace the idea of change. The idea of a learning organization made popular through writings by Senge has certain characteristics that make it a context for change. Coppieters (2005) cited Seel (2000) with these implications for learning organizations:

- Organizational learning occurs through shared insights, knowledge and mental models ... and builds on past knowledge and experience.
- Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspirations are set free, and where people are continually learning to learn together.
- A learning company is an organization that facilitates learning of all its members and continually transforms itself. Learning organizations mirror the complexity of the change process; they themselves are complex organizations that act as a catalyst and impetus for change. (p. 133)

Lima (2013) used interpretive qualitative research design to study the different perspectives on change of three classroom teachers at varying points in their teaching careers. Change in this study is referenced as a broader term of “critical praxis”, or putting an idea into practice. The study revealed that critical praxis, or change, from the teachers’ perspectives included strategic steps: interpersonal mediation, resource management, and political mobilization. The study acknowledged the importance of continuous, self-reflective connection between theory and action in the following steps: identifying the problem, researching the problem, developing a collective plan of action, implementing a plan of action, and assessing efficacy. This correlates with Fullan’s (1993) statement that “it is only by individuals taking action to alter their own environments that there is any chance for deep change” (p. 40).

Systemic Change

Systemic change is defined best as change that pervades all parts of a system, taking into account the interrelationships and interdependencies among those parts (Holzman, 1993; Joseph & Reigeluth, 2010). A move toward systemic change must begin with creating a climate and culture for change (Adelman & Taylor, 2007).

Adelman and Taylor (2007) are very specific about the phases of systemic change:

- creating readiness—increasing a climate/culture for change through
- enhancing the motivation and capability of a critical mass of stakeholders
- initial implementation—carrying out change in stages using a well designed
- infrastructure to maintain and enhance productive changes
- institutionalization—ensuring there is an infrastructure to maintain and
- enhance productive changes
- ongoing evolution and creative renewal—using mechanisms to improve
- quality and provide continuing support in ways that enable stakeholders
- to become a community of learners who creatively pursue renewal. (p. 61)

Some of the key facets of systemic change include social marketing, articulation of a clear, shared vision, commitment from stakeholders, designating leadership, and developing an infrastructure (Adelman & Taylor, 2003). In a school setting, this equates to a sense of community with mutual caring and support for the change (see Appendix K). Adelman and Taylor (2007) state that pre-service and in-service training on systemic change processes and problems has been given “short shrift” (p. 72). Due to this, there is often a lack of clarity in school improvement planning guides in the area of

focus on how changes will be accomplished and the personnel who are expected to act as change agents (Adelman & Taylor, 2007).

Leadership is a key component in change and aids in “individuals taking action”. Anderson and White (2011) used their findings in an illustrative case study set in rural Australia to demonstrate the importance of leadership in resourcing school change. In this particular study, the principal of a small school was able to spur on a culture of change by developing and strengthening community relationships. This again reiterated that 21st century change brings new leadership responsibilities within school culture to act as agents of change and catalysts for change (Ingvarson, Anderson, Gronn & Jackson, 2006).

Fullan (2003) and Senge (2012) put forth the idea that for change or developmental processes to be effective, these processes must focus on developing the conditions and context within which individuals and groups operate. This is in addition to developing knowledge and skills of the individuals. Fullan (1993) speaks loud and clear when he says, “Systems do not change themselves, people change them” (p. 7). Fullan (1993) maintains the future of productive change in education lies in the training of pre-service and in-service teachers as agents of change.

A gap that continues to exist in the literature is the ability to study from the center of systemic change as it happens—to be on the dance floor of change while also standing on the balcony observing the process (Fullan, 2005). The richness of this particular study exists in allowing documentation of a variety of changes lived by those inside the change at the precise moments of the active process. This particular research reveals data concerning simultaneous systemic change as lived experiences

from inside the change. The data collected can be used to inform those inside change and those with the delicate (yet tough) jobs of aiding the change process.

The teachers in the particular school selected for this research were most certainly change agents. This research project is aimed at capturing the lived experience of those change agents. The school selected for this study introduced three simultaneous systemic changes during a four-year period. The teachers in this school were “change agents”. The goal of this research is to examine change from the inside and capture the lived experience of the participants (Eisner, 1991). The natural setting within a school of three simultaneous systemic changes is a unique opportunity for research. Reduction in class size, technology integration, and collaborative leadership all occurred simultaneously within a four-year span of time. The simultaneous systemic changes were intentional in order to help propel the school forward academically.

Classroom Size Reduction

Research in class size reduction (CSR) is surrounded by rigorous debate from many angles (Blatchford, 2003). Class size has been studied since about 1900 in the United States and is still misunderstood and improperly used by researchers and educators alike (Achilles, 2008). At first glance, the connection between class size reduction and more support for students seems to make perfect sense. At second glance, the positive consensus of classroom teachers cries out, linking smaller class size to improved quality of teaching and learning. A close review of research reveals the many facets to be considered when examining class size. Because these many facets can be polarizing, a rigorous debate ensues (Mishel & Rothstein, 2002). The rigorous debate stems mainly from the disparity between what is being measured as the

outcome of class size reduction in a particular study. These outcomes of class size reduction range from standardized test scores to classroom instruction and teacher efficacy.

Project STAR (Student-Teacher Achievement Ratio) is counted as one of the most well-known and important educational investigations carried out to date (Mosteller, 1995). This study involved 79 schools in about 42 of the 141 school systems in Tennessee (Nye, Hedges & Konstantopoulos, 2000). Participating districts had to agree to participate for four years and to allow site visitations for data collecting (which included extra student assessments). Random assignment of students and teachers to class types from kindergarten through third grade was also a requirement of the experiment. The experiment was commissioned in 1985 by the Tennessee State Legislature. A consortium of Tennessee universities and the Tennessee State Department of Education carried out implementation. The cost of this randomized experiment was approximately \$12 million. Project STAR research is described by Cawelti (2003) as one of 11 studies in the past 50 years that have changed education.

The initial findings of Project STAR pointed to a significant effect of small classes on achievement (Nye et al., 2001). Data indicated that small classes benefited all students, but minority and at-risk students showed the greatest gain in achievement. Small classes indicated improved instruction and a decrease in the chance of students being held back. Finn and Achilles (1990) revealed a similar outcome within their data analyses of the experiment as well. This has been to date the longest ongoing study of data on class size and continues to guide research on class size reduction. There are several researchers that feel their analyses of the Project STAR data reveal issues and

concerns in how the original data were analyzed, thus producing varying outcomes. Nye, Hedges, and Konstantopoulos (2000) and Krueger (1999) used a different analysis method and produced results pointing toward no significant effect of small class size on achievement. Hanushek (1986) is usually cited by small class critics since his work is based around production function studies. These studies indicated smaller class size did not increase student achievement; however, it is felt that he ignored class-size research findings like early intervention, intensity, and duration (Achilles & Finn, 1999). Hanushek makes use of large, nonspecific databases not established for class-size research. Critiques in his research are based largely around Pupil Teacher Ratio (PTR), not class size data.

Another prominent study, SAGE (Student Achievement Guarantee in Education), was begun in urban areas of Wisconsin in 1996. This study was akin to the STAR experiment in that it began in kindergarten and progressed one year at a time, phasing in lowered class size. Students showed significant gains in tests scores and behavior. This study also pointed out a most important outcome of lowered class size: teachers felt that they were more effective (teacher self-efficacy) and able to provide more individual attention to students (Fish, 2007). This was an important finding for educators and solidified what they experienced pragmatically in the classroom on a daily basis. This finding also supported earlier findings by Harold Wenglinsky (1997), which stated: "Fourth graders in smaller-than-average classes are about a half a year ahead of fourth graders in larger-than average classes ..." (pp. 24–25). Wisconsin's SAGE study, like Tennessee's Project STAR, indicated cognitive and non-cognitive gains as outcomes of lowered class size.

Achievement is just one possible outcome that has been examined through the lens of class size reduction. A research study by Achilles, Krieger, Finn, and Sharp (2003) highlights increased student engagement as an important outcome of class size reduction. Another study by Achilles, Finn, and Pate-Bain (2001) compiled information concerning how group size influences the way learning tasks are designed and implemented by the teacher to accomplish desired goals. Classroom teachers know they do a better job of teaching with small classes, and it is documented fact that parents demonstrate greater involvement in a school with smaller class size (Achilles & Finn, 1999).

There continues to be a rigorous debate among researchers and educators surrounding class size and achievement. Other positive factors and outcomes associated with class size reduction tend to be a common thread supported throughout research. Glass and Smith (1978) used meta-analysis to calculate the effects of many studies involving class size reduction. The following areas were strongly supported by lowered class size: improved instruction, more individual attention to students, increased level of student participation, class attendance, and stronger student self-esteem. These areas, combined with teacher self-efficacy cited earlier as a positive outcome from the Wisconsin SAGE study, are of extreme importance to the school in this particular research study. Therefore, class size reduction steps were begun at this school in 2008.

Class Size Reduction Steps of Systemic Change

Due to this school being an independent school, funding for class size reduction had to be carefully analyzed, and creative steps had to be employed. Some of these

first steps were not the school's first choices due to research findings; however, funding for this systemic change of lowered class size had to be gradual. These first steps would include temporary use of pullout programs to lower class size for a particular subject matter and the use of a teacher aide. Research on pull out programs and aides indicate that these are not a replacement for overall class size reduction aimed at the positive outcomes mentioned earlier (Achilles, 2008; Blatchford, 2003; Wang & Finn, 2000). Professional development was also begun with teachers concerning how lowering class size should affect their teaching practices. Research has shown that if teachers are not trained in how to take advantage of lowered class size, not much changes with instructional practices (Blatchford, 2003).

The first step implemented in 2008 to 2009 was to take the normal class size in grades one through five and lower it during reading instruction (a time period of approximately one hour daily depending on the grade level). The grade levels in this school have three classes per each grade level, and each class could have up to 26 students in a class. This first intentional step, to lower the class size for all students during reading instruction, was accomplished by employing teachers who would rotate through the grade levels during reading instruction and be the fourth teacher for reading. This allowed each of the three grade level teachers to pull out a few students during reading to make up essentially a fourth class for reading instruction. This allowed the instructional number in a classroom during this period of reading instruction to be at approximately 18 students or below.

During the 2009–2010 school year, the school took the next step to increase this lowered classroom size to encompass a greater amount of instructional time. The pull

out program using a fourth hired teacher was employed once again. This time the teacher taught a fourth pullout group for not only reading instruction, but it was enlarged to encompass the entire language arts block of instruction. This language arts block of time includes reading, writing, spelling, and grammar instruction (a daily time period of approximately 1½ hours to 1¾ hours depending on the grade level).

The 2010–11 school year provided unwanted help from the downturn in overall economics in lowering classroom size. Independent schools across the nation began to feel the effect of fewer enrollments due to job loss and economic decline in the United States. This independent school was no different. Due to budgeting and finance, which must be considered in an independent school, the number of 20 students per class in grades one through five had been set as a goal for lowered class size. The 2010–11 school year provided a lowered classroom setting throughout the entire instructional day due to fewer enrollments in all grades except third grade. The purchase of a portable classroom and the hiring of a fourth third grade teacher met the commitment to lowered class size for third grade. This was an extreme measure by the school to solidify the commitment to classroom size reduction. This commitment was strengthened yearly with the following positive outcomes observed and experienced by students, teachers, and parents: improved instruction, more individual attention to students, increased level of student participation, class attendance, stronger student self-esteem, and teacher self-efficacy.

The 2011–12 school year was used to solidify new teaching techniques to maximize the classroom size reduction. Professional development included: small and large group instruction, daily technology usage to enhance curriculum, differentiation of

instruction for individual student needs, and an increase in digital parent communication (blogs, wikis, email). The classroom size reduction was linked to teachers having time to attend to those types of enriching activities for their class. The professional development goal was to provide training to teachers on how to capitalize on a lowered number of students to produce the desired outcomes: improved instruction, more individual attention to students, increased level of student participation, class attendance, stronger student self-esteem, and teacher self-efficacy.

Classroom Size Reduction Resources

Resources associated with classroom size reduction were research and funding. Research provided the necessary understanding and knowledge to make decisions and commitments to classroom size reduction. Funding enabled professional development, which was critical in helping teachers take full advantage of a lowered class size through the implementation of specific teaching strategies. Funding was also instrumental from the budgetary standpoint of teaching units needed to lower classroom size as well as funding for professional development. Classroom size reduction activities used were professional development for small group instruction/differentiation of instruction, math and reading pull out programs, language arts pull out programs, and classroom size reduction for the instructional day. Outputs from these activities were increased use of inquiry-based learning methods, use of formative assessment for differentiated instruction, increased student/teacher interaction, and relaxed classroom atmosphere. The outcomes, or specific changes, were increased daily student/teacher engagement, increased school-wide morale, increased faculty collaboration, increased use of learning activities/hands-on teaching practices, and true differentiation of

instruction to meet individual needs of students. The impact of classroom size reduction was a more consistent meeting of student and teacher needs academically, socially, and emotionally.

Technology Integration

Central to any discussion of technology integration in schools is the idea of teacher change. Teachers are being asked to integrate technology into their daily instruction and across curriculum areas. Fullan and Stiegelbauer (1991) found that when a teacher is asked to use technology to facilitate learning, some degree of change is required in the following area: (a) beliefs, attitudes, or pedagogical ideologies; (b) content knowledge; (c) pedagogical knowledge of instructional practices, strategies, methods, and approaches; and (d) novel or altered instructional resources, technology, or materials.

According to national (CDW-G, 2006) and international (Voogt & Knezek, 2008) research reports, classroom teachers' efforts to make use of technology to support student learning is on the rise. Professional development in the area of technology has helped teachers move from understanding how computers work to using technology to change how they teach (Ertmer & Ottenbreit-Leftwich, 2010). Teachers have increased both personal and professional use of computers to support their work. According to *Partnership for 21st Century Learning* (2008), the on-going job is for a classroom teacher to seek out ways to integrate technology to produce the most meaningful learning experiences possible for students.

To use technology for practicing, writing reports, conducting online research, or checking assignments and grades online is no longer adequate to meet the needs of

the 21st century learner. In order to move forward with technology integration, teachers need to understand how to use technology to facilitate meaningful learning that enables students to construct deep and connected knowledge (Ertmer & Ottenbreit-Leftwich, 2010). This requires change on the teacher's part, especially in the areas of learning, instruction, and assessment where technology is used. Technology is a bit like hitting a moving target for teachers. It is always changing, and the learning of it will never be completed. This can be a difficult step, but once taken it can be freeing for the educator who is willing to collaborate with other teachers as well as students to produce the best learning environment. The fast pace of technology change forces the teacher into the position of perpetual novice, which suggests the need for strong self-efficacy for teaching with technology (Mueller, Wood, Willoughby, Ross & Specht, 2008).

Step one in technology integration is providing teachers with knowledge of technology itself. Technological literacy is now one of the basic skill requirements for pre-service and in-service teachers (Lawless & Pellegrino, 2007). Teachers coming out of college today may be considered "digital natives", having been exposed to technology for most of their lives; however, this does not mean they are trained in technology best practices for the classroom. Professional development is needed to take a teacher from personal use type applications to 21st century learning type applications for students. Knowing how to use the tool is the basic step. Being able to use technology as a pedagogical tool, teachers must be able to: develop plans, teach software to students, choose appropriate applications to meet instructional needs, and manage computer hardware and software (Coppola, 2004).

Research indicates that teacher belief systems have direct impact on instructional practices within the classroom (Haney, Lumpe, Czerniak & Egan, 2002). Technology integration is no different. The study by Haney, Lumpe, Czerniak, and Egan (2002) found that teacher beliefs predicted classroom action in five of the six teachers observed. Hermans, Tondeur, van Braak, and Valcke (2008) state that belief systems “consist of an eclectic mix of rules of thumb, generalizations, opinions, values, and expectations grouped in a more or less structured way” (p. 1500). Hermans and his colleagues (2008) found that teachers with more non-traditional student centered classroom style used technology more than those with more traditional teacher centered classroom style. Hennessy, Ruthven, and Brindley (2005) conducted longitudinal studies examining teachers’ adoption of technology. Their research described a “pedagogical evolution” occurring as teachers incorporate more technology into their practices. Hennessy et al. described this as a “gradual but perceptible shift in subject practice and thinking” (p. 186).

Teachers are more likely to make changes when they see it clearly impacts their students in a positive manner. A ten-year longitudinal study of the Apple Classrooms of Tomorrow (ACOT) program showed that teachers’ observations of changes in their students caused them to reflect on their current beliefs about teaching and learning, which in turn led to changes in beliefs (Ertmer & Ottenbreit-Leftwich, 2010). Teachers’ knowledge and beliefs concerning technology usage interact with existing culture to create action or inaction.

Knowledge about technology and an understanding of the positive impact on student learning are both critical steps toward technology integration and change from

the viewpoint of the teacher. Self-efficacy, or teacher confidence, where technology is concerned is another important part of technology integration (Mueller et al., 2008). A teacher's self-efficacy can be developed through positive experiences with technology. Studies have shown that even experiencing this vicariously through hearing about another teacher's technology success can have a huge impact on developing self-efficacy. Teachers can gain self confidence, self-efficacy, by sharing technology success stories.

Professional development is an important part of technology integration. The key to successful professional development seems to be alignment of current beliefs concerning technology with the use of technology being explained or demonstrated. In order for teachers to incorporate new approaches into their existing knowledge structures, the uses must align with their beliefs (Ertmer & Ottenbreit-Leftwich, 2010). Technology integration is a powerful educational step but by itself does not bring about positive educational change. The teacher is still the change agent, using technology as a tool to bring about positive educational change for students.

Phenomenological research techniques were used to research the impact of a one-to-one computing initiative at a Midwestern urban middle school (Storz & Hoffman, 2013). The study focused on the voices of eighth grade students and their teachers as they made the journey to each student having a computing device to use at school and at home. Interviews from pre- and post-implementation highlighted patterns of responses to show how one-to-one technology integration changed students' learning experiences and teachers' instructional practices. The theoretical framework of this study was built around the importance for technology usage to help further academics

by using 21st century learning skills and prepare students for a global economy. This computer initiative began with thoughtful professional development and time for teachers to familiarize themselves with their own computers prior to students being given devices. Technology program specialists were in place for support. The goal of the initiative was for teachers to engage their students through a variety of computer based teaching methods and provide students with meaningful learning experiences. Key themes that emerged from this study were: changes in teacher pedagogy, effect on student learning experiences, impact on classroom behavior and management, potential for improved communications, and suggestions to address professional development needs. Pennuel's (2006) synthesis of research findings of one-to-one computer initiative programs confirmed what the teachers in this district identified as important aspects of professional development: instructional integration and continued support. Participants felt that the journey toward helping further learning by using 21st century learning skills and preparing students for a global economy had slowly but definitely begun (Storz & Hoffman, 2013).

Technology Integration Steps of Systemic Change

The goals of enriching academics through 21st century learning skills and preparing students for a more global economy were also goals for the school in this research study as they implemented a one-to-one computer initiative. The study and research for this initiative proved to be one of the most important steps for the long-term success of this instructional change. The school devoted 2008–09 to teacher professional development and site visits to other one-to-one schools. Preparing faculty, administration, students and parents for systemic change in the area of technology

integration proved to be quite a task. This was also the year of focused infrastructure building for the wireless network throughout the school. Research at other one-to-one educational institutions made it very apparent that infrastructure had to be dependable to support an uninterrupted wireless signal from any point in the school. If you ask teachers to make pedagogical changes to increase the use of technology, then the internet wireless connectivity has to be a constant. Site visits to other institutions also brought out the importance of technology support personnel on site at the school as well as making use of tech-savvy students in all grade levels.

The roll-out of individual laptop computers to each faculty member occurred in 2009–10. Along with this came strategically planned professional development covering every aspect of these laptops. The topics covered ranged from simple to complex to include all ranges of teacher tech knowledge at the time. During the 2009–10 school year, the administrative team visited the Apple Corporate Headquarters in Cupertino, California. This visit solidified to all the magnitude of the systemic change that we were already in the midst of in the area of technology integration. During 2010–11, faculty members were trying out new technology sites and possibilities in their classrooms using their laptops and smartboards. This was truly a preparation time for more devices to come for their students and more freedom for technology usage on a daily basis.

The 2011–12 school year was the first year of the one-to-one initiative which began in middle school. Each student in seventh and ninth grade received their own laptops along with professional development, usage/responsibility rules and guidelines, etc. In the lower school more classroom carts of laptops, iPads, and iPods were made

available for teachers to check out and bring to their classrooms for technology integration. A student help desk was established as well as individual tech savvy middle school students with a free period to help teachers or other students with tech questions. Technology coaches were put in place in all three divisions (lower, middle, and upper school) to aide teachers with the integration of technology in a meaningful way throughout the curriculum. The following year, 2012–13, the one-to-one laptop initiative was rolled out to each student in grades six through twelve. Kindergarten through fifth grade received more carts with devices working steadily toward the availability of a device for each child.

The systemic change of technology integration has changed education at the school for students and teachers. This powerful tool in the hands of professional educators has increased student engagement and productivity, enhanced communication and collaboration, and given students limitless possibilities for creative expression. Technology integration at the school continues to hold as its main goals: enrichment of academics through 21st century learning skills and preparation of students for a more global economy.

Technology Integration Resources

The resources associated with technology integration at this school were research (beginning years prior) and funding (ongoing). These resources enabled the following activities: on-going professional development, laptops provided to all faculty members, campus-wide wireless network infrastructure, technology support personnel, strategic plan for student devices, and curriculum development for technology integration. Outputs from these activities were enriched learning activities,

student/teacher excitement, student driven learning, flexibility, “outside the box” thinking, and assessment of “best practices” for technology integration. The outcomes, or specific changes, were collaboration, innovation, differentiated instruction and learning, enriched curriculum, and technology viewed as a necessary tool for 21st century learning skills. The impact of technology integration at this school was a school-wide awareness that technology is constantly evolving and changing. Educators must adopt this thinking in order to meet the needs of our students through increased integration of technology.

Collaborative Leadership

The term “collaborative leadership” is a description of a process, not simply what a person (leader) does. Chrislip and Larson (1994) state that “if you bring the appropriate people together in constructive ways with good information, they will create authentic visions and strategies for addressing the shared concerns for the organization or community” (p. 14). Almost two decades ago, Wasley (1991) brought shared decision-making in school improvement to the forefront of discussion and research. Studies indicate leadership that is shared or distributed is the most effective form of leadership; this type of a collaborative leadership process takes place in the interactions between people in the school and the situations they face (Gronn, 2000; Hargreaves & Fink, 2006). Collaborative leadership within a school strengthens student achievement (Marzano, Waters & McNulty, 2005).

A study by Robinson, Lloyd, and Rowe (2008) examined the impact of different types of school leadership processes on students’ academic and nonacademic outcomes. The study involved analysis of 27 published studies and a comparison of the

effects of transformational and instructional leadership on student outcomes. The outcomes of the study indicated that the more a school focuses on collaborative issues such as relationships, effective teacher learning, and supportive environment the greater the positive effect on academic and nonacademic achievement of students. This goes hand in hand with the desire in today's education world to meet the ever changing needs of students for the challenges they will face.

Copland (2003) reported findings from a longitudinal study of leadership. This research was done through the framework of the Bay Area Reform Collaborative (BASRC). BASRC incorporates a focus on distributed or collaborative leadership, inquiry into practice, and collective decision-making. Qualitative and quantitative data sources suggest that traditional, top down leadership does not lead to systemic, meaningful change necessary to meet the needs of today's students for the world they will encounter. Research points to a more collaborative leadership process for sustainable systemic change within a school.

Collaborative culture has been shown to improve student achievement; however, that does not mean it is natural or easy. Clarifying the purpose for collaborative leadership has been shown through research to be a strong predictor of the success of collaborative leadership (Lezotte, 1991). Studies have shown that a school must have a clear purpose concerning the intellectual mission for children when embarking on change that should effect children in a positive manner (Newmann & Wehlage, 1995). Collins and Porras (1994) reported that just having a clearly communicated vision is never sufficient. There must be a plan of implementation and be focused on the right things.

The idea that a school culture is collaborative will do nothing in and of itself to improve a school. The question that will drive systemic change is not, “Are people collaborating?” but rather, “What are they collaborating about?” The purpose of building a collaborative culture is to help more students achieve at higher levels. This goal can be accomplished if the professionals engaged in collaboration are focused on the right things (DuFour et al., 2006). Deciding on the right things is the beginning of working together in a collaborative leadership process. Michael Fullan (2001) issues a warning in his book, *Leading in a Culture of Change*, “Collaborative cultures ... are indeed powerful, but unless they are focused on the right things they may end up being powerfully wrong” (p. 67).

The process must begin by establishing “ground rules or habits that govern collaboration”. These may be spoken or unspoken but must be known by all. These ground rules for collaboration increase the chances that the culture will begin to function as a collaborative team rather than as a loose collection of people working together (DuFour et al., 2006). Differences and challenges in a collaborative leadership culture should be seen as a resource for growth, not a restriction (see Appendix L). Lyons and Pinnell (2001) listed the following characteristics of a collaborative leadership culture:

- Trust. An atmosphere of trust is essential to the creation and ongoing development of effective and meaningful collaborative relationships. Trust builds collegiality.
- Diverse leadership. Every member of the team has valuable insights, knowledge, and experience to contribute; and a voice.

- Partnerships with parents. Effective collaboration occurs when parents are not just informed about their children but equal partners in the education of their children.
- Collaborative cultures encourage parents to identify problems and possible solutions.
- Shared responsibility and credit for success. A collaborative community shares responsibilities and successes. This replenishes personally and professionally.
- Time to engage in the collaborative process. Collaborative planning time must be set aside as sacred to establish trust and rapport with one another.
- A language for communication. In a collaborative culture reflective conversations and interaction establish values, beliefs, collegiality, and shared understanding.
- Respect for diversity. Diverse viewpoints are acknowledged and valued to build a culture of inquiry.
- A focus on student data. Collaborative leadership uses student data to remind everyone of common goals.
- Problem-solving skills. Collective knowledge and experience are more effective than working in isolation.
- A vision of what is possible. Collaborative leadership sees what is possible and makes a plan for achieving it. (pp. 7–8)

For a culture where steps toward collaboration have not been intentional, the change can be difficult. The ideas involved in collaborative leadership seem simple

enough, but in actuality they are complex and filled with emotion. In studying the psychology of change, Evans (1996) surmised that even when a change is seen as positive, it is still filled with a feeling of loss. People often act defensively to change because it challenges our competence, creates confusion, and stirs up conflict (DuFour et al., 2006). Again, the best encouragement for educators, where any type of change is concerned, is the idea that it will produce a better learning environment for the students. Golman (2002) summed it up by saying that the passion, energy, enthusiasm, and self-efficacy of collaborative leadership are contagious and spread throughout an organization. Collaborative leadership encourages collective efficacy, which is a better predictor of student success than the socioeconomic status of students (Goddard, W. Hoy, & A. Hoy, 1994).

Collaborative Leadership Steps of Systemic Change

The move to a collaborative leadership process of working together was an intentional move for the school in this study. Increased student achievement and improvement of academic programs were main goals for the move to collaborative leadership. Professional development was a large part of the movement—educating people about the importance of collaboration and how it looks and what it feels like. Collaborative leadership is alive and well when one can see and experience the following within a learning community: honoring teacher voice, empowerment, collegiality, vision, stability, and innovation. School is then truly a place where teachers can learn (Stigler & Hiebert, 2009).

During the 2008–09 school year, steps toward the collaborative leadership process was begun by professional development. The professional development was

aimed at the paradigm shift of collaborating and working together instead of in isolation. Teachers were also asked to be part of learning communities by grade level or by departments depending on the division they were in (lower, middle, or upper). Lower school grade level representatives were selected to help with communication across grade levels. Strides in parent communication were made by administration as blogs were started to post upcoming events, parenting information, and pictures of school happenings.

A set time for communication and reflection was worked on during the 2009–2010 school year. The “Monday Plan” was set up, placing after school meetings on Monday for faculty/staff convenience as well as developing a systematic plan for consistency in meeting. The first Monday of the month was designated for all school full faculty meetings directed by the Head of School. The second Monday of the month was set aside for division meetings to be led individually by division principals (lower, middle, and upper divisions). The third Monday of the month was to be used for grade level and/or department level reflection or curriculum meeting time. The fourth Monday was reserved for various committee meetings such as technology or accreditation which often included faculty across all three divisions. The collaborative leadership process was put to the test in 2010–11, when the school undertook the task of updating and rethinking curriculum areas school-wide. This included basic, yet important decisions, such as the format and where it would be housed digitally to keep it a living document to be reflected on and updated on a regular basis. The accreditation process in 2011–12 provided an ongoing yearlong opportunity for the collaborative leadership process to be strengthened. This year called for each faculty and staff member to be a part of a

strategic plan for the school. Each member had small group meetings to attend, reflections to share, and ideas to discuss.

Collaborative leadership is an ongoing process at the school. It is a collaborative team of people working together to achieve a goal that they could not achieve alone. Pfeffer and Sutton (2000) wrote, "Interdependence is what organizations are all about. Productivity, performance, and innovations result from joint action, not just individual efforts and behavior" (p. 197).

Collaborative Leadership Resources

The resources directed toward doing the work of collaborative leadership change at this school were research and funding. These resources were used to provide professional development on collaboration, scheduling to provide collaborative planning times for teachers, teachers trained for leadership positions within the faculty, and use of teacher surveys to gain valuable input and insight for collaboration. These activities produced the outputs of collegiality, flexibility, increased growth mind-set (new ideas and thinking), and a stronger team concept. Outcomes, or specific changes, were increased teacher leadership, growth, and enthusiasm, as well as an overall increase in school-wide morale. The impact of collaborative, or shared, leadership at this school has been a rich exchange of ideas and growth throughout the entire school culture.

The basic logic model was used to clearly demonstrate the complexities of the three systemic changes. These diagrams reveal the depth of change explored through the research questions:

1. What are the teachers' perceptions of their contribution to implement and sustain change?

2. What intellectual and emotional work must teachers do to successfully implement and sustain change?
3. What supports do teachers need when implementing and sustaining change?

The diagrams are labeled as follows (see Appendix L):

Diagram A Reduction of Class Size

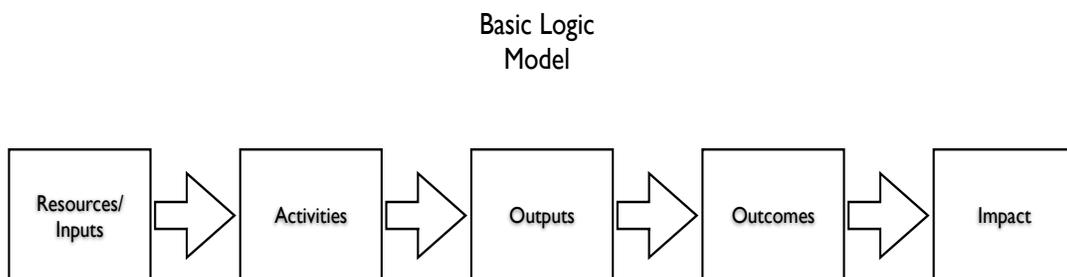
Diagram B Technology Integration

Diagram C Collaborative Leadership

Diagram D Study of Three Simultaneous Systemic Changes

Clarifying the Three Simultaneous Changes

The basic logic model provides visual clarity in presenting the framework for the changes in this study. A logic model paints a picture of how and why a program will work. The basic logic model is built from the “big picture” thoughts and ideas that make up the conceptualization of the program, or change. The logic model is broad and focuses on “big ideas”, not specific “nuts and bolts” (Weiss, 1998). The three systemic changes are more easily understood when viewed through the organized framework of the logic model (see Appendix M).



Resources, or Inputs, are the human, financial, organizational, and community resources a program has available to direct toward doing the proposed work, or making the proposed change. Program Activities are the processes, tools, events, technology, and actions that are put into place to bring about the proposed work, or change. Outputs are the direct products delivered by the program, or change. Outcomes refer to specific changes in program participants' behavior, knowledge, skills, status, and level of functioning. Impact is the fundamental intended or unintended change (Kellogg, 2004).

CHAPTER THREE. RESEARCH METHODS

The Qualitative Methods

Organizational theorists as well as gifted administrators state that educational change is different from any other type of change in that it relies heavily on the belief system of the classroom teacher. The success of educational change lies in the classroom teacher's belief and support of the change at the very basic level of the change process.

The purpose of this study was to document and analyze the responses to simultaneous systemic change within an independent school as seen through the eyes of five classroom teachers as I, the researcher and primary administrator, interpreted the teachers' perceptions. The changes occurred simultaneously within a four-year span. The teachers selected represent a variety of background in academic preparation, teaching experience, and tenure at the school. The data were generated from an interview protocol with questions carefully constructed from prior research. The questions were prepared in advance and reviewed to ensure clarity of the wording. As the researcher, I conducted the interviews for this study. The interviews were audio recorded, transcribed, and coded using open coding to break down, examine, compare and categorize data. The interview questions were grouped into four topics of change experienced by the teachers (classroom size reduction, technology integration, collaborative leadership, and systemic/general change), therefore, this allowed me to

examine the transcripts in those specific categories. This produced the four main categories of: classroom size reduction, technology integration, collaborative leadership, and systemic/general change. I examined the teachers' responses in those four categories and used open coding to break down, compare and categorize the data (see Appendix N). These codes were then examined for specific categories of responses that could be grouped together in common sub-categories. Within each sub-category codes were developed to allow specificity within the sub-category (see Appendix O). Axial coding was then used to put the data back together by looking across each of the four main category areas for common and repeating codes. At this point, connections were made between and across categories from the coding of the four main categories. These connections produced the following emergent themes:

Theme 1: Clarifying the Proposed Change and the Role of the Teacher in Change

Theme 2: Clarifying the Role of the Administrator in Change

Theme 3: Supporting Through Professional Development and Pacing of Change

Theme 4: Building Trust and Team Membership

These codes and themes were generated by the use of Grounded Theory (Glaser, 2005). These findings produced valuable information to inform the following research questions:

1. What are the teachers' perceptions of their contribution to implement and sustain change?
2. What intellectual and emotional work must teachers do to successfully implement and sustain change?

3. What supports do teachers need when implementing and sustaining change?

I obtained permission to conduct the study through the Auburn University Human Subjects Research protocol process.

Fullan (1993) and McLaughlin (1990) remind us that you cannot mandate what really matters for change to take place: skills, creative thinking, and committed action. Effective teachers, change agents, use mandates only as a catalyst to re-examine what they are doing. Fullan (1993) sums it up in these words: “When complex change is involved, people do not and cannot change by being told to do so” (p. 24). This reiterates the value and importance of recording the exact thoughts and words of the classroom teachers in this study. Change of any substance involves complex processes that once discussed openly with reflection have great value for learning. Change truly is learning and is most useful when viewed that way (Fullan, 2003).

Action Research

The qualitative method of action research encourages the practitioner (in this instance, the teacher) to be reflective of his or her own practice with the aim of improving the system (McNiff, 2013). The aim of this study was to capture the lived experiences with change of the teachers involved in order to gain insight concerning the process of change for all educators. Action research helps bridge the gap between theory and practice for the teacher by encouraging the teacher to be reflective in their own practice. Action research is a journey for knowledge seeking how to improve and bridge the gap between theory and practice.

The teachers involved in this study were close to the situation. A purpose of the action research process is to develop a perspective that comes from a degree of

distance. Action research, or teacher research, give us the opportunity to perceive our world with fresh eyes. The desire is to be close to the matter at hand but also develop the perspective that comes from having a degree of distance. Since a person stands at the center of his or her own life space, understanding of that life and experience needs to begin with the individual's perspective (Lewin, 1948). The teacher is in the middle of a group of children and is making things happen through his or her actions.

Action research is used in real situations, rather than in contrived, experimental studies, since its primary focus is on improving real practice.

The school in this study provided a real situation with on-going change and real teachers' lived experiences with that change. It stands to reason that action research based on the experiences of actual teachers in real classrooms among live students promises to better stand the tests of practicality and personal relevance (Burnaford, Fischer, & Hobson, 2001). A clear image of action research that comes from real teaching situations is an intentional attempt to seek increased meaning and direction for students and teachers in the classroom. This research situation afforded me the opportunity to study change from the view of teachers in the midst of the change. Dewey (1929) describes this type of research situation as the practical inquiry of teachers, which should make up the substance of educational research. His was a vision, very much like I have been afforded at this school, "unmistakably a vision of the teacher continuously pursuing self-education in the course of the act of teaching" (Schubert & Schubert, 1984, p. 12). Education is truly a mode of life, of action and renders those who engage in the act more intelligent and thoughtful; therefore, research into this action should render the educative process more enriched and improved.

One of the many rich features of action research is the importance of narrative. It is through narrative that teachers share their beliefs and approaches as they reflect and act upon their reflections. Narratives reveal insights, meanings, discrepancies, and differences. As teachers articulate their own stories and explore their memories it is a way of empowering teachers with legitimacy of their own real experiences. As teachers examine the lives they live in schools with students in an organic way their critical perspective becomes more than theory. Their critical perspective obtained through action research becomes transforming for educational practice. Action research uses narrative, one of the oldest forms of how humans come to know and understand, as the mouthpiece for the emergence of philosophy and substance. This can be seen in the narratives shared in Chapter 4 of this research project.

I have been associated with this particular school for 25 years; this lends itself to a certain amount of perspective on the growth and change culture of the school. My first 17 years were spent in kindergarten, third grade and fifth grade as a classroom teacher. My last seven years have been spent as an administrator at this school for grades K4 through fifth grade working closely with and striving to support the classroom teachers. I respect and honor the perspective espoused by action research of the primacy of the teacher in the classroom. My own classroom experience and reflection have proven this out and now as I work side by side with classroom teachers it is clearer than ever before. The teacher is at the center of the action in the classroom and is the one trying in real life and real time, to understand what is going on in the classroom so they can make a difference in a child's life and education. Teachers have

a unique and central role to play in creating knowledge about teaching and they must through experience be able to distinguish the significant from the trivial (Eisner, 1985).

I feel strongly that it is my role to cultivate a supportive setting where teachers are able to express the concerns and issues they face in their work and celebrate the insights gained through self-examination and reflection. This particular school went through a period of intentional systemic changes. It is my desire to capture the rich lived experiences of the teachers that were here during that time as perceived and retold through my eyes and lived experiences with them. This unique perspective allows this action research to be conducted from the perspective of leader, facilitator, and consultant to the teachers. The goal is to capture valuable meaning and direction from teachers concerning change that can then be used by others in the field of educational change. The challenge is to describe the views and understandings of the teachers involved in order to successfully capture the reality of their lived experiences. The following research questions were used as a framework for this study:

1. What are the teachers' perceptions of their contribution to implement and sustain change?
2. What intellectual and emotional work must teachers do to successfully implement and sustain change?
3. What supports do teachers need when implementing and sustaining change?

The teachers were asked questions concerning their lived experiences with the three systemic changes their school went through as well as questions concerning how they viewed and coped with simultaneous systemic changes in the classroom. The goal was to use separate narratives focused on the different areas of change with the

research questions as the guiding backdrop. This allowed the teachers to use multiple tellings to capture greater personal reflection on change in a variety of circumstances than would be provided in a single narrative focused on a single change experience (Grumet, 1987).

There is a tension involved in conducting action research in organizational environments. This tension can range from extraneous variables that can threaten internal validity to questions regarding action research being regarded as 'science'. This has led action researchers to seek to access research participants' cultures in their natural contexts (Cassell & Johnson, 2006). This type of research has been referred to as 'inductive action research practices' and uses qualitative methods of data collection to produce a form of grounded theory. The school setting and the teachers in this study provided that type of natural context. As the researcher, this allowed me to aim for understanding another person's experience by learning from the other person through conversations and interactions that provided insight. This occurred through the use of qualitative methods of data collection to produce a form of grounded theory (Cassell & Symon, 2004; Glaser & Strauss, 1967). I conducted semi-structured interviews with the participants. My teaching background and history at this school certainly influenced my role of researcher in this study; therefore, member checking was conducted multiple times. During interviews, I determined accuracy through restating and summarizing information with the participants. After transcription was complete, each participant was given a copy of their typed interview and asked to verify their answers. After the study was complete, all findings were shared with the participants and affirmed to be accurate. Action research is flexible and powerful in the hands of teachers and I

acknowledge the need for intentional monitoring of the action research process, as with any research process, to maintain integrity and usefulness (Burnaford, Fischer, & Hobson, 2001).

The Researcher's Role

In qualitative research, the researcher is considered the instrument of choice for this type of naturalistic inquiry. Lincoln and Guba (1985) listed the following characteristics of a qualitative researcher:

- responsive to environmental cues
- able to interact with the situation
- able to collect information at a variety of levels simultaneously
- able to perceive situations in a holistic manner
- able to process data as they become available
- able to provide immediate feedback
- able to explore atypical or unexpected responses (p. 194)

The dependability of qualitative research depends on the researcher's ability to remain sensitive to the data and to make appropriate decisions in the field (Eisner, 1991).

Data Sources

The participants in this study were classroom teachers in an independent school. The study is a retrospective look at four years of simultaneous systemic change within the school. The three systemic changes simultaneously occurring within the school in a four-year span were: reduction in class size, technology integration, and collaborative leadership. School history played into this scenario due to a change in command, or head of school, occurring two years prior to this period of change. The criteria used in

selection of these teachers were an attempt to gain an honest representation of the change process by varying academic preparation, teaching experience, and tenure at the school. Amy is a kindergarten teacher with a bachelor's and master's degree in early childhood education, has been teaching for 28 years, and has been at this particular school for 20 years. Betty is a fifth grade teacher with a bachelor's and master's degree in elementary education, has been in teaching for 35 years, and has been at this particular school for 22 years. Cathy is a second grade teacher with a bachelor's degree in early childhood education and a master's degree in reading instruction, has been teaching for 12 years, and has been at this particular school for 6 years. Diane is a second grade teacher with a bachelor's degree in early childhood education, has been teaching for 28 years, and has been at this particular school for 17 years. Elaine is a fourth grade teacher with a bachelor's degree in early childhood education, has been teaching for 19 years, and has been at this school a total of seven years.

The following were the criteria for participation in this study:

- Participants were currently serving at the school.
- Participants were serving at the school during the years involved in the study.
- Participants represent different educational degree levels.
- Participants represent different grade level teaching expertise.
- Participants represent different years of tenure at the school.

A small gratuity in the form of a restaurant gift card was given to participants at the conclusion of the study.

Data were collected using a one-on-one interview process with each teacher. Questions were written and checked for clarity by me (see Appendix P). Interviews were conducted privately on separate days. I asked questions, and the participants' responses were recorded using a voice recorder. These interview tapes were transcribed and analyzed for themes or issues (Creswell, 2003). Coding was used as a process of organizing the material into chunks of information. This involves taking text data segmenting sentences (or paragraphs) into categories, and labeling those categories with a term. Out of this analysis of codes, themes and topics emerged from the data.

Data Collection

Interview questions were developed in consultation with other researchers, and included the interview protocol constructed by Kvale and Brinkman (2009): introductory questions, follow up questions, probing questions, specifying questions, direct questions, indirect questions, structuring questions, silence, and interpreting questions.

Data Analysis

I determined the direction of the interview by asking the same questions of each participant, moving toward open-ended questions and response time that was more directed by the participant regarding the direction of the conversation (Bogdan & Biklin, 2007). After the data collection was complete, I set about the transcription and organization of the information. All tapes were transcribed using a verbatim transcription technique. This labor-intensive process allowed me to become more familiar with the data. All interview transcripts were arranged chronologically and coded using the NVivo 10 qualitative research software. I identified topics and charted the

frequency of these topics, classifying these topics into themes. In addition, the research participants provided additional clarity, objectivity, and understanding using the process of *Member Checking*, when they were asked to review and edit the resulting data composite. Through this technique, the participants were able to validate my perception of the data. Another way to insure internal validity was to come face to face with the issue of researcher bias. This issue was addressed in the limitations section of this study in more complete detail. Every effort was made to represent the data in a non-biased way; however, due to my professional relationship with the participants, it is difficult to totally remove it.

The participants in this study were extremely eager to share their journey throughout the change process. Participants verbalized that it had indeed been a journey of change for them. The participants appeared to be honestly reflecting on their 'journey of change' and the interview process seemed to deepen their insight concerning the extent of change they had encountered at the school. Some felt certain changes were more difficult than others to embrace; however, the data showed agreement that all three changes needed to take place simultaneously. The data also indicated that the teacher felt that these three changes were valid indicators of how they would deal with systemic change in general.

I determined the use of qualitative analysis software was necessary, and NVivo 10, was used to code the data. The data were reviewed and isolated recurrent themes noted. Each interview was individually analyzed using within-case analysis to formulate common underlying themes (Lincoln & Guba, 1985). A primary strategy in this project

to ensure external validity will be the provision of rich, thick, detailed descriptions allowing for transferability within a solid framework for comparison (Merriam, 1988).

Verification

To further ensure the integrity of the research, the participants reviewed and edited the data. During interviews, I determined accuracy through restating and summarizing information with the participants. After transcription was complete, each participant was given a copy of their typed interview and asked to verify their answers. After the study was complete, all findings were shared with the participants and affirmed to be accurate. Interrater reliability was determined by using the following calculations on a section of interview transcript coded by me, the researcher conducting this study, and a research colleague. The section of interview transcript consisted of two pages out of twenty-five pages of transcript, which accounted for an approximate ten percent sampling. The calculations indicated an acceptable interrater reliability of 0.73 percent.

Interrater Reliability Calculations

- (1) Count the total number of ratings made by each rater (Total Number).
- (2) Count all of the ratings for which both raters agree (Number of Agreements).
- (3) Divide the number of agreements by the total number to obtain percentage agreement.

In qualitative research, verification is the process of checking, confirming, making sure, and being certain. Verification refers to the steps within the research process that contribute to ensuring reliability and validity which indicate a rigorous study.

Researchers have made the point that these verification steps are woven into the qualitative research process (Creswell, 1997; Kvale, 1989). Therefore, if the principles

of qualitative inquiry are followed, identification and correction of errors is built in to the developing model before they influence analysis making the analysis self-correcting. It is a common misconception that qualitative research risks being viewed as nonscientific and lacking rigor. This misconception has brought about an emphasis for qualitative research verification strategies to be implemented once a study is completed (as in quantitative research). The argument has been made that qualitative researchers should reclaim responsibility for reliability and validity (verification) by emphasizing strategies implemented during the research process (Morse, Barrett, Mayan, Olson, & Spiers, 2002). The goal would be to ensure rigor using strategies inherent within each qualitative research design, and moves the responsibility for incorporating and maintaining reliability and validity from external reviewers judgments (as in interrater reliability) to the investigators themselves.

CHAPTER FOUR. RESULTS

The purpose of this study is to capture the lived experience of five teachers in an independent private school during a four-year period of multiple systemic changes. This was done in a retrospective manner to gain firsthand insights from within the systemic change. The perceptions on change from teachers with varying academic preparation, teaching experience, and tenure at the school will provide valuable information concerning the process of simultaneous systemic change within a private independent school. Data were collected from private interviews with the participating teachers.

The following questions guided the study:

1. What are the teachers' perceptions of systemic change process as captured through their lived experiences?
2. How do teachers react to systemic change they do not initiate?
3. How do teachers view their role in the process of multiple systemic changes(s)?
4. How do teachers process multiple changes occurring simultaneously?

The intent of the research is to discern the factors that impact implementation of systemic change from the view of the teacher. This information can inform administrators and teachers on ways to work together to address the complexities of change. The teachers represent a variety of background in academic preparation,

teaching experience, and tenure at the school. The data were generated from an interview protocol with questions carefully constructed from prior research.

Individual Participants

The five teachers interviewed share the experience of three systemic changes simultaneously occurring within the school in a four-year span: reduction in class size, technology integration, and collaborative leadership. The criteria used in selection of these teachers were an attempt to gain a valid representation of the change process by varying academic preparation, teaching experience, and tenure at the school. What follows is an insightful and explicit study of the lived experience of these participants from within simultaneous systemic change. Qualitative analysis of interviews produced emergent themes in this research (see Appendix Q). This research study highlighted four themes that emerged from the lived experiences of the teachers participating in this study. The themes are as follows and will be discussed further in Chapter 5:

- Theme 1: Clarifying the Proposed Change and the Role of the Teacher in Change
- Theme 2: Clarifying the Role of the Administrator in Change
- Theme 3: Supporting Through Professional Development and Pacing of Change
- Theme 4: Building Trust and Team Membership

Participants were assigned pseudonyms to preserve confidentiality. I organized and presented the data person by person in this chapter to provide a rich narrative of the teacher's individual perspective of the change process. In Chapter Five, I will show how this data answers the overarching research questions that guided this study:

1. What are the teachers' perceptions of systemic change process as captured through their lived experiences?
2. How do teachers react to systemic change they do not initiate?
3. How do teachers view their role in the process of multiple systemic changes(s)?
4. How do teachers process multiple changes occurring simultaneously?

Amy

Amy is a kindergarten teacher with a bachelor's and master's degree in early childhood education and has been teaching for 28 years. Amy has been at this particular school for 18 years teaching at the kindergarten level. Amy expressed the following feedback from the lived experiences of implementing three simultaneous systemic changes of reduction in class size, technology integration, and collaborative leadership.

Reduction in class size for this teacher meant taking a class of approximately 20 kindergarten students down to approximately 13-15 students. In her words, this allows her to immediately give more individualized attention and differentiated instruction to students.

With the larger class size we found that the best learning was done in whole group, or the best way to teach was with whole group, it was harder to break it down into smaller groups, smaller reading without an aide and that large of a number it was hard to do the rotation stations to back up the reading and math. Discipline sometimes could be more of an issue. [Amy]

Amy acknowledged professional development focused on small group instruction as a positive influence in her implementation of this change. She readily brought up the fact that she had to do her part in the implementation of a different type of instruction to capitalize on a reduced number of students.

I would say it's very important just with the smaller class size you're just able to try different things, you're able to fine tune the curriculum and your teaching or your methods with the way the students learn. I feel and others have shared that you're just able to accomplish so much more. When you see goals you're able to set the bar a little higher and maybe set higher goals because you have the time to do more things with them and try different things. [Amy]

Amy cited successes in reading and math instruction that she felt would not have been possible with a larger number of students. She felt certain that reduction of class size has allowed her to better meet the individual needs of students by providing time to assess and differentiate instruction within her classroom.

I was thrilled, I was absolutely thrilled. In my entire teaching experience I've had smaller classes and larger ones and I've always felt like the smaller class size gave each child more individual attention and addressed their different learning styles and just allowed me to become closer to them and know them better and help them in the areas. [Amy]

Amy had strong reactions during the discussion concerning technology integration. This teacher was a self-proclaimed “non-tech-savvy” teacher at the beginning of this journey. Amy used descriptive words such as apprehensive, scared, and nervous when discussing the systemic change of technology integration.

Well we were excited about it. I was excited about it. I did feel a little bit apprehensive even though I had a personal computer I was not what I would call a tech savvy person, that was not my thing that I just enjoyed doing on the side, and as excited as I was, I was apprehensive. [Amy]

Amy referenced the professional development and constant support provided by the administration as the number one ingredient helping her implement this change.

At first it was a rude awakening, but I think as the school worked with us to see what areas, you know, what we had needs for, you know, that was a constant question and workshops and things provided. It was hard for me at first but I now couldn't imagine it without it and enjoy learning and want to learn more and more. I also felt like we were allowed time and allowed help when we needed it and I wasn't afraid to ask for help or worried about oh I don't know how to do this, we'd just get the help. But it was fast, I think part of it was because our curriculum was something we decided to go with. [Amy]

She also described coming to grips with the idea that this was a learning opportunity for her that she did not want to waste. Amy mentioned the importance of deciding that her role in this systemic change would be to jump in, learn all she could, and ask for help as she was striving to implement the use of technology.

I feel like my role was to learn everything I could and to attend things we were taught and try to seek out people who could help me with my personal issues or problems that I had so I would know how to apply it to my classroom, some things that would apply to an upper school teacher wouldn't necessarily apply to

me. I had questions about things that they may not have with the class that would impact my class. [Amy]

She brought up the fact her co-teachers and her were on this journey together and worked to help each other with the learning curve with technology integration. She cites the use of an interactive whiteboard as well as iPads and iPods for small group work as some of her most impactful uses of technology for students.

I absolutely loved the iPads, when they came to my classroom I was a little nervous as I slowly walked them through each step to do, and I found to my surprise that over half of them knew more about them than I did. I think the iPads are the one thing I was most excited about because we could break it down as we did rotations and reading stations. I would assign them a particular reading or math game and according to which level they were at they would all be playing the same game but it would be individualized to their level, whether they needed enrichment or reinforcement. The smart board has just revolutionized everything. I think that was the first thing, it was just everything can be done with the smart board and I never, it's like my computer and my phone I keep learning something knew every time I turn around, or something new to try out the class and something you said earlier about how the class, I think the enthusiasm that I get from using the technology and seeing the children's response makes teaching, it just keeps me excited and having fun.

[Amy]

Amy began the technology integration journey with words like apprehensive, overwhelmed, and nervous but those were replaced by words like enthusiasm, excitement, and collaboration.

There was an air of excitement but I was also, I won't say I jumped right in, maybe I was drug in but it was, I'm just being honest ... It's a little scary, it's very scary but there was an excitement because we knew we needed to do that to be on the cutting edge and I wanted to be on the cutting edge. [Amy]

Amy expressed excitement and enthusiasm as we moved to the discussion of collaborative leadership, the third simultaneous systemic change. She described the implementation of collaborative leadership as a very positive journey; however, she still mentioned a learning curve associated with it.

I think it went from being the administration passing things down to us and saying okay this is how we're going to do it and I don't know if that's how they meant to come across, that's how I perceived it. To discussing with us, asking for our feedback, providing surveys, questionnaires, bringing in speakers ... I think they did but I think they quickly adapted to that because that is so helpful. I think everybody that taught here had that desire to learn and feel like they could ask questions and ask each other for help. It's hard to teach an old dog new tricks but if you have that support... I can't imagine doing what I'm doing without it [collaborative leadership], I really can't. No, to me it only has a positive impact.

[Amy]

Amy brought out the fact that simply because someone is asked for their input and opinion does not mean they will automatically jump in and give it. She wisely put forth

the idea of the need for explanation of expectations for collaboration between the administration and teachers. And even with explanation, Amy described an adjustment period of teachers being able to develop trust in the idea that their opinion is important and will be factored into decisions.

Yes, and I feel like before there may have been the fear of failure or the fear of that's not appropriate to ask that, or not appropriate to call for help, you need to figure that out. I think now the environment is what can we do to help, how can we help you. [Amy]

She also described situations where collaborative leadership was able to achieve a larger goal due to working in tandem with reduced class size and technology integration. Amy felt collaborating with others provided new ideas that she was now comfortable trying which incorporated technology or small group instruction.

Thinks that helped me or hindered me ... I think my not being as cutting edge on technology hindered me. I think coming in fast and the pain that comes with it hindered me, but I think that having as the environment became more and more supportive, okay what do you need help with, we're going to help you go through this. [Amy]

She gave the newer collaborative culture in the school total credit for helping her develop self-efficacy to step out and try new instructional strategies and projects. The idea that the three changes occurred simultaneously was also discussed and produced valuable insight from Amy. She felt that the three changes happening together had been a bit overwhelming simply because she wanted to implement all three to the best of her ability and tended to put pressure on herself.

I don't think I realized it at the time. I felt like there was a lot of change and sometimes I kind of felt I was dangling alone in the beginning, but I ...

For me probably both, but I felt like I needed to break it down and that's what I had to do. I think with anything one step at a time is easier but at the same time it goes so fast you have to keep up. [Amy]

Amy also mentioned the idea of feeling the need to adapt quickly. When reflecting on the implementation of the three changes simultaneously, she felt the overall faculty had pulled together as a team to collaborate and support each other in the changes.

I think the changes that have been made have helped with the team because we do have people come in, we do have in-services, you know, what area do you need or for the upcoming in-service which of these would apply to you most, what would help you the most. [Amy]

Amy surmised that the three systemic changes needed to occur together since they appear to work hand in hand causing greater overall learning goals to be achieved. For example, she cited having a reduced class size and collaboration with other teachers and administration as critical supports when integrating technology in the classroom. The idea of team and the entire school moving together in these systemic changes came up several times in Amy's interview as an overall strength for implementation of change.

Overall moral besides the learning level the overall moral and the feeling of cohesiveness and support. Without that collaboration you just don't have that. You don't have the working together as a team and it is a team. [Amy]

Betty

Betty is a fifth grade teacher with a bachelor's and master's degree in elementary education and has been teaching for 35 years. Betty has been at this particular school for 20 years teaching at the fifth grade level. Her last 8 years have been spent departmentalized in fifth grade in the area of mathematics. Betty expressed the following feedback from the lived experiences of implementing three simultaneous systemic changes of reduction in class size, technology integration, and collaborative leadership.

Reduction in class size for Betty meant going from 26 in a fifth grade class to approximately 17-20 in a class. This particular teacher also factors in that she came from past experience of teaching seven subjects in a self-contained classroom to teaching only mathematics in a departmentalized classroom. Those two things combined with Betty's years of experience in education led to valuable insight concerning reduction of class size. Betty experienced class sizes (at previous schools) of over 32 students in a classroom. Her insight from those experiences included words like frustrated, overwhelmed, and exhausted.

Yes, I experienced that one time, when I had 32 sixth graders in my past teaching career. Awful it was terrible and this was not a public school situation, it was a private school situation. Too many children, too many varied needs, you just, you can't spread yourself thin enough to do the best job for each individual child. Yeah, and then that is frustrating it's very frustrating and exhausting.

[Betty]

With that as her past experience, this particular school reducing classroom size from 26 to 20 or below has been a dream come true. Betty cites individualized student care as the largest take away she has seen from reduction of class size.

Having gone to lower class size everybody knows the lower the student number the more that you can accomplish probably in that classroom. So having had lower class size now the difference being that you feel you can get to more students, more questions, more involvement with the students of course with a smaller number. [Betty]

She also followed up on that by saying that professional development in the area of small group instruction was extremely valuable. Another practical outcome of reducing class size is less time spent on weekly grading for teachers. This time can be devoted to formative assessment, research, planning, preparation, or collaboration with colleagues.

Oh, I definitely think it has [made a difference in my teaching]. One thing it does, your paper grading time drops, which allows you more time to do other things, investigate some other things that you can do with your class. We've learned to use more equipment, you know, when we get into technology I'm sure, but that has come in. It just allows you more time I think to bring more things into the classroom and do more with the children in small groups. [Betty]

She cited a host of other valuable effects from this systemic change. These effects range from the practical idea of more physical space in the room for students to move around and collaborate to more time to actually dialogue with students developing a relaxed and open atmosphere of learning.

Excited and this is a small thing but just the idea of the size of our classroom when you put five less desks in there you have more mobility, you know just the classroom comfort itself. We do quite a bit within our time period so I'm always moving along as fast as I can but at the same time children grasp concepts at different paces and all that. I feel like I do have more time to spend with those who need a little bit more help. I would think so because anything that you do that releases a little bit of stress in the classroom you walk out less stressed when you're with your friends and other people too. I think we probably all have our moments but I do, I think it makes you overall just an emotionally healthier person. [Betty]

Betty reiterated the importance of collaborative time when discussing the implementation of technology integration as a systemic change. She felt her teaching experiences spanned the time from purple print hand-cranked copy machines all the way to email parent communication, blogging, and digital report cards.

It was kind of frightening at first because it was the unknown territory and I'm thinking in 35 years I've gone the gamut. I remember standing at the, I think we called it the duplicating machine, and that was as far as I knew about machinery where you turn the handle and it comes off purple copies. Oh yes, oh yes, so at any rate from that to today's world has just been amazing changed and thinking about when we went from hand written report cards into electronic report cards and that happened while being at this school and that was wonderful, but there's an excitement about it, but there's a little fear that goes along with it to. I think not as much fear now because we've done it, the summer we were handed the

laptop, the new MacBook I thought I really felt uptown, but at the same time I had to go home and practice that summer when you've never opened and seen a Mac in your life, and Mac is a little different. Now I go back and I'll look at a PC and I'm thinking now how did I work that, let me think, my aunt had one and I was just down at her house and I was like let me think now, what was that called, the PC ... [Betty]

As Betty put it, "I have seen it all and I do not want to go back. I enjoy using technology to enhance my teaching and student learning." She highlights the collaboration and support of her co-teachers and administration as a large part of her implementation of technology integration.

Well to try to do what was expected of you and we all felt like I mean it was, it was expected that you learn how to use the computer, these programs, as each piece of it was put in place it can be a little overwhelming. It was a good thing to walk home with that computer that summer because we were not in class teaching all day long with a piece of equipment that we had not had time with, a little time with. So that helped a lot. I thought the professional development was great, I don't really see how you could have offered much more. You know, I think it's a learning process; the nice thing is that we were really all kind of learning together; it wasn't that you walked into a school where everybody else knew how to do it. [Betty]

Betty offered open and honest comments about her journey. At the top of her list in the implementation of technology integration is learning to ask for help. Betty stated reaching out for help as a personal hurdle she had to get past.

Yeah and as time goes by you do feel like I say with each change you just kind of have to jump on it, hit it head on and say okay what do I need to learn about this, how do I find this now. And I've learned to do that, I have learned to go for help and we've got some great people around here that are so willing to help you.

[Betty]

She went back to her journey of teaching and the day where you went in your room and you did it all by yourself. Betty feels in this new technology age with constant changes and updates it is impossible to know it all or do it all. She also cites the development of a can-do attitude for herself toward new technology challenges as being key to her implementation.

The thing is we already know there's still a lot we don't know so we keep trying to learn but I would say one probably a little frustrating thing about it is about the time you go you have your ah hah moment, I think I've got this then we update and go to the next thing and you're going oh my goodness, I don't have that, but I have this. [Betty]

Betty shared that most teachers are out of their comfort zone and begin to question themselves as to whether they can actually learn the new technology well enough to integrate it into meaningful instruction.

Yes, and that's why I'm thinking at the beginning it felt out of control. You had that vision of feeling oh my goodness can I do this, you know, kind of questioning and all. Yes, it is way out of your comfort zone, which is not always a bad thing.

[Betty]

She felt her success with technology integration had come through the one step at a time process and asking for support and help at the school. The professional development and constant support from the school was a point she brought up as a must for true technology integration implementation in a positive manner.

We all work very cohesively together; you know it's all-supportive of each other. Like I said if one knows a little something, the other one doesn't know, you're in there like a flash, here . . . come show me how to do so and so. [Betty]

She felt that it was important for the teacher to feel a basic measure of confidence with technology in order to instill this confidence in her students.

Step up to the plate. It was like the snowballs rolling down the hill, get ready, it will run over you or you can jump in there with it. So yeah for the children, you carry that responsibility. I've got to know what I'm doing so that I can help them with what they're doing. Of course they could probably teach us about the computer. [Betty]

The idea that the school was moving forward and she wanted to move with it was cited as an important personal decision that the individual teacher must make while working through the ups and downs of technology implementation.

I think there's always the pros and cons to every side, you know, and there's always the excitement of something new versus the leaving the comfort zone of what you've had. I remember when we got the Macs we had the day off and we got the Macs, the PCs and we got the Macs and the big deal was I remember being told well Word is going away, well everything we ever typed and every file we had was in a Word Document. It was like Word can't go away, everything we

have, I mean there's no way, it would take years to recreate it, you know, because you can pull up and make changes and all but to recreate from the beginning that was a fear and I just kept thinking it can't go away, we have to be able to use what we have, and we were told you're going to need to learn Pages. I'll learn Pages but please tell me Word is not going away. [Betty]

Betty mentioned that when visiting other schools it is obvious that technology integration at her school has been successfully implemented and is continuing to grow and increase student and teacher learning.

I think in the beginning it was really about the teachers learning to use the technology and it's gradually not just the teachers learning it's the students now learning to use technology because we have more available now. [Betty]

She also mentioned that when discussing this journey with teachers from other schools, it has become obvious to her that the support and encouragement present in this school culture is not present in all schools.

Betty mentioned repeatedly collaborative leadership that extends throughout the culture.

I think we do have a lot more of that than we had in the past. I think the school has seen it's little separate entities you know, lower school kind of did its thing, and middle did its thing, and upper and we still see some of that, there's more collaborative decision making across the entire school. [Betty]

She feels this begins at the administrative level and is modeled with teachers then in turn teachers model this with each other and with students.

Years past it's more that you were told this was what was going to happen rather than let's get everybody's opinion, what do you all think about this to be asked what you think and to be able to say what you think without people viewing that as being negative or it's like it's okay to agree to disagree on something, but then the decision was made and everybody goes forward with it and I think when you are professionals you should be able to do that and I think there's probably more than that now than there ever was in the past. Yeah I mean I think when, for the administrative it works from the top down, administration is an example for the faculty, faculty doing it, it's also an example for children. Yeah, safe enough to share. [Betty]

Parent collaboration was also something that she felt had been spawned from this collaborative culture as well.

I think so because I think parents now have been encouraged to come to the teachers for that, whereas maybe in the past that really might not have been the case and now the encouragement is there, talk to your teacher, open the communication and we're seeing that with some coming in and it's really maybe not what they thought or like I wish I had come sooner, you know, I wish we had had this chat soon, or that type of thing. [Betty]

Betty did reiterate that trust, time, and positive experiences help collaboration grow. She felt that it often takes multiple successful experiences of collaboration before a person is truly comfortable sharing their opinions and ideas. In her words, a comfort zone must be built within a school for collaboration where one is encouraged to share and feedback is welcome.

We do I think in years past I think a lot of teachers, and it was a sign of the times I'm sure, but you had your own classroom, you just did your own thing and you don't, you know, if your thing wasn't the same as your same grade level, co-teachers or whatever, you know, everybody just went in there and did their thing where it's kind of like to me students were getting all kinds of different what seemed to be going on in this room may not be going on in this room and so forth and I think it was a lot more parents comparing. So with the collaboration you come up with a great idea and there's no reason why all classes can't do that. So a much more shared situation. It is, it's new and some people, you know, I think it takes time I would say to build a comfort zone around something and not view anyone else as a, you know, making sure you're not viewing anyone as a threat or well if I do tell you what I think is it going to come back to haunt me. You know what I'm saying. [Betty]

Betty also felt that laying out a clear picture of what true collaboration looks like and the expectations from it is helpful for teachers as they step out and become more open with their sharing and thinking.

Especially in years past if you came out of a situation where you never really felt that comfortable to do that, it takes a lot longer to do that. You learn not to do that and so you know, it takes time and I think practice and just some experience and ... [Betty]

She found encouragement in the assurance that her professional opinion would be accepted and valued as she stepped out into the world of collaboration with others. Betty felt that her professional opinion being accepted, even it differed from others, was

an important step in successful implementation of collaborative leadership at this school.

Well I think you always hear people say our school is like a family and so when people are working collaboratively it's like in any family when the family works together the family thrives and so ... [Betty]

She also felt the use of surveys, questionnaires, and discussion groups had been welcome additions of collaborative leadership in the decision making process at the school. Teachers are on the front line and they want to be heard and they want their opinions to matter and to be taken seriously.

Right and sometimes there's a good reason why something can't be the way it is and you just, like I said, when that's the case you, you know, that's moving on and making the best of a situation. [Betty]

Betty stated that in her view this particular systemic change had a huge impact to the entire culture of the school. She also mentioned that most teachers were probably like her and until asked to reflect on it, they probably did not realize the vast change in this area of collaborative leadership.

In reflecting on the three simultaneous systemic changes, Betty definitely felt the word *overwhelmed* had to be used, however with some clarification.

I really think probably just in thinking back most teachers felt kind of overwhelmed and mainly because you were still, you were trying to plan and teach and focus on the children, but you also had, your focus had to be spread, you know, so I think it probably had to happen that way and that you grew

because of it and learned from it and then you came out on the other side and you had no bruises. [Betty]

She felt that in looking back the three changes needed to occur simultaneously in order for true and thorough implementation. The three changes in her view fed on each other in a positive way and were intertwined.

Well maybe there would have been a little less frustration that you were trying to bounce so many balls at one time, you know, kind of coming at you but I don't know if it would have made things slower to improve maybe ... They do, they kind of overlap and so I think all in all it was a good thing and it certainly put you on your toes, got you up and running. [Betty]

Betty felt that she had personally leaned on her maturity and past experiences to become more flexible during implementation of systemic change. She felt strongly that more experienced teachers often have to go through a period of adjustment then make their mind up that they will engage with systemic change.

Well I do think I'm probably better with it than I was at the beginning because like I said in the beginning it's like it happens and it comes at you so fast and you felt like you couldn't learn this, get this down just right and then we were on to this and then this, it was a lot of things at one time. Maturity, just absolutely experiences, just going through it. I think I'm much more flexible now than I was when I was 20 something. [Betty]

Betty used the word *willpower* to describe what must happen inside a teacher in order to implement systemic change. She reiterated that a teacher must feel confident that she

at least has the willpower to get in there and move forward and learn something different.

And you say okay, you know, you can do this. I think every decade of life brings more wisdom and you view life a little differently. [Betty]

Betty points to what is best for the student as a driving force behind her willpower to make change. She feels that if someone can show her that it will be more effective for the student that she make a particular change then she will find the willpower to make that happen. She views the use of this willpower to make change as her role in systemic change.

Well I think my role as a classroom teacher is to embrace the change, learn everything I can and be the best I can be at doing what I'm expected to do. We're all human, no one is perfect, so we all make mistakes, but I want to be able to put my head on my pillow at night and say it was a good day. [Betty]

The role of the administration in her view is to research, gather feedback, and lay out a clear picture while providing support for the change.

Just being there as a support, being open, being willing to listen. Like I said whether people really agree, totally agree on it just the fact that you can be open and discuss something and nobody gets their feathers ruffled and that sort of thing and it's just to be professional and have that professional involvement with the teachers. [Betty]

Betty stated that at this school if you have willpower you would have the total support to implement change of any type.

You'd better be telling yourself you can do it otherwise you're . . . We have great people in all of the different parts of this school. And there's not one of them that will turn you away and say I don't have time for you today. [Betty]

Cathy

Cathy is a second grade teacher with a bachelor's degree in early childhood education and master's degree in reading instruction and has been teaching for 12 years. Cathy has been at this particular school for six years. During the six years she has taught kindergarten, a pull out program for reading instruction in second and third grade, kindergarten, self-contained third grade, and self-contained second grade. Cathy expressed the following feedback from the lived experiences of implementing three simultaneous systemic changes of reduction in class size, technology integration, and collaborative leadership.

Cathy was hired at this school to be an integral part of the reduction of class size implementation. Due to this, she has a unique perspective concerning reduction of class size for the entire school day. Cathy was hired for the first step of the plan that was to reduce class size for reading instructional time. She taught second grade reading in the morning and third grade reading in the afternoon in a pull out style program to reduce the number of students in reading instruction to approximately 12 students. The next phase the following year was to increase the instructional time to include the entire language arts block of instruction for a reduced class size of approximately 12–15. The pull out style program was not the optimum situation but these were small steps taken until the final step could be implemented of having a reduced class size for the entire instructional day. This occurred in year 3 of the

implementation, and she was able to have a reduced class size third grade of approximately 18 students for the entire instructional day. Cathy stated that up until this implementation began the school had 25–26 students per classroom and this caused her concern.

I had a child here at that time and the class sizes were about 25 per class, it was large. For what we were investing for our child's education I wanted smaller class sizes for sure. [Cathy]

The concern was due to her early childhood background that placed a strong influence on building relationships with students. She had been in the classroom long enough at this point to know that the more students the less individual attention the student receives from the teacher.

Well in early childhood in particular, my child was early childhood at that time, the relationship is so important, it is at any level but in early childhood it's so important for the teachers to connect with each child individually. With a larger class you just cannot get that close with each child. [Cathy]

Cathy stated that she was extremely excited to hear she would be a part of the implementation process to reduce class size even if it was a multi-year step-by-step reduction beginning with reading instructional time.

Yes. I started my first year a lower class size in reading elementary and I pulled students from 2nd grade in the morning and the 3rd grade in the afternoon and taught them reading in smaller class sizes. Smaller class sizes for me but it was also a smaller class size in the general classroom. So we were able to dig a little deeper, we were able to meet the needs of those students rather than teaching

just the general level of the whole grade. I loved it, especially during that time I was finishing my Master's in reading so I got to really focus on what I was and I got to focus on the students and where they were in their reading development and so I would get to really dig deeper and into comprehension especially and not just the actual reading part of it. [Cathy]

She mentioned that if class size were to increase back to those higher numbers in each room, her teaching would unfortunately have to change.

I definitely feel they've been proven. The class size makes such a difference, if we were to go back to the 25 in a classroom I would not be able to teach the same way I'm teaching now. There would be less small group time. The small groups I could pull would be larger, and which means I would have to group children again in a class with varying degrees but it would also be less time that they would actually get to come and be with me. So less informal assessment and probably less formal assessment to some. [Cathy]

Cathy felt the implementation of reduced class size had afforded her the opportunity to fully use her early childhood training of on-going informal assessments such as running records and anecdotal notes to help her truly meet individual needs within her classroom. She cited an example from her kindergarten instruction where she was working with two students that were reading on a third grade level and how important that was to her to be able to meet their needs. In her words, she was able to assess the need and truly follow through and meet the need and keep them challenged.

I can think when I was in kindergarten in particular and the varying needs that with very diverse population they're coming into it I was able to pull not, I was

able to pull two in a group size which is very small and I wouldn't have been able to do that with larger sizes and I had several groups that had two in there, two kids that were reading on a 3rd grade level already, two children who were still working on the sounds and letter connections and so I was able to do that and meet those needs. So children grew because of that. [Cathy]

Cathy gave examples of reduced class size having an effect in math instruction with manipulative use with a smaller group. The smaller number of students allowed her to spend individual time with students discussing their math thinking enabling her use that time as formative assessment.

Well I take it beyond the readings groups in math, especially this past year when we had more manipulatives with our new program that's they've purchased. They've been able to spread out in the room with those manipulatives, they've been able to work on that and have, I was able to go around as they're all working on it and see where they were, see where they were physically touching the manipulatives and even having enough manipulatives to go around much less the space in the classroom to spread out on the floor. [Cathy]

She also gave examples of additional enrichment activities that she would be more likely to include with a smaller group. One example mentioned was the planning and implementation of science experiments in the science lab. With an increased class size, a teacher might think about those things but simply not have the time to follow through due to being overwhelmed with the number of students and paperwork.

Then going to the science lab and being able to do activities in there if we had 10 more children, or even 8 more children than what we've had it would just really limit what I was actually able to allow them to put their hands on. [Cathy]

Cathy also mentioned hearing from other faculty their negative experiences of how it used to be at this school in classrooms of 25–26 students.

I know having come in as a teacher right when that change was being made I have heard a lot of them comments that the teachers have been made about the way it used to be, and even the physical space, we're setting up our classrooms right now and we're looking at the desk and I mean you think how did you fit that many desks in this classroom and the children. So it's still brought up by teachers who have been brought up longer than me every year. [Cathy]

Her early childhood background was mentioned in supporting reduced class size that allowed time not only for student relationships but for parental relationships as well.

Cathy was adamant that reduced class size had allowed her to teach using more of her early childhood methodology and training than ever before.

I think it's extremely important, again early childhood and the relationships are huge, not only with the child, but I've come to realize how important it is for my relationship with their parents and there's only seven units in a day, there's only so much of me to go around and I can't reach out to those parents in the same way when you have more than what was going to happen when you have 25.

I believe relationships are probably the most important part of teaching, which is directly related to class size. [Cathy]

Cathy was also convinced that the reduced class size had definitely helped with the systemic change of technology integration. As she so aptly put it, to instruct using technology you must be able to give individualized guidance to the younger student.

I think all of them have been really beneficial. It depends on what I'm teaching at the time, I love the Smartboard that it can pull the whole group in, I pushed really hard for that iPad and iPods when I was teaching kindergarten because they were not going to be able to use the computers in the same way that my older students could, and there's so many readily available apps that they could use and could grow and use them to learn. Even just being able to just record themselves was a huge piece. [Cathy]

Cathy was very supportive and excited about the technology integration change. Her biological children were of school age and the excitement for children in using technology to enrich learning was very evident to her at home as well as at school.

I loved it and you know both as a teacher and a parent. It's the world that our children live in and it's what we give back to them, it just makes sense for them to be implementing that in positive ways not just video games when they're at home. [Cathy]

Cathy viewed technology as opening up a new world of learning possibilities for her and her students. She mentioned needing to devote time to the professional development and the learning curve but felt it was worth every minute of it.

Professional development was huge. I think it helped me make my, the things that I presented in my classroom more professional but it also expanded my

teaching, what I allowed the students to do to express themselves, but also opened up their world to more learning opportunities. [Cathy]

Cathy gave examples of successful implementation using the interactive whiteboard with students to fully engage them in learning. She described her favorite technology supported project to be one implemented in third grade. It was a market day type activity that was a culminating event to a unit on commerce and trade. The students designed simple products, made the products, and marketed the products making their own commercial using iMovie then sold it in a student run market. The students kept up with sales using technology to assess what it cost to make their product then how many products they sold.

The computers, you know, probably my favorite thing that I've done with the computers when I was in 3rd grade and doing the market day and then research and then make commercials, and then they went into numbers and it was all over with and they put in their numbers of what they did and what they made and reflected on what they'd done. So there were so many ways they used the computer. That's probably why it's my favorite because we used it in so many different ways. [Cathy]

Cathy also gave examples of the integration of iPads and iPods for small group and whole group instruction that she felt had been extremely successful enrichments to learning activities. She reminded me that along with technology come challenges.

Technology often has glitches so you must have a back-up plan.

There have been challenges but they sometimes decided not to work the way you wanted it to work. Sometimes the apps that you expected to be there is not

there and you have to adapt to that. But I have to say that's no different than any thing else in teaching. I mean if you go back to the overhead days, the overhead light bulb might go and you have to adapt. So that's part of life, it's part of teaching. [Cathy]

Cathy felt that for some teachers that frustration was harder to get past and continue using technology.

Yes, there were those that were very excited and couldn't wait, there were those of us who said okay but you're going to help me. There were some that were scared to death. In fact the ones that were scared to death now count on it and use it regularly. [Cathy]

She was a strong supporter of the professional development provided by the school and the support of the administration in all areas of change.

Yes I think it's been a very positive thing, you know, we all need pushes to help us grow and so I appreciate that the school has pushed us to grow in that and I really feel challenged every year to grow in a new way and I have, you know, just the people around me, again the collaboration has pushed me I guess like peer pressure you know in a positive way. Yeah, the best thing that I did was just play with it on my own and I appreciated that it was made very clear. I use it for the classroom all the time and had I not played with it in the summer personally using it, you know, just doing things for fun on there I would not have known how to use it in my classroom as easily. We're all going to do it and it's kind of like what I said earlier is how the kids are so quick to problem solve and I got more

comfortable with how to problem solve and play with it but not everybody is there.

[Cathy]

Cathy had served on a technology committee during the early implementation period so she was privy to the thorough planning that had gone into infrastructure and professional development. She mentions that she was in awe of the research and work done by the school to prepare in advance for the implementation of technology integration. Cathy was also able to be a part of the collaboration on the technology committee to work through some of the early issues with technology that helped move the school into full technology usage campus wide.

I got to be on one of the committees, the one to one implementation committee and so I know how thought through it was, not that I had a hand in that but I was amazed at all the different things that had to be thought through and not just getting it up and running, not just having that bandwidth and figuring out what the appropriate amount of bandwidth was even how are the kids going to go to lunch and have a computer, what are we going to do to protect that computer so it's not destroyed in their locker and it was very well thought and it was so many different people and so many different levels and areas of the school that came together to discuss those issues. [Cathy]

Cathy had a close-up view of collaboration and collaborative leadership through the technology integration change. She described collaborative leadership as making use of everyone's gifts and talents.

Well the first thing I think of is I think about everybody's gifts are able to be used appropriately because we all have different strengths. [Cathy]

Cathy stated that the collaboration she sees now is so much greater than even a few years ago. She stated that she hears more sharing of research and ideas than ever before throughout the entire school culture.

Yes we have gotten much stronger collaboratively, I've enjoyed getting together with teachers from the middle and upper school subject matter, I mean we've done it with writing, we've done it with math in particular. I mean and we've gotten together on other committees and we've had those discussions I mean even with the programs within the schools. [Cathy]

Cathy links this to the administration's support and encouragement to try new ideas and not be afraid to fail.

I think that that culture has made it more comfortable to do that particularly thinking about the new head of school talking about don't be afraid to fail and say you had more conversations about what if we tried this and I think that's continued on. Whereas with more of an authoritative culture you're afraid to fail, you're afraid to, I mean, you're not as willing to try things. [Cathy]

She insisted that the collaborative leadership is more than just the administration.

Cathy gave the example of teachers collaborating with other teachers and putting competitiveness aside.

I do, I think that it takes a building of trust and not just from administration to the teachers, but also among the teachers of not being competitive among each other and keeping a secret that you're doing, but it's a part of sharing and everybody growing that's more win-win and not just out to look at yourself. [Cathy]

She states that the culture of this school has totally changed to a much more collaborative culture due to intentional leadership in this area. Cathy felt that the collaborative leadership encouraged her to think outside the box and try new things in her classroom like the market day experience that otherwise she might never have tried.

A friendlier, more supportive atmosphere . . . You know, it is more relationship based if you do that, which again I will say I think is the number one key in a classroom then it trickles down, that culture does. [Cathy]

Implementation of the three systemic changes was a challenge but Cathy felt her way of finding success in all three was to do some deep thinking and planning. She described herself as a positive person but one that enjoys a challenge and change. Change is exciting to Cathy and her approach is to embrace it and try to learn as much as she can from the change and the journey.

I do a lot of thinking about it. I try and learn about is it something new that we're doing, particularly the computers. For me I believe in being positive about it, I'm not afraid of change and there's the personality thing too that change is usually pretty exciting to me. So usually go into it with a positive attitude, but I also try, especially the older I get, I try and take it in more and learn more. [Cathy]

She described her role in systemic change as one of positive supporter, deep thinker, and influencer of others.

Yes, I mean spiritually I do a lot of time in prayer and meditating, you know, I pray, it's change, I do a lot of dreams of possibilities, that's change, and getting excited in thinking of the positive things of what positive things we connect and I also think of worst case scenarios how I deal with things and how can I avoid

worst case scenarios. What's the worst that can happen and how can I keep that from happening are the ways that I deal with it. [Cathy]

Cathy shared the insight that as a school year moves forward real life can occur and teachers can get bogged down. She felt an important administrative role during simultaneous systemic change was that of helping teachers avoid getting overwhelmed, or bogged down by providing research, reassurance, support, and professional development.

I think administration should, our administration does a good job of reassurance, not just the educating and continuing to education, but I really appreciate their reassurance. This is where we're trying to go, this is what we still have to learn, but we've gotten this far and I appreciate that, because you can get, especially throughout the school year you can get bogged down and get overwhelmed and you can get discouraged with life happening. The day to teaching can do that to you. Educate, reassurance is a big one, and the same thing you do in the classroom, that informal assessment. You've gotten here, that's great, now let's try this step. Kind of helping to guide what the next step should be, those changes can be overwhelming and you know, with the day to day responsibilities it's hard to think of the bigger picture what should the next step be and I appreciate the fact that administration does that work and thank them for it.

[Cathy]

Cathy's opinion on the three simultaneous changes was that the three occurring together led to the immense progress and growth experienced by the school in the last

years. She shared that in her view the growth in the area of technology would have been less if reduced class size and collaborative leadership had not supported it.

I agree with you it would have been hard, I don't think that we would have gotten as far technology wise if we had not been more collaborative at that time. It would have been hard to do it separately, but you could, I mean you would make progress but I don't think you ... Of growth I don't think you could, I think it would have been smaller amount of growth. You wouldn't have seen the creative output that you've seen with the technology. [Cathy]

Cathy reiterated that she felt the greatest challenge in the implementation of systemic change at the school-wide level is working with the fact that individuals approach change differently.

Well just accept it, learn, and to be positive and implement that change. We have had a lot of changes and I have thought about it. I do, I definitely see it as positive thing. Yes, the people around you can make a big difference. You know having changed grade levels and classrooms several times in the last six years. The people that are your team, I mean you can be well received or you can be not so sure of these outsiders and when you're well received when people are excited and positive that makes a huge difference. [Cathy]

Diane

Diane is a second grade teacher with a bachelor's degree in early childhood education and has been teaching for 28 years. Diane has been at this particular school for 15 years teaching second grade. Diane expressed the following feedback from the

lived experiences of implementing three simultaneous systemic changes of reduction in class size, technology integration, and collaborative leadership.

Diane was teaching at the school when class size was at its largest and her excitement for the reduced class size was evident in her interview.

It was larger than I would like, space became an issue for just being able to have movement around the room when you have so many, also of course you were not able to meet the individual needs as well with a class size that large, that we did the best we could with it but it did limit us to some activities that we could have going on and breaking up into smaller groups with that larger number of students. [Diane]

She stated that the reduction in class size had definitely allowed her to work with individual students and meet the needs more efficiently. Diane reiterated that she was also able to meet with each student in a small group setting each day which also helped establish relationships as well as assess individuals to pinpoint needs.

The reduction it was wonderful to go down, be able to remove, you know, the physical desks out of the room to have more room and meeting the needs of the children, allowing the children to work in groups that if you had the smaller class size allowed for me as a teacher to work with individual students at a longer period that really, really needed the reinforcement, whereas those that could stand challenges and work more independently could divide up into groups and work without chaos going on in the room, you know, was able to do with a smaller group and more room in the classroom. Yes, definitely make meeting more individual needs and working more one on one with students that needed

that extra teacher time. That was really the goal I think and yes having worked with a smaller group I definitely feel that that was the intent I wanted to be able to use it for, to work with the individuals one on one more, and then also provide opportunity for smaller groups to work and that has worked out very well too.

[Diane]

During the interview she reflected on her teaching with the larger class size saying it limited the activities she could do to assess and meet needs. This was frustrating to her since her view of her role as a teacher was to assess student needs then find a way to meet those needs.

I think looking back with the larger class size I did not incorporate using smaller groups and children working together in groups independently because of the size and because of the limited space and just breaking up children into that many more groups with the larger size is harder. Since we have gone down to lower numbers it has worked really well and I do love the fact that we can incorporate that now and I can pull and always have the small group with myself working with the students that really need the extra help. Working with all of them at some point but really concentrating on letting those that really need more teacher one on one time and allowing them other students to work independently in groups off together and so yeah it's been great. I've enjoyed it. [Diane]

Diane cited several learning situations where due to the reduction in class size she was able to pinpoint what an individual student needed in the way of differentiated instruction and truly deliver that instruction.

Specific example of a cold read that I time them so I'm looking at and you know, mark through to see how accurate or ... Running record, to see improvement and look from those, I follow that along throughout the year. I use that every year, it really does help me to assess where their reading ability and the co-reads go along with the reading story, but they're not anything that they've seen before and it's not ... It has allowed me the time to do that because that is a one on one, you know, and to get through everyone it does, you know, take a little time.

[Diane]

She felt this was only possible with fewer students in the classroom allowing her more time to devote to formative assessment and follow up.

Diane felt that with the introduction of the systemic change of technology integration she had to accept the role of student and devote time and energy to grasping a new digital world. She used the words challenge, not my world, frightened, and apprehensive when reflecting on her initial reaction to technology integration.

Just to be honest, I think being from the old school it was just kind of like oh know, okay it was not my world and having to learn that it was a challenge of course and I knew that it would need to be something that I needed to get up-to-date on and know how to function and use. I really have grown to love it, initially I was a little frightened by it and taken back thinking oh no can I do this, it's not my world. But given the time and the persistence to continue to go through it and the outcome so outweighs any negative thought from the get-go I think that, you know, but initially I would have to say yes, just a little apprehensive thinking oh no, I'm an older teacher. [Diane]

Diane was honest about her need to invest her own time to learn a new digital operating system.

Well I just felt like it was my responsibility to jump on board and to really plug in. I could dig my heels in and say oh two can't do this, or I could just say okay this is the way we're going and I've got to plug in and learn it and I think that kind of really, having the other two teachers with me, the three of us really working together to learn it together cause we were all kind of old school and not having that young person in there to kind of help. But doing it together and learning I think that was helpful. [Diane]

She felt that she had to be persistent with the professional development in order to gain enough confidence to convince herself that she not only could learn the newer technology but she could become proficient enough at it to guide children in it.

I have to say at the beginning I think that there were some oh no, you know, how are we going to do this, this is a lot to expect but if you're acting across the board I think that those comments were out there and people were scared and thinking, you know, how and why. Why do we have to change, you know, if this is working but having been here and worked through it then you just realize the technology there's always something new and bigger and better and I sometimes think oh no do we have to upgrade, do we have to because upgrades bring on more learning and it's a continuous thing. Well I think there's so much it's just so hard to say, you know, from sending the communication with the parent to the interaction with the children have on a day to day basis that we have from like the opening day, the start of our day with our morning message that's just so great and the fact

that I feel like we are so up and running to what their world is like and then if I put it into the practical stance of how I see it in my classroom teaching a skill, it really wows me. [Diane]

Diane recalled doubting herself and asking the question, “Can I do this?” Her answer to that question was found in her hope of using technology to enhance learning for students.

I think that it is an ongoing challenge, I think that just, and probably for me because I'm an older teacher whereas younger teachers that have been doing it longer or maybe still have young children in the home to help them, because I think that is so the children's world now and the young adults anyway have been brought up with it. So my challenge is just the little, the things that I come up against to think oh it's so easy to get out of that but I don't know how to get out of that or to change it for that day, or to incorporate some of the oh yeah let's plug in a picture here, and those are things that I just need to still learn to get proficient at where I could feel real comfortable. I really count on my younger co-teachers that are really more updated with it. [Diane]

She felt that the excitement surrounding technology could be harnessed and used to light the educational fires for students. For Diane, this was all she needed to take on the role of student and jump on board. She credits on-going professional development with helping her navigate the ever-changing technology world.

It was scary and I think the school at the time that it was brought in added a lot of professional development ... And that's the one good thing that we have here, everyone is so willing to help each other out to plug in where we can what we

know, each person. I just think it just makes us so much more competitive out there and moving forward as fast as we have with the technology I feel like it's just setting us up at a level where of excellence and it's ... Yes, and where these children are and it's their world so getting us on board with it has really I think helped them and it's going to even more. [Diane]

Diane saw immediate gratification in lessons using the interactive whiteboard. For example, she could see light bulbs come on for students as she used technology to enhance visually her lessons in place value. She described technology as helping take an abstract concept and make it more concrete visually for the students as well as interactive.

I see that those children can plug into that Smartboard and really understand place value by actions and breaking down of the skill where I can stand up there verbally and say it, teach it, teach it, teach it, but seeing it on a Smartboard actually played out of how it works and them buying into it because that's their world of vision not only just hearing it verbally but the vision brings it into, yeah it makes it more engaging. [Diane]

Diane mentioned the need to collaborate and work with other teachers as a key ingredient for her implementation of technology. With the technology integration implementation, she felt it extremely important to have designated technology support personnel within a faculty trained at a higher level in technology to step in to help.

Definitely, I definitely think I had to assume the responsibility of learning in my own time away from the children at school just to spend that one on one time with my computer and explore and find out and work so that when I got in front of

the children I knew what I was doing and just the responsibility I felt like since the faculty had provided this for me that I needed to plug into it and learn so therefore just spending the time trying to educate myself on the different . . .

[Diane]

She felt that collaboration and professional development had helped her take ownership and assume responsibility as she implemented the change of technology integration in her classroom.

Other faculty members really coming to the forefront that were very used to working with it and knew some of the ins and outs and the training that was provided, you know, all that was so helpful and knowing that I could go to the faculty member and that's probably where I found the most help from just here that knew what to do. A little bit of outside help, like I said probably at home, but even having a faculty member come to my house to help, you know, our technology person came and helped me with some things initially.

Collaborative leadership has a very deep meaning for Diane since she was asked to head up the mentor teacher program aiding first year teachers at the school.

But overall just the mentorship I think really I enjoy that aspect of my job here just because I'm so comfortable and know that a new person coming in is always on edge a little bit and always just trying to smooth that and grow that into help and know, help that new person learn to love the school as much as I've loved the school and just to kind of get that feeling of somebody that they can come to or whatever and that's kind of been the role I've liked to take on to just make them feel comfortable and ... [Diane]

She reflected on the change in culture at the school due to collaboration being expected. Diane shared the comfort in having an open door policy with administration and other teachers.

I think there has been like a door open for the input and for more feedback from everyone involved I think is wonderful because, you know, the more minds sometimes doing it like we do it more on a survey or whatever does kind of help to get the overall feel so that it's just not a few people making the whole decision for everything. Collaborating among teachers here has gotten much stronger.

[Diane]

She felt it had freed her up to try new things in her classroom and openly share her professional opinion whether that is in a group or individual setting.

Definitely, I feel like there's much more open door policy coming in expressing your opinion, not your opinion, but your thoughts, it's received well than in years past and open to the change that the faculty is very much aware of the things that are going to take place because administration has really put it out there so that you don't feel like oh you're thrown into this and this just happened, I think that administration has really tried to lay it out in a way that makes the teacher feel like your input is important and not just this is how it's going to be, this is what we're going to do in the end. I do think that has changed immensely. [Diane]

Diane mentioned that even the daily schedule reflects the importance placed on collaboration. Teachers on the same grade level have a daily 45-minute collaboration time for planning, discussing, or just simply touching base. Diane explained the importance of an educator being heard since they are on the front lines engaged with

students. She felt this was a major change achieved through the implementation of collaborative leadership.

Definitely, it has made me a happier person coming and knowing that I can express and really feel comfortable going to the administration and to hear whether or not it's the outcome I want or whatever, just being able to voice and feeling comfortable enough to do that. I mean working in an environment that you feel comfortable that you can go in and talk to your administration about something personal be it personal or a classroom situation we have not always had that and that is a huge change and a very positive change. It has, I think it has loosened the reigns up to make you feel like I can try this because if it doesn't work I'm not going to be put down about it or, what's the right word, I don't know, reprimanded maybe by doing something out of the routine of everybody said pick up your pencil, you know, just a really controlled environment. I feel like I can try things and if it doesn't work out then you know the people around me are saying well okay you tried and it didn't work or it did work you know, but ... [Diane]

Diane expressed that dealing with three simultaneous changes had definitely made her aware of how she personally implements change and the process she goes through to get there. She shared the following questions she often asks herself when confronted with change at the school:

Am I going to be able to understand how to do it? Am I going to be able to do it successfully? I think those are the first red flags that pop up in my mind as okay, this is change, I don't know, but is it going to be as beneficial to my children that

I'm teaching as well as I've been doing, or how the questions that are, you know, I ask myself okay how can I implement it if it's been adopted and that's the way we're going then you have to sit back and think okay well they have explored this enough to think okay this is the best route, so you have to kind of think okay this is what I need to really realize. But as far as how I feel about it, those emotions come up first, can I do it, am I going to be successful and how to implement it and give the best. [Diane]

She felt the administration had helped her answer those questions by providing time for training and experimentation prior to final implementation of a systemic change. Diane expressed her feeling that the administration put collaboration into play by listening to the teachers need for a slower pace of change and additional training.

Yeah, training and time to get on board with it before it's needed to be put to use. So I think that with the faculty if it's going to be a big change, if they have provided the training and the time to play with it, to work with it, to understand it before we put it into use. Because then yeah time to process, time to play around and then to ask questions because when you are given something and I think really having the lady come back at the end and teach us was as much of a help than what we've ever learned at the beginning even if the first lady would have been really good because we had a year to know what kind of questions to ask and you know moving forward cause when you are really just looking at something for the first time and you haven't dug into it or even taught it you don't know what your questions are going to be. So anyway, I just think that's the

main thing with administration is allowing the opportunity for the training and the time. [Diane]

She felt the pace at some points had been too swift for the majority to feel comfortable.

That's probably the biggest thing, just to be able to not have to jump in quite so fast since they just have to be done next month, you're all going on board with this and whatever, but just allowing us to know this and even if it does happen to know okay there's no way evaluation taking place we will all get in and get our feet wet and get used to it, and basically I would say the time and pacing.

[Diane]

However, when asked about simultaneous systemic changes she felt the three systemic changes needed to occur when they did at this particular school.

The three that were going on at the same time the class size, lowering of the class size and introducing the technology that to me was a no brainer so it was great, that was good timing you know cause you could really use it more effectively. Collaboration I just feel is always ongoing and I think that we've opened it up so much more now, you know, for the, you know, what comes to my mind is like when you come in to observe and then we automatically get feedback immediately pretty much, okay that kind of relationship acts so quickly and so helpful to see that you know we never had that until, and you go and you go and you had taught from August to May and you get your feedback in May and you don't get anything until then that's where the collaboration has been really helpful, it's been helpful to me to see it right after the fact that you can work

on your class in September on something or see that, you know, it will turn out okay, you're introducing it and they're able to see ... [Diane]

Elaine

Elaine is a second grade teacher with a bachelor's degree in early childhood education and has been teaching for 17 years. Elaine has been at this particular school for seven years teaching third and fourth grade. Her last 2 years have been spent departmentalized in fourth grade in the area of mathematics. Elaine expressed the following feedback from the lived experiences of implementing three simultaneous systemic changes of reduction in class size, technology integration, and collaborative leadership.

Elaine's teaching experience prior to seven years ago was at a much smaller private school with class sizes of approximately 10–12 students. She mentions that this gives her a unique perspective.

You know, it has because I believe it was harder to give the necessary attention to the groups of students that I had working with the larger number, so now I believe that it's easier for me to effectively monitor the different groups that are going on during classroom time. [Elaine]

As she arrived seven years ago at this school, the reduction in class size change was being implemented. Elaine states an overwhelmingly positive attitude existed as she arrived concerning the movement toward reducing class size. She found that the reduced class size allowed her to more effectively monitor group work and use it as formative assessment since there was time to discuss and dialog with students about their work.

Lower classroom size definitely affects my teaching. I don't feel as overwhelmed as far as all the different needs in the classroom, I'm much more attentive to what's going on in the groups and I'm able to manage what's going on in the groups better. So definitely I believe the lower classroom size is an advantage for the children and for the teacher, you know, to accomplish what we're trying to accomplish. [Elaine]

Elaine reflected that an increased class size causes her to automatically do more whole group instruction to keep everyone on the same page. She seemed frustrated when explaining this.

I think I tended to do more whole group instruction and try to keep everybody on the same page which sometimes I did not feel like I was differentiating enough and I enjoyed being able to work with the groups but I did shy away from that when the number was so large that I felt like I needed everybody with me at the same time. [Elaine]

Once asked to further explain, she cited her belief that an educator's true role is to differentiate instruction and meet individual needs. Elaine's view was that if there is simply not enough of her to go around to do the job in that manner then it is extremely frustrating.

Definitely. I feel like that if I'm given a task that I can handle better yes it makes me want to provide more hands on activities, more discussion activities, things that aren't whole group, you know, whole group instruction activities, so I definitely benefit from having a smaller classroom size. [Elaine]

When the class size was reduced, she was able to assess and instruct to meet the needs revealed in the assessment. She experienced a rise in her use of discussion groups with student interaction using strategies like *Turn and Talk*.

I do think that I have used more discussion groups where students interact with each other and when they interact with a small group turn and talk where they just turn to each other and they talk it's manageable and the classroom is not a great size. Also the use of manipulatives is easier, we can't spread out and use time effectively for manipulatives say with math or different kind of word maps or whatever that we're doing with literature. [Elaine]

Elaine expressed that with a reduced number of students, she paid closer attention to the individual students resulting in less off-task time for the class as a whole.

I think it's easier for children to get distracted and to be off task if I'm not able to give the attention to the different groups that I need to give to them because of size, yes, I think it's harder. [Elaine]

She felt the variation in her teaching strategies and the positive learning environment paid off in stronger self-efficacy for her as a teacher. This resulted in an even greater use of hands on, student-centered learning strategies and activities.

I think there are students that are left out sometimes that have challenges and so when the students that are needed are noticed and followed through with that's definitely encouraging for them. [Elaine]

Elaine stated that reduced class size had even made it possible for her to arrange the room in a more effective manner for meeting the needs of small groups and whole group.

We're encouraged together when we talk about what we were able to accomplish with our classroom because of classroom size being lowered and we like to make the room, set up the room in a way that's more effective with our teaching because of the fewer amount of students and when our room is filled up with students we feel like we can't sometimes ... [Elaine]

She commented that this may seem to be a minor part but it can pay off in a major way when differentiating instruction occurs more easily and comfortably.

Elaine stated that she truly enjoys change and is excited to be a part of educational change that keeps the betterment of students at the forefront. She carried this attitude right into the discussion of the systemic change of technology integration.

Well it's been great, I've loved everything about it. I'm one of those that likes to change, I enjoy learning something new, so for me that was a huge privilege and you know I saw the excitement on the children's faces and we were able to learn in different ways and they were excited and I was excited and you know to me it's been a great addition to the books and to the traditional classroom just to be able to have that tool to make it even more fun. [Elaine]

Being a life long learner, the simple idea of learning something new enticed her. She admitted that the word inhibited might be able to be used to describe her at first simply due to the fact that she had to pace what she expected of herself.

I wasn't truly inhibited and I just sometimes felt like it ... there weren't enough hours in the day to do everything we wanted to do. I do I think it's a great tool to enhance what we're discussing or what topic that we're on and it isn't something that's going to occupy their whole day, it is a tool to enhance our goals and

objectives, so you know, we can use it as much as we feel like we need to and then we can scale back and say we need to get back into this discussion or back into this text, you know, so ... [Elaine]

Elaine said she had to come to the point of recognizing that with technology there was no way she could know it all or do it all at once. There are simply not enough hours in the day. At this point, she mentioned teacher wisdom coming into play as far as making sure that you balance technology and how you use it in the classroom.

I do but I feel like that it's very balanced here. I feel like there's wisdom from the teachers, I think that we all are very aware that in the olden days they did not have these and they were greatly successful and greatly intellectual and so I do like you said believe that it's a tool and it's something that we bring alongside to encourage and add to and you know make things even clearer but I don't see it as an end all, especially in our day. [Elaine]

Elaine reflected on learning situations using technology such as creating business cards using an app, math digital tools that support curriculum, and content creation using a storytelling website. She cited the excitement of students over learning as making it worth all the effort on her part.

There are a lot of learning examples. I think one in particular that just came to mind real quick was when we made business cards and they were creating their own items to sell and then we found a website where we could create business cards and they just did a fabulous job on that and we printed them out and also there are just several apps that they can practice their facts and there are apps where they can practice their spelling words and you know, then there's

storytelling websites that they were so proud of when they created it digitally and they got to share it on the Smartboard and they were very proud of themselves and that you know the list goes on and on so ... [Elaine]

Elaine brought up the professional development and collaboration of other teachers as two of the most significant pieces of the implementation process for her. She sees it as a responsibility to research and determine the best digital tools to use to produce the greatest amount of student growth and learning.

I think my role was to present it and to share my excitement with the tools that we have with the Macs, with the iPods, and iPads, and then to let them investigate it and use it and share their knowledge with me and my knowledge with them it wasn't that I knew everything about it because I didn't and they are so easily taught little things about the computer and then they go forward so fast so you know it was like we were in it together and ... I felt very responsible that I would research and find the best web tools that would really be effective and not be a waste of time and not be something that didn't produce any kind of growth or learning. [Elaine]

Elaine also sees collaborative leadership as a personal responsibility for growth both individually and collectively. She cited the importance of the professional development that was given concerning being a team member, sharing ideas, and keeping an open dialogue with co-teachers and administration.

Well when we meet in our meetings, when all the teachers meet with you, our principal and assistant principal, I believe that we are heard. We're able to interact with you during the meetings and I really believe we can come in here,

every time I've every peeked in the door you were ready to listen and I think that you know we all feel as if you respect our opinions so I think we're all listened to, and I think there's just, you know, I wasn't here six years ago but I think every year I've been here that's even gotten better as far as you know if there's ever anything on their minds or in our hearts to do. I really feel like that we're listened to and respected, that's huge. I think that's why we all work well together as far as the team that we're in of course we listen to each other and there's three in our team so you know, we let each other know what we think is valuable, what's not valuable and we adjust and that's been very good. I think so because every year it seems to get better and every year there seems to be little kinks worked out because we've been able to talk about it and because we have an administration that listens, so yes, I think it's been very positive over the years.

[Elaine]

Elaine fully explained the idea that for some teachers sharing their thoughts and ideas may not come as naturally as it does for others.

Sometimes I think so because you may not want to collaborate sometimes I guess because you don't want to maybe grow, maybe you want to just do what you're doing. It takes time to collaborate; it takes time to come away from what you're doing to maybe come up with some different ideas or different ways so sometimes that is a negative for some. [Elaine]

She felt that for some teachers it might take encouragement and practice for them to feel comfortable sharing professional ideas. Elaine felt her duty was to encourage

others to share and not to force her opinions on others. She added that there are times a person may hold back simply due to not wanting to force their opinion.

Well I don't know, I hope so, I hope that we encourage each other to share ideas and you know without the fear of making someone feel like, well like in my situation I sometimes do hold back of collaborating because I don't want to force anybody to change or think that I'm thinking that I'm doing it better than them, so sometimes you know, you're careful to collaborate, sometimes you feel very welcome to do that so it's a mixture. [Elaine]

Elaine described the administration as striving to be a role model for collaboration throughout the school. Actively seeking feedback, mutual respect, and sharing of professional opinions were cited as on going in this school culture as implementation of collaborative leadership grows stronger each year.

Right I think it is a trusting system because you know the administration has to be willing to listen and then they have to be willing to be strong enough to go ahead and make decisions that may not be as popular as maybe they wanted to be because they know this is the best thing and we've listened and we've analyzed it and you know, so I think it is a positive but it's difficult at the same time I'm sure. [Elaine]

She described collaborative leadership as:

When I'm encouraged and feel supported then I'm free to go with what's in my heart to teach and you know do the best of my ability that I can get done, so yes, I think that that's a huge part of not being bogged down with worry and fear and doubt. [Elaine]

Elaine summed up the three simultaneous systemic changes as all working together to again support her teaching and student learning at a higher level.

Well you know, I think they're all three very positive changes so it makes life better, the collaboration to me makes life better and education better. The technology has been really, really good, real positive, the classroom size is wonderful when you can manage it well, so those three changes haven't been stressful, so I haven't felt, I felt like I can ... I can, I feel like they've been positive changes, so yeah I think they're okay to have come together. [Elaine]

She reiterated her enjoyment of change but also mentioned that at this school it was very easy to recognize that thorough research and discussion preceded decisions concerning systemic change.

I think that I do embrace changes, it's not that I don't question them if I think that it might not be the best thing to do, but usually especially here it seems like there's been collaboration going on even before changes are suggested and so it's, you know, after the initial shock of we're going to do this different then you know, yeah I pretty much can go along with changes and I enjoy changes in my day and I know the children do and so you know it seems to be okay most of the time. Today I think the administration here does that really well because they present it and they present what's going on behind the scenes and the reasons of the change. So you know, I think that's mainly the main thing is to be, to explain it well and to give the reasons backing the changes and then research ... Yeah clarify it all and then they're able to accept that and embrace it. [Elaine]

Elaine explained that with all three systemic changes the decisions were made by putting student needs first and that was all it took for her to be on board. She reflected on the amount of systemic change that had taken place in a relatively short amount of time at this school but balanced that with the idea that all three changes needed to happen for the advancement of instruction at the school.

The changes like the administration has to come up with, you know, to me are for the betterment of the children and for them to learn better. I think that's an honorable thing to do and I agree with making things better, more efficient, more effective, so I think that changes need to be made in life. [Elaine]

Elaine shared that her experience with teachers had been that those that are resistant to change need a very clear picture laid out for them concerning the research, implementation, and outcomes associated with a systemic change. She shared observing that clarification of a systemic change seems to encourage buy in and implementation.

I think when people are able to be positive and we're able to look at the good reasons of these things happening I think that when we collaborate together and we bring about those positive reasons together instead of focusing on the negative and I think those things really help. I think that like I said when the administration is presenting it and preparing us that helps, those factors help. And I feel like that when that thought has been put into something and that preparation shows that you care that the administration cares therefore how could you not accept those changes for the better so ... You know it doesn't, I don't know why, but it's been a journey and it's been an adventure I should say

and so who doesn't want to go on an adventure, that's how I feel about it. So it doesn't mean it's not difficult at times but mind stretching. [Elaine]

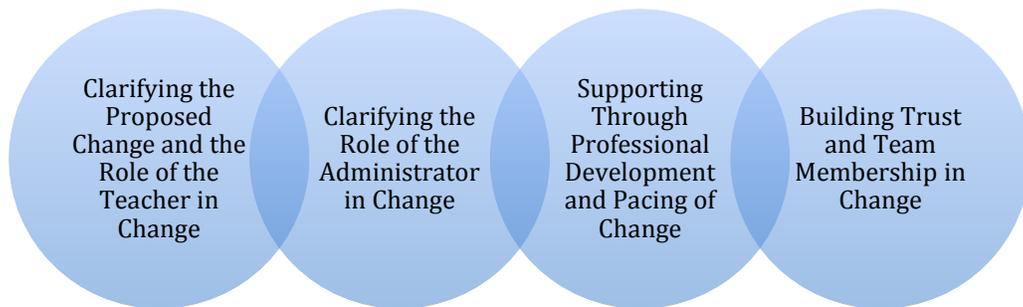
Elaine described her role in change as encouraging others to move forward into change as a team. She summed up the role of the administration as preparing for change, presenting a clear picture, listening to feedback, and adjusting realistic goals associated with systemic change.

Summary

In this chapter, I presented the findings of the study. These findings are based on analysis of interview transcripts. Interview questions centered on the three simultaneous systemic changes these teachers experienced by these teachers at this particular school and change in general. The interview data revealed that even though many questions began around a particular systemic change that had been implemented, the answers given by the teachers were then applied to their view of the change process in general and any change encountered by teachers in the classroom. These three changes were important to be used as a catalyst for focus on change due to the fact that the changes were simultaneous and systemic during a set amount of time that could be studied with a set group of educators. The richness of this study is the fact that it is truly the change process as seen through the lived experiences of teachers that experienced the changes.

The interview data in the study confirms the idea that change is a multi-dimensional process. The lived experiences of the teachers clarify that the change process does involve all aspects of an organization. The words of teachers from within the change process are invaluable to help inform and guide administrators as they

facilitate the complexities of change within a school. To that end, Chapter Five discusses the themes that emerged from this study, and recommends future practice and research in the area of educational change.



CHAPTER FIVE. DISCUSSION, RECOMMENDATIONS, AND CONCLUSION

The purpose of this study was to capture the lived experiences of teachers in an independent private school during a four-year period of multiple systemic changes. Research was conducted through semi-structured face-to-face interviews with five classroom teachers in this independent private school. This chapter reviews, analyzes, and discusses (in light of the relevant literature) the findings of the study. This chapter also outlines the implications of the findings for administrators and teachers, and illustrates the potential impact of the change process for faculty and staff in a school. This chapter concludes with suggestions for further research.

Discussion

The fundamental questions that framed this research were:

1. What are the teachers' perceptions of their contribution to implement and sustain change?
2. What intellectual and emotional work must teachers do to successfully implement and sustain change?
3. What supports do teachers need when implementing and sustaining change?

These questions were answered by themes that emerged from interview data, and were reported in Chapter 4.

Theme 1: Clarifying the Proposed Change and the Role of the Teacher in Change

According to Hargreaves, Earl, Moore, and Manning (2000), “the intellectual work of educational change involves establishing moral and philosophical clarity and agreement about what the change means” (p. 124). This need for clarification was highlighted throughout the teacher interviews. Each teacher in her own words described a basic need to be very clear on the change and more than that her role in the change.

I feel like my role was to learn everything I could and to attend things we were taught and try to seek out people who could help me with my personal issues or problems that I had so I would know how to apply it to my classroom, some things that would apply to an upper school teacher wouldn't necessarily apply to me. I had questions about things that they may not have with the class that would impact my class. [Amy]

Well I think my role, as a classroom teacher is to embrace the change, learn everything I can and be the best I can be at doing what I'm expected to do. We're all human, no one is perfect, so we all make mistakes, but I want to be able to put my head on my pillow at night and say it was a good day. [Betty]

For me I believe in being positive about it, I'm not afraid of change and there's the personality thing too that change is usually pretty exciting to me. So usually go into it with a positive attitude, but I also try, especially the older I get, I try and take it in more and learn more. Well just accept it, learn, and to be positive and implement that change once clarified. [Cathy]

Clarity and time to process is probably the biggest thing, just not having to jump in so fast ... [Diane]

So you know, I think that's mainly the main thing is to be, to explain it well and to give the reasons backing the changes and then research ... Yeah clarify it all and then they're able to accept that and embrace it. [Elaine]

Research indicates any successful change process always begins with focus and clarity and there is a reason for this (Evans, 1996). Amy referred to self-efficacy as being confident she could bring about the expected change.

I felt like I, besides the help at school, I did play with it on my own, researched things on my own, learned to research things on my own and learned how to do things, but I did a lot of that, but that was because I wanted to feel confident and wanted to feel like I was using it, it wasn't an opportunity to waste. [Amy]

This idea of self-efficacy is definitely built into the reason one needs to be clear on change and a person's role within the change. Diane stated that when confronted with change she asked herself questions like, "Can I do this?"

Am I going to be able to understand how to do it. Am I going to be able to do it successfully, you know, I think those are the first red flags that pop up in my mind as okay this is change, I don't know, but is it going to be as beneficial to my children that I'm teaching as well as I've been doing, or how the questions that are, you know, I ask myself okay how can I implement this if it's been adopted and that's the way we're going then you have to sit back and think okay well they have explored this enough to think okay this is the best route, so you have to kind of think okay this is what I need to really realize. But as far as how I feel

about it, those emotions come up first, can I do it, am I going to be successful and how to implement it and give the best. [Diane]

Once a teacher understands the overall concept of the change and where he/she fits into the change it helps generate a self-efficacy, or a confidence inside the teacher toward tackling the change.

Self-efficacy was woven throughout the interview data pointing toward the need teachers have for clarity of their role within change. When faced with change, teachers immediately break it down to the classroom and how it will affect what they do with and for students. This is due to the fact that educational change is intellectual and emotional (Hargreaves, et al., 2000). Teachers must be able to intellectually make sense of the change and grasp the point of it in order for them to be convinced it is feasible and will benefit their students (Fullan, 1991).

Yes. That's what the bottom line is for me and learning new ways to teach the same skills that are necessary sometimes is a challenge and that's the change that I feel like stepping out, that's a challenge, to learn to do it a different way, but you know, just like we've said once again with the math, when you see the response from the children and how well it works it does make you want to do more . . . [Diane]

This is where clarity of the change and the teacher's role is critical. The change and the teacher's role must be clearly presented in an explicit and compelling manner; then teachers must be allowed the opportunity to take time to work through their steps of the change process. Since everyone's journey in the change process is different it is a

great time to work alone as well as together as a faculty to further clarify the teacher's role in change.

I think in the beginning we all jumped in because that was the direction the school was going, but I felt like that was important enough because that drew students and that's where the world was going so I think everybody at first felt like you know for most people it was kind of a low, a little bit of shock to the system. That may not be accurate but I felt that way, but I also know that everybody that I talked to really got in there and ... I think anybody that needed help the opportunity was allowed. I think for everybody it was a little bit fast. But with any job when there are changes and things are provided you have to take the advantage and you have to take the initiative yourself. I think the older some of us are it is maybe a little harder for the quick changes . . . [Amy]

Elaine's comments reiterated the need for a teacher to work with teachers at other schools observing if possible so that she gets an idea of what a change looks like in practice at the classroom level, not just in theory.

I really enjoy that part of it in fact I just got off the phone with a teacher and we're trying to work through different ways to make it more efficient when putting our students that are using the math text website next year again to put them in more efficiently to do it a little bit easier, so yeah, I mean I feel like we each learn from each other. One of teacher has investigated one area, I've investigated a different area so we come together and we have a lot that we've conquered, you know, so that's ... [Elaine]

This is yet another part of achieving clarity in the role of the teacher within a change.

The idea of clarifying the change and the teacher's role in change is mentioned throughout research as a step that is often omitted. When those designing change do plan ahead for clarification often it is thought through from the point of view of those doing the implementation of the proposed change.

Being open, being willing to listen. Just the fact that you can be open and discuss something and nobody gets their feathers ruffled and that sort of thing and it's just to be professional and have that professional involvement with the teachers. [Betty]

Research bears out that decision-making is improved by clarifying roles and responsibilities (Evans, 2001). The consequences for omitting this important step can be confusion, uncertainty, and even suspicion. During any change, or innovation, in education it is easy for misunderstandings to develop concerning decision-making, responsibility, and authority.

I feel like in the beginning the decision was made and we were told about it and I felt like it's kind of when someone expressed anxiety or expressed being uncertain or unsure I felt like that the school did take more initiative and said well what are your areas of concern and broke it down from upper school, middle school and lower school. I felt like when we've had the in services and I've had several sessions and you could choose the one that addressed your needs and I feel like they've listened to our feedback, was this helpful, was this not helpful. I felt like it's more of they listened, the school listened more and more and tried to address the needs and you know just like the teachers were learners and we needed to be. [Amy]

If left untended, confusion and mistrust can develop into distress and cynicism even in the best of schools. It is important for administrators and faculty who see themselves as change agents to help resolve uncertainty so teachers can move from confusion to coherence and clarify roles and relationships in change (Evans, 2001).

Clarity in the role of the teacher also brings up the issue of what teachers are to do when they encounter resistance to change from other teachers. Interview data revealed the importance of how the teacher viewed her role in change as being very important as to whether they would jump on board and support change or not. Cathy put it into words by saying that she felt her role was to embrace change and not waste the opportunity to be a life-long learner.

I believe in being positive about it, I'm not afraid of change and there's the personality thing too that change is usually pretty exciting to me. So usually go into it with a positive attitude, but I also try, especially the older I get, I try and take it in more and not waste being a life long learner. [Cathy]

Some teachers, including several in this study, view changes as opportunities for learning and growth (Fullan, 1993). We know that research and real life indicates that not every teacher is going to view his or her role in change in this positive manner right off the bat.

Initially, I was a little frightened by it and taken back thinking . . . oh no, can I do this; it's not my world. But given the time and the persistence to continue to go through it and the outcome so outweighs any negative . . . [Diane]

It is important to make everyone in a school aware of the many different ways change can be embraced so when faced with resistance they can offer encouragement. Senge

(1990) paints a portrait of seven different degrees of support people have for an organization's vision for change:

- Commitment: Wants it. Will make it happen. Creates whatever "laws" (structures) are needed.
- Enrollment: Wants it. Will do whatever can be done within the "spirit of the law."
- Genuine Compliance: Sees the benefits of the vision. Does everything expected and more. "Good soldier."
- Formal Compliance: On the whole, sees the benefits of the vision. Does what's expected and no more. "Pretty good soldier."
- Grudging Compliance: Does not see the benefits of the vision. But, also does not want to lose job. Does enough of what's expected because he has to, but also lets it be known that he is not really on board.
- Noncompliance: Does not see the benefits of vision and will not do what's expected. "I won't do it; you can't make me."
- Apathy: Neither for nor against vision. No interest. No energy. "Is it five o'clock yet?" (as cited in Evans, 2001, p. 70)

Real change is personal and must be accomplished on a person-by-person level. One reason people resist change is that change comes with a personal risk factor. Most often resistant behaviors are rooted in the fear of a loss of autonomy and self-esteem that one might fail in the midst of the change process (Bloom, 2005). This was evident in the self-questioning mentioned in the interview data from Diane. This 28-year

veteran teacher cited the following questions that she takes herself through each time she is confronted with change:

Am I going to be able to understand how to do it? Am I going to be able to do it successfully? You know, I think those are the first red flags that pop up in my mind as okay this is change, is it going to be as beneficial to my children that I'm teaching? [Diane]

“Each time we ask a person to change, we are asking her or him to take a journey into incompetence” (Bloom, 2005, p. 161). Change represents a leap into the unknown and is seen as both hopeful and fearful.

It was kind of frightening at first because it was the unknown territory. But there's a little fear that goes along with it to. I think not as much fear now because we've done it. [Betty]

Teachers themselves can often be unaware of how change is making them react. Oppositional behavior to change is often nothing more than a protective mechanism for the teacher who is afraid of failure.

Just to be honest, I think being from the old school it was just kind of like oh know, okay it was not my world and having to learn that it was a challenge of course and I knew that it would need to be something that I needed to get up-to-dated on and know how to function and use. I really have grown to love it, initially I was a little frightened by it and taken back thinking oh no can I do this, it's not my world. [Diane]

Resistance may be better understood as a way for teachers to protect their work, ideas, philosophy, and personal beliefs if they feel these are threatened by proposed change.

Again, clarifying the change and the teacher's role and responsibilities is an important part of positively dealing with resistance and helping a person move through the change process.

Administration must be strong enough to deal with it with all of those that are needing to be brought along with change. Their role is to implement what they believe is best in spite of a little bit of resistance. [Elaine]

Schein (2010) calls this “unfreezing” and describes it as “one of the most complex and artful of human endeavors” (p. 98). Preparation and time dedicated to clarifying the change and the role of the teacher is a critically important part of the change process as seen through the lived experiences of the teachers in this study.

In summary, Theme 1: Clarifying the Proposed Change and the Role of the Teacher in Change answers the fundamental questions framing this research project in the following ways (indicated by bullet points under each research question):

1. What are the teachers' perceptions of their contribution to implement and sustain change?

- clarification among co-teachers of roles and responsibilities
- positive attitude
- encourage collaboration, clarification, and support for resistance to change
- encourage and aid self efficacy for all through clarity and collaboration

2. What intellectual and emotional work must teachers do to successfully implement and sustain change?

- awareness that educational change is both intellectual and emotional

- self awareness of the change process
 - awareness of the change process of others and the differences
3. What supports do teachers need when implementing and sustaining change?
- clarification of their role and expectations
 - systemic change broken down into implementation steps
 - time and opportunities to observe what change looks like
 - time to work through the change process

Theme 2: Clarifying the Role of the Administrator in Change

To increase the probability of successful change, the change leader needs to understand change and how others will respond to change (Ebbeck & Chan, 2011).

This theme was strongly evident throughout the interview data. The lived experience of the teachers within this study highlighted that clarification of the role of the administrator as it relates to complex change is extremely important. Amy stated that it was the encouragement from administration that aided her in stepping out and implementing change.

I think as the administration, I feel like most administration is learning a lot. I feel that there's a lot more support and I'm not hesitant to ask for help or say I don't understand, or how do I do this. Yes and I do feel like that we have been able to speak up and have a voice. [Amy]

Elaine emphasized the importance of administrative research and discussion done prior to the introduction of a proposed change.

Administration has to be willing to listen and then they have to be willing to be strong enough to go ahead and make decisions that may not be as popular as

maybe they wanted to be because they know this is the best thing and we've listened and we've analyzed it and you know, so I think it is a positive but it's difficult at the same time I'm sure. Today I think the administration here does that really well because they present it and they present what's going on behind the scenes and the reasons of the change. So you know, I think that's mainly the main thing is to be, to explain it well and to give the reasons backing the changes and then research ... clarify it all and then they're able to accept that and embrace it. [Elaine]

The open door policy of communication from the administration is woven throughout the interview data. The teachers described these as important pieces of the role of the administration that they could count on as they navigated the waters of the change process for themselves.

I feel like there's much more open door policy coming in expressing your opinion, not your opinion, but your thoughts, it's received well than in years past and open to the change that the faculty is very much aware of the thing that are going to take place because administration has really put it out there so that you don't feel like oh you're thrown into this and this just happened, I think that administration has really tried to lay it out in a way that makes the teacher feel like your input is important and not just this is how it's going to be, this is what we're going to do in the end. I do think that has changed immensely. [Diane]

Being a change agent is not a haphazard process but a delicate balance of providing direction yet suppressing the urge to over manage (Bloom, 2005).

In order to facilitate complex systemic change, emotionally intelligent leaders and emotionally intelligent organizations are necessary (Goleman, McKee, & Boyatzis, 2002). This emotional intelligence enables an administrator to develop interpersonal context that can free, encourage, and help people to become actively engaged in the change process.

Definitely, it has made me a happier person coming and knowing that I can express and really feel comfortable going to the administration and to hear whether or not it's the outcome I want or whatever, just being able to voice and feeling comfortable enough to do that. I mean working in an environment that you feel comfortable that you can go in and talk to your administration about something personal be it personal or a classroom situation we have not always had that and that is a huge change and a very positive change. [Diane]

This is an extremely critical part of the role of the administrator that greatly influences the role of the teacher. The future of change requires administration to be much more aware of the big picture, conceptual thinking, and transforming an organization through people. Goleman, McKee, and Boyatzis (2002) identify 18 competencies divided up over four domains: self-awareness, self-management, social awareness, and relationship management. Leaders proficient in these domains are aware of their own emotional make-up, are sensitive and inspiring to others, and are able to deal with the daily problems and still work intentionally on changing the culture of an organization (Fullan, 2002).

Years past it's more that you were told this was what was going to happen rather than let's get everybody's opinion, what do you all think about this to be asked

what you think and to be able to say what you think without people viewing that as being negative or it's like it's okay to agree to disagree on something, but then the decision was made and everybody goes forward with it and I think when you are professionals you should be able to do that and I think there's probably more than that now than there ever was in the past. [Betty]

Fullan (2001) examined successful leadership in business and in school systems and found that in this new knowledge society, business and education leaders have increasingly more in common than ever before. Fullan surmised that the convergence of mind and action could be best understood within a new framework for leaders of complex change. Fullan (2002) referenced this as the Culture Change Principal (a hypothetical character) and highlighted five core components of leadership necessary to build energy, enthusiasm, and hope:

- moral purpose
- understanding change
- relationship building
- knowledge creation
- sharing and coherence making (p. 5)

This reference to Fullan's work will come up again in Theme 4: Building Trust and Team Membership.

Fullan's words are an appropriate summary for what the five teachers commonly referenced in their interviews as the role of the principal that helped them secure their role in change. The following are a few of the descriptions from the interview data of what teachers need from the role of an administrator during complex change:

- administrative investigation and research prior to proposing change
- sharing research and ideas as they unfold
- clarity of the change and the process
- encouragement and patience during the process
- approach to those resistant to change (how this is handled speaks to everyone in the organization)

My perception of the lived experiences of the teachers within this study highlight that the role of the administrator as it relates to complex change is extremely important and needs to be clarified. A good change agent is no longer simply an administrator who has innovative ideas and embraces the change process. The Hay Management Group (2000) found that developing relationships and team building is the most difficult skill set for a leader to develop whether they are in business or in a school setting. This underscores the importance of emotional intelligence for a leader during complex times. Research indicates that it is more important for a leader to have emotional intelligence than the best ideas (Fullan, 2002). An emotionally intelligent change agent can build relationships with diverse people and groups, which is a must for the complexities of systemic change.

In summary, Theme 2: Clarifying the Role of the Administrator in Change answers the fundamental questions framing this research project in the following ways (indicated by bullet points under each research question):

1. What are the teachers' perceptions of their contribution to implement and sustain change?

- understanding and clarifying to others the administrator's role and the teacher's role and how they work together to implement change
- awareness of the big picture and overall goals for the school
- transparency and open discussion with the administration concerning change and the process prior to implementation

2. What intellectual and emotional work must teachers do to successfully implement and sustain change?

- acceptance, recognition, and support of administrative research and work done prior to change implementation
- strengthen emotional intelligence
- awareness of how to work with administration when encountering resistance to change

3. What supports do teachers need when implementing and sustaining change?

- administrative open door policy for clarification and discussion
- administrative and team support
- emotionally intelligent leadership
- administrative support and guidance for those resistant to change

Theme 3: Supporting Through Professional Development and Pacing of Change

The teacher interview data indicated the importance of professional development and pacing as important ingredients helping move them forward in the change process. Teacher responses indicated they associated professional development and pacing of change as equally important pieces of their journey.

I don't think I realized it at the time. I felt like there was a lot of change and sometimes I kind of felt I was dangling alone in the beginning, but I ... I felt like I needed to break it down and that's what I had to do. I think with anything one step at a time is easier. [Amy]

Professional development was huge. I think it helped me but it also expanded my teaching, what I allowed the students to do to express themselves, but also opened up their world to more learning opportunities. [Cathy]

Each teacher put into her own words the message of needing to be encouraged through the anxiety and fear of trying something new.

It was a lot of change like I said though I really did enjoy it, I was just amazed at the Smartboard, I thought it was incredible and so you know everything I could read about it was fun. I felt like we had to really just get our hands in there, we could not really listen about it and go over it and do it well. I think that we had to really just start experimenting with it, professional development was good but we needed a lot of time, probably needed even more time in the summer to do it together but as we've come along I mean we've, you know, even the children enjoyed all the new things on it and pointed things out to us and so I just think it's something where we have to yes listen and be with your professionals and hear guidance and training but you've got to get in there and be encouraged to start doing it for yourself. [Elaine]

This rings of the term Schein used of “unfreezing” someone so they can move forward to embrace change (Evans, 2001). It is the “matter of lessening one kind of anxiety, the fear of trying, but first of mobilizing another kind of anxiety, the fear of not trying”

(Evans, 2001, p. 56). The teachers confirmed the idea of needing to be given assurance through professional development and the idea of pacing so as not to be overwhelmed with the idea of change.

I definitely think I had to assume the responsibility of learning in my own time away from the children at school just to spend that one on one time with my computer and explore and pace myself so as not to get overwhelmed. [Diane]

Schein (2010) put into words what the teachers were trying to convey through their interview data:

If the change ... threatens my whole self, I will deny the data and the need for change. Only if I can feel that I will retain my identity or integrity as I learn something new or make a change, will I be able to even contemplate it. (p. 300)

Interview data from Diane points to this need as she reminded us about her need for internal answers to questions like, "Do I have the skills to make the change?" and, "Will I be successful?" Diane reiterated how critical it was for her to have time for training and experimentation through professional development prior to implementation of a change.

But as far as how I feel about it, those emotions come up first, can I do it, am I going to be successful and how to implement it and give the best. Am I going to be able to understand how to do it? Am I going to be able to do it successfully? I think the beginning of the changes a few years ago there was a lot at one time and I think it has backed off, we're still implementing more in update changes to technology but slowing down other changes and it's been received better I think having slowed down some of the change that's taken place since ... Very important, right, so that you can wrap yourself around professional development

and really dig into this part of the change before you're jumping ship and trying to change this too, so you're not feeling real good. For me personally if I take change slower or a slower pace I can plug in and learn it before and really get comfortable before the next. I know some of it has to overlap, that's going to happen but when we do pace it more I think it's received better. [Diane]

Diane also included the importance for professional development support to include time with colleagues for discussion and working through change questions and concerns.

Faculty members really coming to the forefront that were very used to working with technology and knew some of the ins and outs and the training that was provided, you know, all that was so helpful and knowing that I could go to the faculty member and that's probably where I found the most help from other teachers and time for sharing. [Diane]

Interview data indicated a need for an awareness of the stages that meaningful professional development should help take a teacher through. Research by Evans (2001) indicated that administrators could help teachers move into change by helping teachers address the four dilemmas of change:

- loss to commitment
- old competence to new competence
- confusion to coherence
- conflict to consensus (p. 55)

The teachers felt that with well thought through and intentional pacing of change and meaningful professional development, teachers were more likely to engage in the

change process. They also felt that within a faculty there is a variation in the level of need for change support and this also influences how professional development should be handled for a specific change.

I think that change is an ongoing challenge. So my challenge is just the little, the things that I come up against that need more time for me. I really count on my younger co-teachers. [Diane]

This type of distinction is present with any organization as they deal with change, and there are three basic levels of commitment to change: make it happen, help it happen, and let it happen (Evans, 2001). Professional development decisions need to be studied in relation to the commitment of those facing the change.

The words “clear picture” and “support” are linked through the data with the words “professional development” and “pacing”. Research warns change agents, such as administrators, not to underestimate the need for clarity in the change process and the steps of adaptation.

I think if you work as a team you're learning together, we put it together to help one another in different areas and I think that does, I think it provides the support and pacing. Discussing with us, asking for our feedback, providing surveys, questionnaires, bringing in speakers ... providing support and being clear about expectations. [Amy]

Change agents have usually already had their time to assimilate the change and formulate their idea of purpose and practice. The same opportunity to assimilate and adapt must be given to those who are being asked to make the change. This crucial step of professional development is often omitted and should be a standard part of the

thought process for change agents, or administrators. The teachers in this study consistently brought up the need for time during the initial phases of professional development for any change to discuss and “get it all thought out” as they put it so that they can move on to making meaningful change.

Yeah and as time goes by you do feel like I say with each change you just kind of have to think it through and jump on it, hit it head on and say okay what do I need to learn about this, how do I find out about this now. [Betty]

Well I just felt like it was my responsibility to jump on board and to really plug in. I could dig my heels in and say oh two can't do this, or I could just say okay this is the way we're going and I've got to plug in and learn it and I think that kind of really, having the other two teachers with me, the three of us really working together to learn it together cause we were all kind of old school and not having that young person in there to kind of help. But doing it together and having time for learning I think that was helpful. [Diane]

The research data confirmed that teachers view this intentional building in of time for people to discuss and wrestle mentally with change as one of the greatest forms of administrative support. This once again reiterates Bloom's (2005) research showing the teachers' degree of receptiveness to change is significantly affected by their perception of their administrator's support.

The importance of pacing change endeavors appropriately was evident throughout the interview data. There is often a difference between the view of the change agent and the view of those implementing the change when it comes to pacing

of change. It is easy for an organization to suffer from too many good ideas and have too many changes occurring at once.

Pacing of change is tied to the success of a change. Interview data indicated that teachers would welcome isolated, slower paced change but they also knew that it was not reality within a school.

Well I do think I'm probably better with it than I was at the beginning because like I said in the beginning it's like it happens and it comes at you so fast and you felt like you couldn't learn this, get this down just right and then we were on to this and then this, it was a lot of things at one time. [Betty]

I think the changes that have been made have helped with the team because we do have people come in, we do have in services, you know, what area do you need or for the upcoming in service which of these would apply to you most, what would help you the most. For me, I felt like I needed to break it down and that's what I had to do. I think with anything one step at a time is easier but at the same time it goes so fast you have to keep up. [Amy]

There are times within a school when simultaneous changes must occur. The teachers in this research study were in a period of years of simultaneous systemic changes. After much discussion about this, they each felt that the three changes of lowering class size, technology integration, and collaborative leadership needed to occur simultaneously. The teachers truly felt that even though it had been a bit overwhelming at times, the three changes worked together in a very positive manner, bringing about meaningful change.

I agree with you it would have been hard, I don't think that we would have gotten as far technology wise if we had not been more collaborative at that time. It would have been hard to do it separately, but you could, I mean you would make progress but I don't think you ... Of growth I don't think you could, I think it would have been smaller amount of growth. You wouldn't have seen the creative output, which you've seen with the technology. [Cathy]

Well you know, I think they're all three very positive changes so it makes life better, the collaboration to me makes life better and education better. The technology has been really, really good, real positive, the classroom size is wonderful when you can manage it well, so those three changes haven't been stressful, so I haven't felt, I felt like I can ... I can, I feel like they've been positive changes, so yeah I think they're okay to have come together. [Elaine]

When considering pacing, it is important to recognize that change comes in different magnitudes. Organizational theorists refer to these changes as first order and second order change. Recognizing the difference in first order and second order can aid administration when looking over how much change to consider and how to pace that change. First order change is usually an extension of the past, incremental, consistent with prevailing values and norms, and often designed to solve a specific problem (Bloom, 2005). An example of first order change might be a new afternoon pick-up procedure for parents and students. Second order change is more challenging due to the fact that these changes are of a greater magnitude and break away from past traditions and practices. Second order change usually requires people to change attitudes and mental models, acquire new knowledge and skills, and redefine roles and

expectations (Bloom, 2005). An example of second order change might be changing an educational program to a project based learning approach. Whether a change is first order or second order heavily influences the pacing and professional development needed to support the teachers in that change process.

Another point that surfaced in the interview data within the theme of professional development support and pacing is the idea that change is not a single event. The teachers found it extremely supportive when administrators considered overall changes required within the school year. Betty felt that the consideration by the administration indicated collaborative, caring leadership and encouraged her to go above and beyond to make successful changes in her classroom.

Yeah, I mean I think when, for the administrative it works from the top down, administration is an example of collaboration and care for the faculty, faculty doing it, it's also an example for children. It is, it's new and some people, you know, I think it takes time I would say to build a comfort zone around something and not view anyone else as a, you know, making sure you're not viewing anyone as a threat or well if I do tell you what I think is it going to come back to haunt me. You know what I'm saying. Administration is supportive and open to pacing and professional development needs. [Betty]

Change within a school is cyclical and ongoing. This underscores the importance of pacing change and providing meaningful professional development support (Hargreaves, Earl, Moore, & Manning, 2000).

In summary, Theme 3: Supporting Through Professional Development and Pacing answers the fundamental questions framing this research project in the following ways (indicated by bullet points under each research question):

1. What are the teachers' perceptions of their contribution to implement and sustain change?

- collaboration with administration to guide professional development and pacing decisions to meet teacher needs
- collaboration with colleagues sharing meaningful professional development
- collaboration with colleagues concerning pacing
- clarification and support for simultaneous change

2. What intellectual and emotional work must teachers do to successfully implement and sustain change?

- awareness of differences in approach and reaction to change
- awareness of personal reaction to change and team membership
- awareness of need for collaboration regarding professional development and pacing then setting aside time for collaboration

3. What supports do teachers need when implementing and sustaining change?

- administrative awareness of the teacher's view of pacing and amount of change
- meaningful professional development that helps clarify and break down change
- intentional pacing when planning change and professional development

- provide input for decisions concerning professional development and pacing
- assurance from administration and team
- clarity in the change process and the steps of adaptation
- time to assimilate and adapt professional development and pacing
- administrative awareness of simultaneous change

Theme 4: Building Trust and Team Membership

When organizational goals and expectations are compatible with the collective needs and expectations of individuals the result is high morale and a healthy organization. It is certainly the goal of any change agent to aim for embarking on change with a healthy organization. The teachers in this study strongly indicated the need for clarity in the goals and expectations of the organization and the individuals within the organization. A goal and expectation that they felt permeated the entire organization was that of trust and team membership. The teachers reiterated the importance of a culture of trust and team membership during any uncertain times of change.

Overall moral besides the learning level the overall moral and the feeling of cohesiveness and support. Without that collaboration you just don't have that.

You don't have the working together as a team and it is a team. [Amy]

Well I think so because I think there's not a teacher that teaches here that doesn't have this school's best interest at heart. So when you can bring all that together it has to be better for your school, for the children, for the teachers, for the team. [Betty]

Yes, the people around you can make a big difference. You know having changed grade levels and classrooms several times in the last six years. The people that are your team, I mean you can be well received or you can be not so sure of these outsiders and when you're well received when people are excited and positive that makes a huge difference. [Cathy]

It has, I think it has loosened the reins up to make you feel like I can try this because if it doesn't work I'm not going to be put down about it or, what's the right word, I don't know, reprimanded maybe by doing something out of the routine of everybody just a really controlled environment. I feel like I can try things on the team and if it doesn't work out then you know the people around me are saying well okay you tried and it didn't work or it did work you know, but ... [Diane]

I hope that we encourage each other to share ideas and you know without the fear of making someone feel like they are not part of the team. [Elaine]

Even when they felt unsure of their ability to change, the trust in the team and being a part of the big picture of moving the school forward gave them the impetus to embark on change. Evans (2001) describes this trust and team membership as participatory leadership which empowers trust and collegiality. The school must be viewed as an intellectual community of life long learners that share a covenant of values. The goal is for this community to be harmonious and self-reflective so they can examine challenges of change and decide as a team the best way to proceed (Evans, 2001).

Trust is the essential link for transformational change between leaders and those they are leading (Evans, 2001). When trust is missing it is easier for people to “ignore, disguise, and distort facts, ideas, conclusions, and feelings that might increase their vulnerability to others which increases the possibility of misunderstanding” (Kouzes & Posner, 2012, p. 147). The teachers in this study linked the word “trust” to other words.

Right I think it is a trusting system because you know the administration has to be willing to listen and then they have to be willing to be strong enough to go ahead and make decisions that may not be as popular as maybe they wanted to be because they know this is the best thing and we've listened and we've analyzed it and you know, so I think it is a positive but it's difficult at the same time I'm sure. I really feel like that we're consistently listened to and respected, that's huge. I think that's why we all work well together as far as the team we let each other know what we think is valuable, what's not valuable and we adjust and that's been very good. [Elaine]

I think that the overall faculty and the staff just making the effort to be a team, more than ever allowing us to be a part of it and consistently inviting our input and trusting the faculty members to be able to come to and ask for help and not feel ... [Amy]

These words can be found in the research on change closely linked to trust. For instance, the word “consistency” appeared multiple times in the data. Evans (2001) stated that consistency is the lifeblood of trust (p. 184). The teachers in this study confirmed the idea that consistency produces trust when an administrator regularly follows through with commitments they have made to their faculty and staff. Research

shows that when people are consistent in their actions and in their follow through people equate this with trustworthiness. The word “confidence” also appeared in the data linked in the minds of the teachers with “trust”. The teachers stated it was easier to embrace change when there was a confidence that a vision for change would be clearly articulated and brought to reality.

Today I think the administration here does that really well because they present it and they present what’s going on behind the scenes and the reasons of the change. So you know, I think that’s mainly the main thing is to be, to explain it well and to give the reasons backing the changes and then research ... present a clear picture and clarify it all . . . [Elaine]

This type of confidence in leadership produces trust in the administration and support for proposed changes. Evans (2001) reminds us people seek authentic leaders who inspire them to trust and confidence, someone worth following into the uncertainties of change (p. 185).

The importance of team membership was evident throughout the data. The words “team membership” were associated with each and every change discussed with these teachers. The idea of belonging to a team and making changes for the greater good seemed to nudge even the most reluctant teacher to embrace the change process. Elaine stated she felt it was her duty to encourage team membership and change that would impact students in a positive way.

And I feel like that when the thought has been put into something and that preparation shows that you care that the administration cares therefore how could you not accept those changes for the betterment of students ... [Elaine]

Research supports the importance of team membership. Evans (2001) brought this to light as he compared transformational leadership and transactional leadership. Transformational leadership unites people and highlights the human need to work toward a common goal. Transactional leadership exchanges rewards for performance to keep daily operations flowing smoothly. The more complex, second order change, taking place in schools, the greater the demand for transformational leadership (Evans, 2001).

A strong sense of team membership is a common bond that holds people together. During times of change, team membership leads people to work together for the greater good even when it requires conquering fears and extra work. The lived experiences of the teachers in this study clearly indicate that the change process was positively impacted by common goals supported by relationships of trust and respect.

We all work very cohesively together; you know it's all supportive of each other. I think there's always the pros and cons to every side, you know, and there's always the excitement of something new versus the leaving the comfort zone of what you've had. It's like it's okay to agree or disagree on something, but then the decision is made and everybody goes forward with it and I think when you are professionals you should be able to do that and I think there's probably more of that now than there ever was in the past. [Betty]

Bloom (2005) explained that commitment to an organization, or team membership, is the strength of a teacher's identification with an educational institution. Bloom (2005) characterized team membership in three related factors: a strong belief in and acceptance of the organization's goals and values; a willingness to exert oneself on

behalf of the program; and a strong desire to remain working at the institution (p. 95).

This presents a challenge for administrators to help teachers develop this strong sense of team membership. Hall (1988) points out three essential ingredients for team membership: impact, relevance, and community.

- Impact: It is important for teachers to know they are making a difference in the lives of young children. Impact affirms our personal feelings of importance.
- Relevance: It is important for teachers to know their time and training are being used appropriately.
- Community: It is the belief that people can depend on one another and is built through mutual respect and shared responsibility.

This research study has highlighted four themes that emerged from the lived experiences of the teachers participating in this study. The themes are as follows:

- Theme 1: Clarifying the Proposed Change and the Role of the Teacher in Change
- Theme 2: Clarifying the Role of the Administrator in Change
- Theme 3: Supporting Through Professional Development and Pacing of Change
- Theme 4: Building Trust and Team Membership

The four themes underscore the fact that change is complex and that learning to change is intellectually challenging (Hargreaves et al., 2000). My perception of the lived experiences of the teachers brought to life the findings of Evans (2001) when teachers were asked to reflect upon past changes they had been asked to make. In retrospect,

teachers found that even involuntary change had a more positive impact than they originally thought it would and helped them grow professionally.

Yes I think it's been a very positive thing, you know, we all need pushes to help us grow and so I appreciate that the school has pushed us to grow in that and I really feel challenged every year to grow in a new way and I have, you know, just the people around me, again the collaboration has pushed me I guess like peer pressure you know in a positive way. Yes, there were those that were very excited and couldn't wait, there were those of us who said okay but you're going to help me. There were some that were scared to death. In fact the ones that were scared to death now count on it and use it regularly. [Cathy]

The complexity of change calls for complex strategies and leadership to address the needs of teachers when faced with change.

This complex leadership needed for simultaneous systemic change in today's school setting calls for emotional intelligence. Emotional intelligence drives resonance (positively driving emotions to bring out the best in everyone) and in turn performance (Goleman et al., 2002). The themes in this data all point to the need for leaders to work on strong emotional intelligence as they lead others in the change process. Emotional intelligence can be categorized into four domain areas. The first two domain areas of self-awareness and self-management are described as personal competence and determine how we manage ourselves. The latter two domain areas of social awareness and relationship management are described as social competence and determine how we manage relationships (Goleman et al., 2002).

In summary, Theme 4: Building Trust and Team Membership answers the fundamental questions framing this research project in the following ways (indicated by bullet points under each research question):

1. What are the teachers' perceptions of their contribution to implement and sustain change?

- awareness of the school's goals and expectations
- clarify and communicate personal goals and expectations leading to collective goals and expectations

2. What intellectual and emotional work must teachers do to successfully implement and sustain change?

- self reflection concerning personal goals and expectations compared to school's goals and expectations
- investment in team trust, team membership, and collegiality

3. What supports do teachers need when implementing and sustaining change?

- clarity of the school's goals and expectations
- culture of trust and team membership
- transformational leadership that empowers trust, collegiality, harmony, and self-reflection
- administrative consistency concerning commitments and follow through
- authentic participatory leadership that inspires
- confidence that a vision for change will be clearly articulated and brought to reality

Conclusion

The teachers' lived experiences with systemic change process, as I interpreted them; provide valuable insight for teachers and administrators. The themes of change clarity, role clarity, professional development, pacing, trust, and team membership emerged from the data collected from the teachers' lived experiences with three simultaneous systemic changes. One could apply the idea that these would be important facets for undertaking any change not just the three highlighted in this particular school.

When discussing change the teachers did not initiate, the strength was found in the experience of trust and team membership. Time invested in building a foundation of trust, dependability, and team membership pays off great dividends when embarking on change that is proposed to a group of educators.

In a school setting, it is very difficult to narrow change to one change at a time. The participants in this study leaned on their past school experience to cope with multiple systemic changes in an open-minded manner. The idea that multiple changes will occur in a school was not only accepted but also supported by the participants. Since multiple changes will occur, the idea of pacing and professional development is important in navigating multiple changes.

In a school setting, multiple changes occur simultaneously. The lived experiences of these teachers clearly indicated that people approach change differently. This was highlighted as the participants embarked on three simultaneous systemic changes at this school. The common thread was that each participant held in high

regard the overarching idea that the changes were for the greater good of the students and the school.

The data collected from this study have generated numerous topics for discussion, including teacher self-efficacy and emotional intelligence in the change process. The results of this study suggest that it is valuable for administrators to invest time in the study of the change process. The change process within a school is complex for teachers and all involved. Change is personal and change within an organization is often slow. Even with the best of leadership, change which transforms culture and practice takes years. Addressing the complexities and focusing on the needs of those involved can dramatically influence in a positive manner the experience and outcome of the change process and the culture in which it takes place.

Future Research

This research contributes to the body of research on educational change and more specifically multiple systemic changes as seen through the eyes of educators. It is unique in the fact that the research was conducted within the independent school sector. The insight gained from studying those within the change process is invaluable to all educators both teachers and administrators.

The area of teacher self-efficacy and how it affects the individual change process was highlighted in this research as an area in need of future study. The lived experiences of those in this study indicated a direct link between a teacher's belief that he or she has the capacity to affect student performance and their capacity to embrace change (Tschannen-Moran, et al., 1998).

This research also revealed the importance of strong emotional intelligence and the benefit it brings to those leading change within a school. A time of systemic change within a school is definitely a time for leadership that is self-aware, empathic, motivating, and collaborative. Future research dedicated to emotional intelligence within the school setting would be valuable for both teacher and administrator (Goleman et al., 2013).

My perceptions of the lived experiences of the teachers in this study suggest awareness is valuable for those supporting teachers in change. The data provided from this research study would be useful in developing a survey that would allow administrators to be aware of where teachers' perceptions are before and after facilitating major changes in their schools.

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APPENDIX A
STAGES OF CHANGE



Stage 1: Precontemplation (Not Ready)^[4]

Stage 2: Contemplation (Getting Ready)

Stage 3: Preparation (Ready)

Stage 4: Action

Stage 5: Maintenance

Prochaska, J., Norcross, J., & DiClemente, C. (2007). *Changing for good*.
(Reprint edition). New York: William Morrow Paperbacks.

APPENDIX B

FACILITIATING EDUCATIONAL CHANGE

COMPLEX PROBLEMS, NO SIMPLE SOLUTIONS

Assessing employee reactions to a proposed organizational change is the first step in identifying initial concerns staff might have about change. This is important because organizational change implies altering established ways of thinking about one's job.

Facilitating Change for Individuals at Different Stages of Concern

Stage 0 – Awareness Concerns

- Involve teachers in discussions and decisions about the innovation and its implementation.
- Share enough information to arouse interest, but not so much that it overwhelms.
- Acknowledge that a lack of awareness is expected and reasonable, and that no questions about the innovation are foolish.
- Encourage individuals in this category to talk with colleagues who know more about the innovation.
- Take steps to minimize gossip and inaccurate sharing of information about the innovation.

Stage 1– Informational Concerns

- Provide clear and accurate information about the innovation.
 - Use a variety of ways to share information—verbally, in writing, and through any available media.
 - Communicate with individuals and with small and large groups.
 - Have individuals who have used the innovation in other settings visit with your teachers. Visits to other centers could also be arranged.
 - Help teachers see how the innovation relates to their current practices, both in regard to similarities and differences.
 - Be enthusiastic and enhance the visibility of others who are excited.
-

Stage 2 – Personal Concerns

- Legitimize the existence and expression of personal concerns; knowing that their concerns are common and that others have them can be comforting to individuals.
- Use personal notes and conversations to provide encouragement and reinforce personal adequacy.
- Connect these teachers with others whose personal concerns have diminished and who will be supportive.
- Show how the innovation can be implemented sequentially rather than in one big leap. It is important to establish expectations that are attainable.
- Do not push innovation use, but encourage and support it while maintaining expectations.

Stage 3 – Management Concerns

- Clarify the steps and components of the innovation.
- Provide answers that address the small specific how-to issues that are so often the cause of management concerns.
- Demonstrate exact and practical solutions to the logistical problems that contribute to these concerns.
- Help teachers sequence specific activities and set timelines for their accomplishment.
- Attend to immediate demands of the innovation, not what will be or could be in the future.

Stage 4 – Consequence Concerns

- Provide these teachers with opportunities to visit other settings where the innovation is in use and to attend conferences on the topic.
- Give these individuals positive feedback and needed support.
- Find opportunities for these individuals to share their skills with others.
- Share relevant research relating to the outcomes of the innovation.

Stage 5 – Collaboration Concerns

- Provide these individuals with opportunities to develop the skills necessary for working collaboratively.
- Bring together people, both within and outside the center, who are interested in collaboration.
- Help the collaborators establish reasonable expectations and guidelines for the collaborative effort.
- Use these people to provide technical assistance to others who need assistance.
- Encourage the collaborators, but don't attempt to force collaboration on those who are not interested.

Stage 6 – Refocusing Concerns

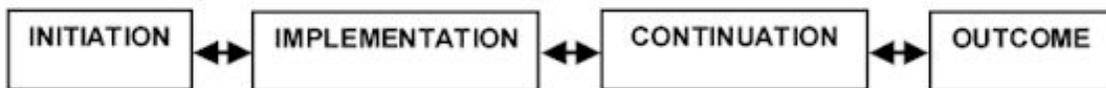
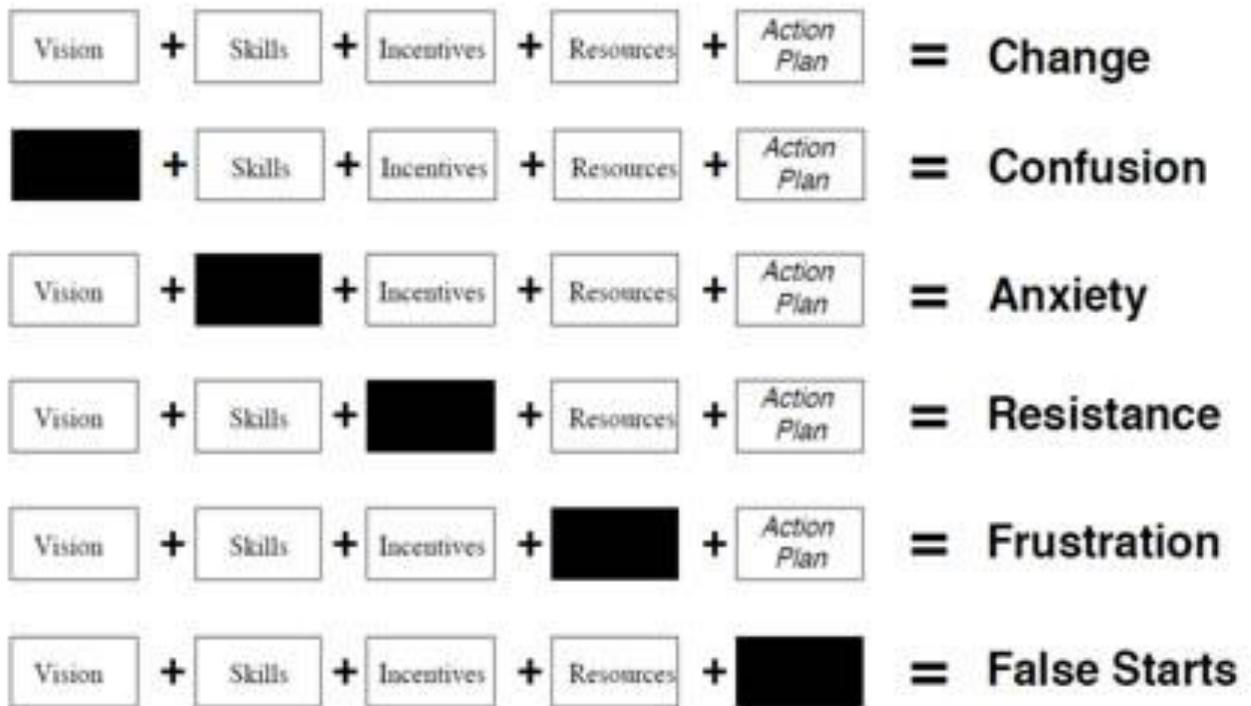
- Respect and encourage the interest these individuals have for finding a better way.
- Help these individuals channel their ideas and energies in ways that will be productive rather than counterproductive.
- Encourage these individuals to act on their concerns for program improvement.
- Help these people access the resources they may need to refine their ideas and put them into practice.
- Accept the fact that these individuals may replace or significantly modify the innovation.

Bloom, P. J. (2005). *Blueprint for action: Achieving center-based change through staff development* (2nd ed.). Lake Forest, IL: Gryphon House

APPENDIX C

COMPLEXITY OF THE CHANGE PROCESS

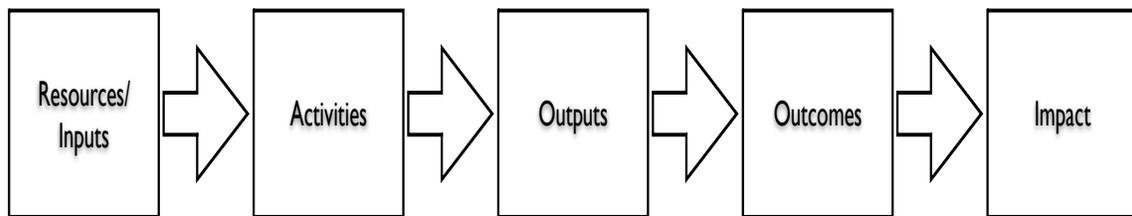
Managing Complex Change



Fullan, M. (1993). *Change forces probing the depths of educational reform*. London and New York: Routledge Falmer.

APPENDIX D
BASIC LOGIC MODEL

Basic Logic
Model



W.K. Kellogg Foundation. (2004). Logic Model Development Guide. East Battle Creek, MI: W. K. Kellogg Foundation.

APPENDIX E
DEFINITION OF TERMS

Action Research – action research is an interactive inquiry process that balances problem solving actions implemented in a collaborative context with data-driven collaborative analysis or research to understand underlying causes enabling future predictions about personal and organizational change (Reason & Bradbury, 2002).

Architect of Transformation or Change – An architect of transformation or change is a teacher who takes ownership of positively influencing learning and instruction for themselves and their students (Vetter, 2012).

Change – Fullan (1993) states that “change is a journey of unknown destination, where problems are our friends, where seeking assistance is a sign of strength, where simultaneous top-down bottom-up initiatives merge, where collegiality and individualism co-exist in productive tension” (p. viii).

Change Agent – A change agent is an individual who influences innovation-decisions in a positive direction (Rogers, 2003). At the same time, Fullan and Stiegelbauer (1991) see each stakeholder in the educational change as a change agent.

Collaboration – “A systematic process in which people work together, interdependently, to analyze and impact professional practice in order to improve individual and collective results” (DuFour, DuFour, Eaker & Many, 2006, p. 214).

Collective Efficacy – the groups shared belief that it can organize and execute courses of action required to bring about given levels of achievement (Goddard, 1994).

Emotional Intelligence – the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions (Salovey & Mayer, 1990; Goleman et al., 2002; 2013).

Logic Model – The logic model is defined as a picture of how an organization works; the theory and assumptions behind a program. This type of model links outcomes (long-term and short-term) with program activities/ processes and the theoretical assumptions/principles of the program (Kellogg, 2004).

Moral Purpose – Moral purpose in education is summed up by Fullan as a dedication to the following steps in order to bring about deep lasting change for instructional improvement: impacting the lives of students, committing to reducing the gap between high and low performers, contributing to reducing the larger environmental gap, and transforming the working and learning conditions of others to foster constant growth, commitment, and engagement (Fullan, 2005).

One-to-One Computer Initiative – In an educational setting, this describes a learning environment in which all students have access to a variety of digital devices (Storz & Hoffman, 2013).

Power of Context – The power of context suggests that people are sensitive to their surroundings and their past experiences (Gladwell, 2000).

Professional Community – Newman and Wehlange (1995) describe a professional community as a group that pursues a clear, shared purpose, engaged in collaborative activity, and accepting of a collective responsibility for student learning and growth.

Professional Development – DuFour, et al. (2006) describes professional development as a “lifelong, collaborative learning process that nourishes the growth of individuals, teams, and the school through daily job-embedded, learner centered, focused approach” (p. 217).

Reflection – Reflection can be described as turning experience into learning (Dewey, 1938). Schon (1984) added ideas of “reflection in action” and “reflection on action”, or thinking on your feet.

School Culture – “The assumptions, beliefs, values, and habits that constitute the norm for the school and guide the work of the educators within it” (DuFour, et al., p. 218).

Sustainability – The capacity of a system to engage in the complexities of continuous improvement (change or innovation) without compromising the development of others in the surrounding environment now and in the future (Fullan, 2005; Hargreaves & Fink, 2006).

Systemic Change – Systemic change is defined best as change that pervades all parts of a system, taking into account the interrelationships and interdependencies among those parts (Joseph & Reigeluth, 2010; Holzman, 1993).

Teacher Self-Efficacy – The extent to which the teacher believes he or she has the capacity to affect student performance (Tschannen-Moran, Woolfolk-Hoy & Hoy, 1998).

Transactional Leadership –Transactional leadership is built around mutually beneficial compromises governed by values such as fairness, honesty, loyalty, and integrity using procedures that are clear, evenhanded, and respect the rights and needs of all (Evans, 2001).

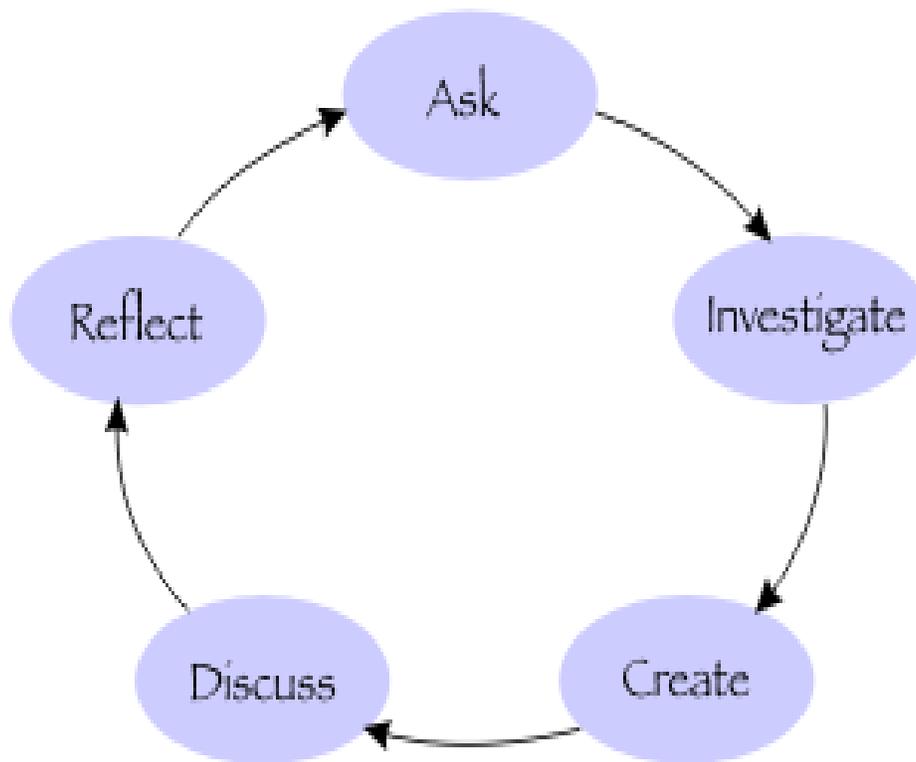
Transformational Leadership –Transformational leadership is motivated by deep values such as freedom, community, and justice. It seeks to unite people in the pursuit of communal interests therein raising the attitudes, values, and beliefs of organizational members (Evans, 2001).

21st Century Learning Skills – Fullan argues that true 21st Century Learning Skills have the following four criteria: irresistibly engaging activities (one gets lost in thought), elegantly efficient (the products must be easy and natural to use), technology that is “at our fingertips” all the time, and learning overflowing with real life problem solving which leads to entrepreneurialism (Fullan & Stiegelbauer, 1991).

APPENDIX F

DEWEY'S INQUIRY MODEL

Inspires Change through Questions, Investigations, and Opportunities for Authentic Teachable Moment



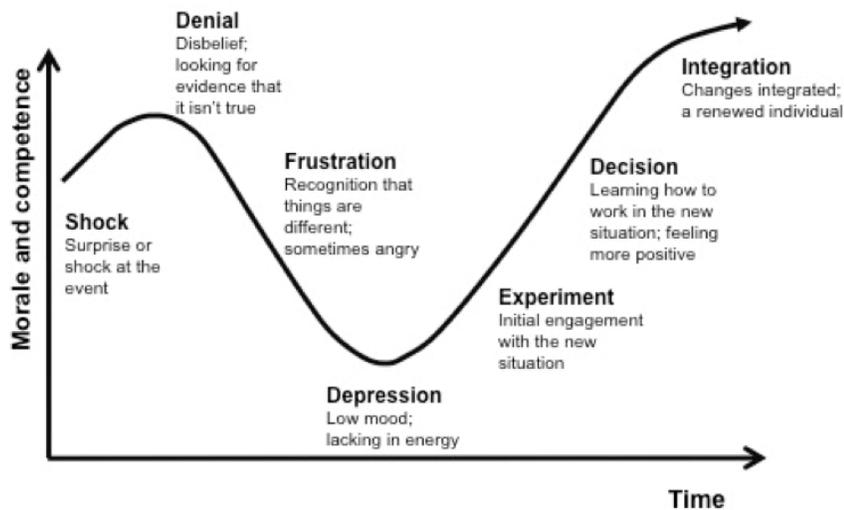
<http://www.cii.illinois.edu/InquiryPage/>

APPENDIX G

BLOOM BLUEPRINT FOR CHANGE

Demonstrates Change is On-going

The Kübler-Ross change curve



Bloom, P. J. (2005). *Blueprint for Action: Achieving Center Based Change Through Staff Development* (2nd edition). Lake Forest, IL: Gryphon House.

APPENDIX H

SCHON'S REFLECTION ON ACTION AND REFLECTION IN ACTION



Schon, D. A. (1984). *The Reflective Practitioner: How Professionals Think in Action* (1st edition). New York: Basic Books.

Appendix I

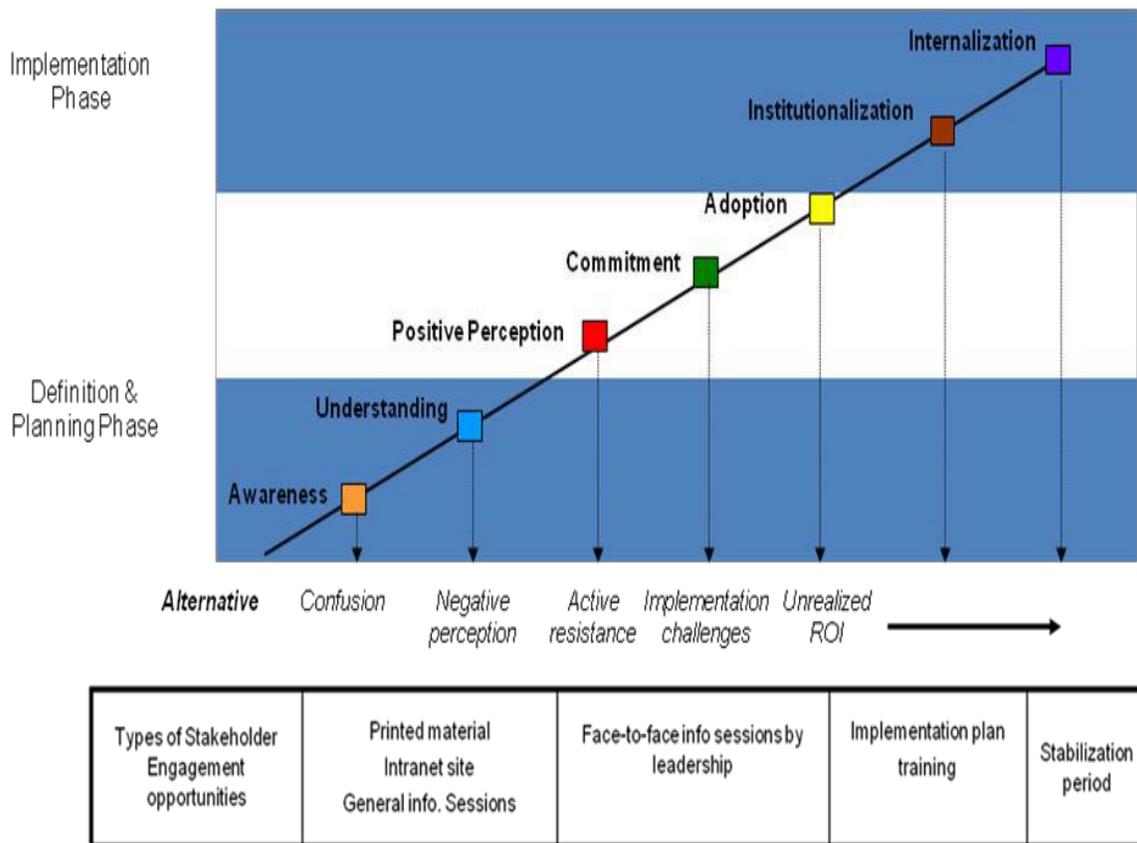
Kegan's Constructive Developmental Theory

Developmental Stage/ Order of Mind (typical ages)	What can be seen as <i>object</i> (the content of one's knowing)	What one is <i>subject</i> to (the structure of one's knowing)	Underlying Structure of Meaning-Making
1st Order: Impulsive Mind (~2-6 years-old)	one's reflexes	one's impulses, perceptions	Single Point 
2nd Order: Instrumental Mind (~6 years-old through adolescence)	one's impulses, perceptions	one's needs, interests, desires	Categories 
3rd Order: Socialized Mind (post-adolescence)	one's needs, interests, desires	interpersonal relationships, mutuality	Across Categories 
4th Order: Self-Authoring Mind (variable, if achieved)	interpersonal relationships, mutuality	self-authorship, identity, ideology	Systemic 
5th Order: Self-Transforming Mind (typically > ~40, if achieved)	self-authorship, identity, ideology	the dialectic between ideologies	System of Systems 

Adapted from Robert Kegan, *In Over Our Heads: the Mental Demands of Modern Life* (Cambridge: Harvard University Press, 1994), pp. 314-315 by Peter W. Pruy, <http://developmentalobserver.blog.com>.

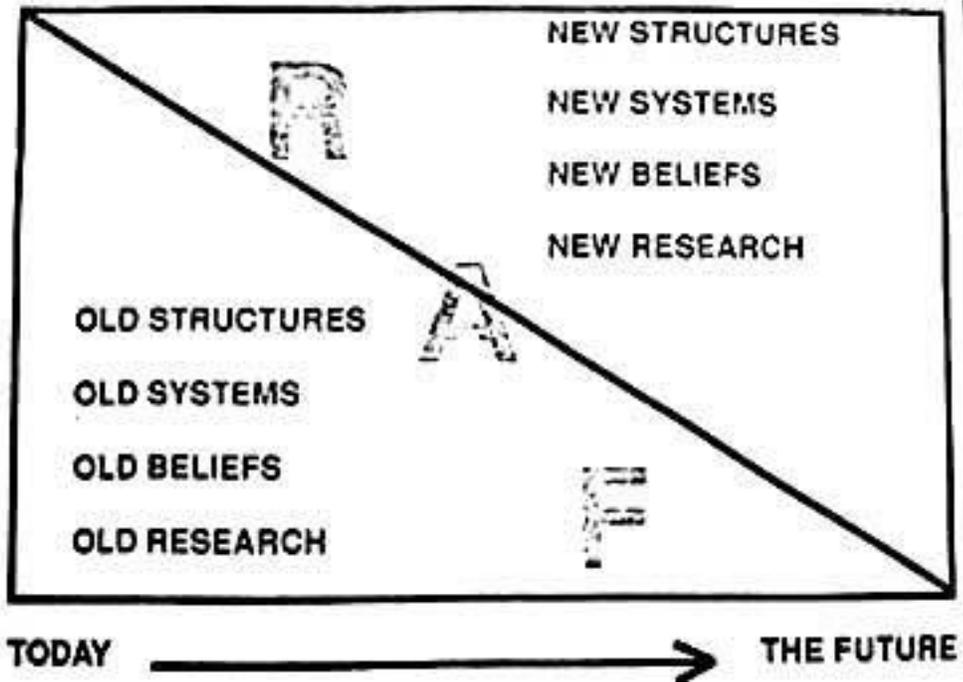
APPENDIX J

SCHEIN'S CHANGE IMPLEMENTATION PROCESS



Schein, E.H. *Organizational Culture and Leadership* (4th edition). San Francisco: Jossey-Bass.

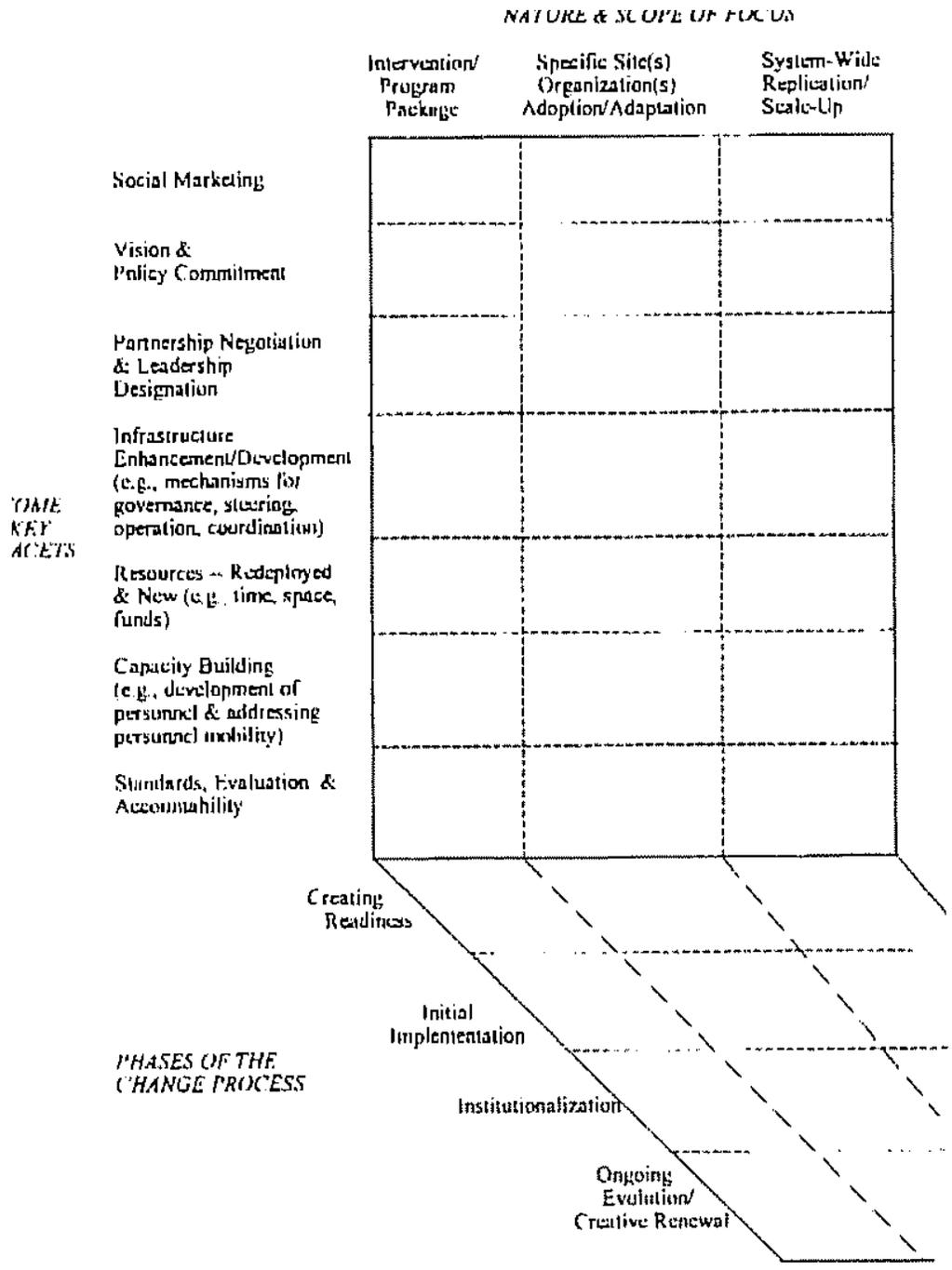
APPENDIX K
SYSTEMIC CHANGE



Stages by Processes of Change



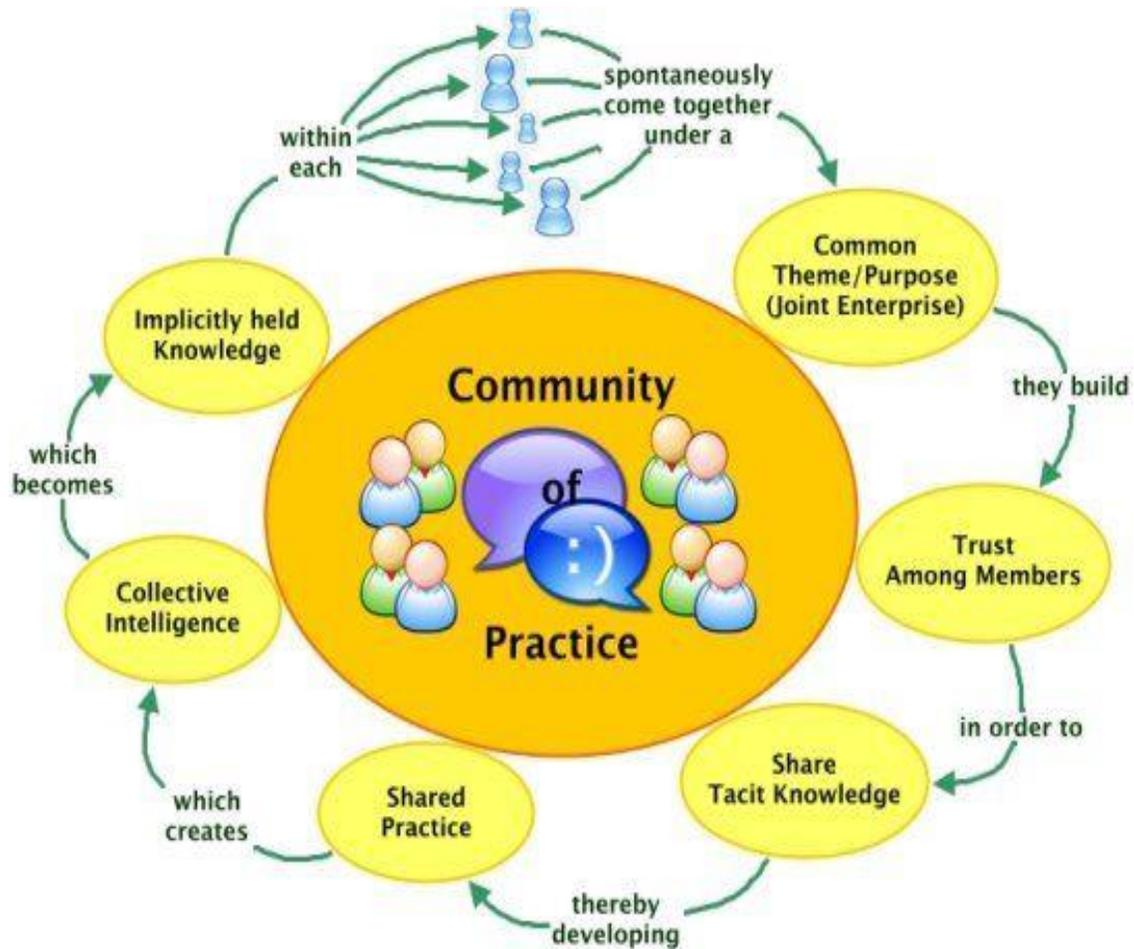
Phases of Systemic Change



Adleman, H.S., & Taylor, L. (2007). Systemic Change for School Improvement. *Journal of Educational and Psychological Consultation*, 17(1), 55–77.

Adelman, H. S., & Taylor, L. (2003). On Sustainability of Project Innovations as Systemic Change. *Journal of Educational & Psychological Consultation*, 14(1), 1–25.

APPENDIX L
 COLLABORATIVE LEARNING CULTURES



Lyons, C. A., & Pinnell, G. S. (2001). *Systems for change in literacy education: A guide to professional development*. Portsmouth, NH: Heinemann.

DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IN: Solution Tree.

APPENDIX M
LOGIC MODELS A, B, C, D

Diagram A: Reduction of Class Size

Resources	Activities	Outputs	Outcomes	Impact
In order to accomplish our set of activities we will need the following:	In order to address our problem or asset we will accomplish the following activities:	We expect that once accomplished these activities will produce the following evidence or service delivery:	We expect that if accomplished these activities will lead to the following changes:	We expect that if accomplished these activities will lead to the following changes:
<p style="text-align: center;">Reduction of Class Size</p> <p style="text-align: center;">Research</p> <p style="text-align: center;">Funding</p>	<p style="text-align: center;">*professional development in small group instruction/ differentiation of instruction/use of formative assessment</p> <p style="text-align: center;">*math and reading pull out programs to lower class size during those instructional blocks of time</p> <p style="text-align: center;">*language arts pull out programs designed to lower class during language arts instructional block (reading/writing) of time</p> <p style="text-align: center;">*reduction in overall class size</p>	<p style="text-align: center;">*increased time to support more inquiry based learning and discussion methods of instruction</p> <p style="text-align: center;">*more use of formative assessment</p> <p style="text-align: center;">*increased teacher/student engagement</p> <p style="text-align: center;">*more relaxed class atmosphere beginning with the teacher</p>	<p style="text-align: center;">*increased student/teacher Interaction</p> <p style="text-align: center;">* increased school-wide morale</p> <p style="text-align: center;">*better differentiated instruction</p> <p style="text-align: center;">*increased faculty/staff collaboration</p> <p style="text-align: center;">*increased use of richer learning activities and hands on teaching practices</p> <p style="text-align: center;">*true differentiation of instruction to meet individual needs</p>	<p style="text-align: center;">*higher academic performance</p> <p style="text-align: center;">*stronger teacher efficacy</p> <p style="text-align: center;">*stronger autonomy of student learning</p>

Diagram B: Technology Integration

Resources	Activities	Outputs	Outcomes	Impact
In order to accomplish our set of activities we will need the following:	In order to address our problem or asset we will accomplish the following activities:	We expect that once accomplished these activities will produce the following evidence or service delivery:	We expect that if accomplished these activities will lead to the following changes:	We expect that if accomplished these activities will lead to the following changes:
<p>Technology Integration</p> <p>Research</p> <p>Funding</p>	<ul style="list-style-type: none"> *ongoing professional development *faculty provided with laptops *infrastructure for wireless network campus-wide *technology support personnel *strategic plan for student devices *curriculum development 	<ul style="list-style-type: none"> *enriched learning activities *student/teacher excitement over new mode of learning *student driven learning *flexibility *thinking outside the box *assessment of best practices for technology integration throughout curriculum 	<ul style="list-style-type: none"> *collaboration *innovation *differentiated learning *enriched curriculum *technology viewed as a tool for learning 	<p>Due to the constant evolution of technology in education and the world, educators must embrace technology as a tool to meet student learning needs and prepare our students for the future.</p>

Diagram C: Collaborative Leadership

Resources	Activities	Outputs	Outcomes	Impact
In order to accomplish our set of activities we will need the following:	In order to address our problem or asset we will accomplish the following activities:	We expect that once accomplished these activities will produce the following evidence or service delivery:	We expect that if accomplished these activities will lead to the following changes:	We expect that if accomplished these activities will lead to the following changes:
<p>Collaborative Leadership</p> <p>Research</p> <p>Funding</p>	<ul style="list-style-type: none"> *professional development *collaborative planning period for grade level teachers built into daily schedule *teachers placed in leadership positions *use of teacher surveys to gain input/insight 	<ul style="list-style-type: none"> *collegiality *flexibility *innovation *increased growth mindset *fresh new ideas/thinking *stronger team concept 	<ul style="list-style-type: none"> *increased teacher leadership *increased ownership *increased teacher growth *increased teacher enthusiasm *increased school-wide morale 	<p>Rich exchange of ideas and growth throughout the school culture (administration, faculty, students, and parents)</p>

Teachers, research, and funding were the resources used to investigate the simultaneous changes in this study. The activities were the three simultaneous changes of classroom size reduction, technology integration, and collaborative leadership. These activities produced the outputs of on-going professional development, demonstration of life-long learning, enriched classroom learning activities, passion and excitement, increased teacher leadership and ownership, flexibility, and a growth mindset. Outcomes, or specific changes, were enriched academic experiences for students providing the highest level of college preparation possible, evolution of curriculum to meet ever-changing student needs, and overall team enthusiasm and buy in for our mission. The impact of collaborative leadership at this school has been a faculty that is better prepared to embrace change in order to provide for the ever-changing learning needs of the students and their preparation for the future.

A fourth diagram uses the basic logic model to show the overall layout the study. This diagram is labeled below as: Diagram D: Study of Three Simultaneous Systemic Changes.

Diagram D: Study of Three Simultaneous Systemic Changes

Resources	Activities	Outputs	Outcomes	Impact
In order to accomplish our set of activities we will need the following:	In order to address our problem or asset we will accomplish the following activities:	We expect that once accomplished these activities will produce the following evidence or service delivery:	We expect that if accomplished these activities will lead to the following changes:	We expect that if accomplished these activities will lead to the following changes:
Teacher A Teacher B Teacher C Teacher D Teacher E *academic preparation *teaching experience *tenure at school professional development research funding	Simultaneous Systemic Changes: *reduction in classroom size *technology integration *collaborative leadership	*ongoing professional development *demonstration of life-long learning *enriched classroom learning activities *passion/excitement *increased teacher leadership/ownership *flexibility *developing a growth mindset for the future	*enriched academic experiences *providing the highest level of college preparation possible *growing and evolving to meet the ever-changing needs of our students *enthusiasm for team progress	Faculty prepared to embrace change to provide for ever-changing student learning needs in today's world

W.K. Kellogg Foundation. (2004). *Logic model development guide*. East Battle Creek, MI: W.K. Kellogg Foundation.

APPENDIX N
OPEN CODING

First Cycle Coding

Systemic Change of Classroom Size Reduction

These codes were used to identify first cycle coding of the interview questions dealing with the systemic change of Lowered Classroom Size.

Time management
Classroom management
Expectations
Teacher role
Administrative role
Individual attention
Small groups
Discipline
Different learning styles
Develop relationships
Rigor
Accomplish more
Student/teacher relationship
Mobility/comfort in room
Grading papers
Teacher demands on time
More instruction/learning
Frustrating
Exhausting
Collaboration
Attention to curriculum
Exciting
Job satisfaction
Improvement
Less stressful
Smaller/better
Too large feels awful
Lowered teacher efficacy
Spread too thin
Investment
Parent view
Aware (in tune)
Accountable
Pull out program
Makes a difference

Not overwhelmed
Teacher efficacy
Aware (in tune)
Accountable
Larger class/more whole group
instruction
Less assessment
Preparation
Student learning
Parent needs/relationships

Systemic Change of Technology Integration

These codes were used to identify first cycle coding of the interview questions dealing with the systemic change of Technology Integration.

Apprehensive
Not tech savvy
Teacher role
Administrative expectations
Open to learning
Seek support/ask questions
Support provided
Classroom application
Different needs
iPads exciting
Little nervous
Student knowledge
Small group use
iPads multiple uses
Smartboard-revolutionary
Enthusiasm
Student response
Excitement/fun
Challenge
Learn
Apply
Use to support teaching & learning
Varied instructions
Fascination/student engagement
Responsibility
Advantage
Big change
Pacing
Team
Clarity (get on the bus)
Rude awakening
Community perception
Clarify admin. role/expec.
Changing how we do things daily
Innovative faculty
Paradigm shift
Out of comfort zone
Job satisfaction
Ownership of change

Difficult at first
Enjoy learning and challenge
Time to collaborate, investigate
Curriculum
Confidence
Self-efficacy
Opportunity
Quick changes difficult
All jobs have change
Self-motivated
Initiate
Tech training on going
Community perception
School culture
Inhibition
Professional development
Teacher growth
Flexibility
Parent communication

Systemic Change of Collaborative Leadership

These codes were used to identify first cycle coding of the interview questions dealing with the systemic change of Collaborative Leadership.

Teacher expressed needs
Uncertainty/clarity
Unsure/clarity
Addressed needs
Teacher voice
Feedback heard by administration
Teacher feedback acted upon
Administrative support
Teacher/parent collaboration
Collaboration a must for admin./teachers
More support than ever
Paradigm change
Not hesitant to ask for help/encouraged to
Comfortable collaborative culture
Encouraged to try new things
Collaboration across divisions
Administrative collaboration huge change
Culture change from fear of failure to collaboration
Administrative role clarified
Teacher role clarified
Team support
Culture was ready for change
Teacher desire
Teacher need for encouragement
Positive impact
Fear of past and failure/hinders
Increases moral
Teamwork
Collaborative culture contagious
Transparency
Asking, discussing, not telling
Collaborative decision-making
Teacher empowerment, leadership, ownership
Grade level collaboration
Safe to share
Job satisfaction
Curriculum/text adoption

Simultaneous Systemic/General Change Questions

These codes were used to identify first cycle coding of the interview questions dealing with the General Change.

Excitement
Scary yet exciting
Honest (may have been drug into change)
Desire to be cutting edge
Can be fast paced at school
Savvy and knowledgeable
Teacher role
Clarity of the change
Clarity of expectations
Initiative
Desire to excel
Administrative support for collaboration
Administrative support for transparency
Role of administration
Collaborative leadership is a must in change
Pacing
Team support
Ask for help
Reflection
Professional development
Administrative support
Teacher voice heard
Break down change into small steps
Pressure to keep up with change
Administration can't control or pace all change
Teacher perspective from administration
Transparency
Open, honest collaborative culture
Personal journey
Flexibility
Embrace
Cope
Process
Simultaneous
Paradigm change
Progress
Innovate
Less frustration
Day to day
Overwhelming

Preparation
Reassurance
Encouragement
Opportunities
Resistance
Implement
Challenge
Best for students
Balance
Discouraged

Second Cycle Coding

Systemic Change of Technology Integration

Teacher Role

apprehensive
not tech savvy
clarify role and change (get on the bus)
open to learning
seek support/ask questions
iPads exciting
nervous
student knowledge
small group
iPads multiple uses
Smartboard use
enthusiasm
student response/engagement
responsibility
advantage
big change
pacing
team
rude awakening
community perception
changing how we do things daily
innovative faculty
paradigm shift
out of comfort zone
job satisfaction
ownership of change
teacher growth
difficult at first
enjoy learning/challenge
time to collaborate
curriculum
self-efficacy
confidence
all jobs have change
initiate
inhibition
resistant
parent communication

Administrator Role

expectations
clarify role
support
responsibility
preparation
pacing
community perception
paradigm shift
school culture
parent communication

Team

administrative expectations
clarity (get on the bus)
pacing
time to collaborate
innovative
paradigm shift
ownership of change

Clarity

tech integration/expectations
teacher role
administrative role
pacing
innovation
tech training on going
teacher growth

Professional Dev.

on going
out of comfort zone
self-motivated
opportunity
innovative faculty
engagement
instruction
support teaching
support learning
learn
apply
challenge

Pacing

expectations
training
prof. dev.
innovation
opportunity
all jobs change
on going

Second Cycle Coding

Systemic Change of Collaborative Leadership

Teacher Role

teacher voice
uncertainty/clarity
admin./teacher collaboration
teacher/parent collaboration
paradigm change
seek support
role clarified
encouragement
desire to collaborate
resistance
empowerment
leadership
ownership
job satisfaction
decisions
grade level collaboration

Clarity

unsure
uncertain
safe to share
teacher voice
feedback heard
roles

Administrator Role

address needs/feedback
clarity
supportive
paradigm change
collaboration
transparency
shared decision making process
teamwork
safe to share
job satisfaction

Professional Development

team building
collaboration
encouragement
shared decision making for prof. dev./pacing
collaborative culture contagious
school culture
growth

Pacing

listen to feedback
paradigm shift
increased moral
realistic expectations
job satisfaction
time for collaboration
time for team building

Team

express needs
safe to share
clarity
voice
paradigm change
positive impact
culture
empowerment
ownership
support
job satisfaction
cross division-
collaboration

Second Cycle Coding

Simultaneous Systemic/General Change

Teacher Role

scary yet exciting
resistance to change
desire to be cutting edge
savvy and knowledgeable
clarity of change/expectations/role
initiative
desire to excel
team support
seek help/support
reflect
teacher voice
pressure to keep up
personal journey
transparency
flexibility
embrace
cope
process
paradigm change
innovate
less frustration
day to day
overwhelming
discouraged
preparation
reassurance
encouragement
implement
challenge
best for students
balance

Professional Development

feedback
collaborative planning
reflection
small steps
personal journey
process
opportunities
progress

Administrator Role

collaborative decision making
transparency
clarity of admin. role in change
flexibility
team support
collaborative leadership a must
paradigm change
reassurance
encouragement

Team

collaborative culture
progress
innovate
encouragement
best for students
process
flexibility

Clarity

change
expectations
professional development
pacing
roles
accountability

Pacing

awareness
break change down
pressure to keep up
process
simultaneous
discussion
paradigm change
less frustration
overwhelming
discouraged

APPENDIX O

CODING GUIDE

Educational Change: The View from Within

Tami Shelley

August, 2015

The purpose of the information in this guide is to explain a method for coding interviews. The interview questions were divided into four distinct areas to capture the lived experiences of the teachers in dealing with the three main systemic changes the teachers were faced with as well as their lived experience with change in general. Unpacking this lived experience from the interviews through the lens of grounded theory (Glaser, 2005) allowed recurring themes to emerge across the four categories. The lived experiences represented in this qualitative research project are valuable in answering the following research questions:

1. What are the teachers' perceptions of their contribution to implement and sustain change?
2. What intellectual and emotional work must teachers do to successfully implement and sustain change?
3. What supports do teachers need when implementing and sustaining change?

For organizational purposes the four areas of questioning will be called "categories" and the coding was done within those areas. The categories are as follows:

Category 1: Systemic Change of Classroom Size Reduction (CSR)

Category 2: Systemic Change of Technology Integration (TI)

Category 3: Systemic Change of Collaborative Leadership (COLL)

Category 4: General Change (GC)

Within each category of the interviews, First Cycle coding (Miles and Huberman, 2014) was conducted (see Appendix ? for First Cycle coding list). From these codes, Second Cycle coding (Miles and Huberman, 2014) was conducted using Grounded Theory (Glaser, 2005) and the following Subcategories and codes emerged during the coding procedure.

Category 1: Systemic Change of Classroom Size Reduction (CSR)

Subcategory: Clarify Change (CSR-CLCH)

Code: Expectations/Outcomes (CSR-CLCH-EXPECG0A)

Words or phrases indicating expectations/outcomes as it relates to clarifying the change of classroom size reduction.

That was really the goal I think working with a smaller group I definitely feel that was the intent I wanted to be able to use it for, to work with the individuals one on one more, and then to provide opportunity for smaller groups to work and that has worked out very well, too.

Code: Classroom implementation (CSR-CLARCH-CLASIMPL)

Words or phrases indicating classroom implementation as it relates to clarifying the change of classroom size reduction.

The smaller class size allowed for me as a teacher to work with individual students at a longer period that really, really needed the reinforcement, whereas those that could stand challenges and work more independently could divide up into groups and work without chaos going on in the room.

Subcategory: Teacher Role (CSR-TROLE)

Code: Demands on time/expectations (CSR-TROLE-TIMEXPEC)

Words or phrases indicating demands on time/expectations as it relates to teacher role within the change of classroom size reduction.

I think it's extremely important, again early childhood and the relationships are huge, not only with the child, but I've come to realize how important it is for my relationship with their parents and there's only seven units in a day, there's only so much of me to go around and I can't reach out to those parents in the same way when you have more than what was going to happen when you have 25.

Code: Classroom instructional changes (CSR-TROLE-CLASINSTRUC)

Words or phrases indicating classroom instructional changes as it relates to teacher role within the change of classroom size reduction.

I think I tended to do more whole group instruction and tried to keep everyone on the same page which sometimes I did not feel like I was differentiating enough. I enjoyed being able to work with smaller groups but I did shy away from that when the number was so large.

Subcategory: Administrator Role (CSR-AROLE)

Code: Professional development (CSR-AROLE-PROFDEV)

Words or phrases indicating professional development as it relates to administrator role within the change of classroom size reduction.

We're encouraged together when we meet and talk about what we are able to accomplish because of classroom size being lowered.

Code: Investment and accountability (CSR-AROLE-INVACCT)

Words or phrases indicating investment and accountability as it relates to administrator role within the change of classroom size reduction.

By making this decision, the administration confirmed what I had discovered through experience, smaller class size always allows for more teaching, more learning.

Subcategory: Professional Development and Pacing (CSR-PDPC)

Code: Teacher needs (CSR-PDPC-TEANEEED)

Words or phrases indicating teacher needs as it relates to professional development/pacing within the change of classroom size reduction.

I feel like if I'm given and trained for a task that I can handle it better with a smaller class size. Yes, it makes me want to provide more hands on activities, more discussion activities, things that aren't whole group when the pace is more manageable.

Code: Instruction and implementation (CSR-PDPC-INSTR/IMPL)

Words or phrases instruction/implementation as it relates to professional development/pacing within the change of classroom size reduction.

I believe it was harder to give the necessary attention to the groups of students that I had working with the larger number in the classroom, so no I believe it is easier for me to effectively monitor the different groups that are not going on during classroom time.

Code: Effective support (CSR-PDPC-EFFSUPP)

Words or phrases indicating effective support as it relates to professional development/pacing within the change of classroom size reduction.

I think lowered class size has been a very positive and supported move, across the board with the school faculty and administration.

Subcategory: Team (CSR-TM)

Code: Collaborative community (CSR-TM-CC)

Words or phrases indicating collaborative community as it relates to team membership within the change of classroom size reduction.

Being able to talk to each individual and find out more one on one about them as far as their family, the things going on in their life, which does impact their learning and my teaching. Then being able to easily breaking them into collaborative little groups with the children, the small group learning, one on one reading.

Code: Investment actions (CSR-TM-INVACT)

Words or phrases that indicate investment actions as they relate to team membership within the change of classroom size reduction.

I feel and others have shared that we're able to accomplish so much more as a team. When you see goals you're able to set the bar a little higher and maybe set higher goals because you have the time to do more things with them and try different things in the classroom as a team.

Category 2: Systemic Change of Technology Integration (TI)

Subcategory: Clarify Change/Get on the Bus (TI-CLARCH)

Code: Expectations of Change (TI-CLARCH-EXPECTCH)

Words or phrases indicating expectations of change as they relate to clarification of the change within the change of technology integration.

I think school-wide the importance of technology and how it effects the students, I think that's the road we need to be going down for sure because for us to be able to use it and have the opportunities for the children to use technology . . . it's going to help them beyond high school into college, too. I definitely think I had to assume the responsibility of learning in my own time . . . to spend that one on one time with my computer and explore and educate myself on technology . . .

Code: Paradigm Change Process (TI-CLARCH-PARCH)

Words or phrases indicating paradigm change process as it relates to clarification of the change within the change of technology integration.

I saw the excitement on the children's faces and we were able to learn in different ways and they were excited and I was excited. To me it's been a great addition to the books and to the traditional classroom just to be able to have that tool . . .

Subcategory: Teacher Role (TI-TROLE)

Code: Personal journey (TI-TROLE-PERJ)

Words or phrases indicating personal journey as it relates to teacher role within the change of technology integration.

I was excited about it. I did feel a little bit apprehensive . . . as excited as I was, I was apprehensive . . . my role was to learn everything I could and attend things and apply it to my classroom . . . learning how to use the devices and apply it . . .

Code: Support (TI-TROLE-SUP)

Words or phrases indicating support as it relates to teacher role within the change of technology integration.

I think we had to really just start experimenting with it, professional development was good but we needed a lot of time. Probably even more in the summer to do it together. I just think it's something where we have to listen and be with professionals and hear guidance and training but you've got to get in there and start doing it yourself.

Code: Efficacy (TI-TROLE-EFF)

Words or phrases indicating efficacy as it relates to teacher role within the change of technology integration.

Yeah and as time goes by you do feel like I say with each change you just kind of have to jump on it, hit it head on and say okay, what do I need to learn to do this, how do I find this now. And I've learned to do that, I have learned to go for help . . .

Subcategory: Administrator Role (TI-AROLE)

Code: Clarity of role in change (TI-AROLE-CLAR)

Words or phrases indicating clarity of role in change as it relates to administrator role within the change of technology integration.

We all need pushes to help us grow and so I appreciate that the school (administration) has pushed us to grow and I feel really challenged every year to grow in a new way . . .

Code: Clarity of expectations (TI-AROLE-EXP)

Words or phrases indicating clarity of expectations as it relates to administrator role within the change of technology integration.

Administration wants us to be balanced with it, they don't want to complete let it control the day . . . utilize it as a learning tool.

Code: Clarity of support (TI-AROLE-SUP)

Words or phrases indicating clarity of support as it relates to administrator role within the change of technology integration.

I think as the administration, I feel like administration is learning a lot about this. I feel that there's a lot more support and I'm not hesitant to ask for help or say I don't understand, or how do I do this.

Subcategory: Professional Development and Pacing (TI-PDPC)

Code: Teacher needs (TI-PDPC-TN)

Words and phrases indicating teacher needs as it relates to professional development and pacing within the change of technology integration.

The school [administration] listened more and more and tried to address the needs. Just like the teachers were learners and we needed to be. Slowing the pace of change down and it's been received better I think having slowed down some of the change that's take place . . .

Code: Paradigm change/comfort zone (TI-PDPC-PARCH)

Words and phrases indicating paradigm change/comfort zone as it relates to professional development and pacing within the change of technology integration.

For me personally, if I take change slower or at a slower pace I can plug in and learn it and really get comfortable with it before the next change. I know some changes have to overlap, that's going to happen but when we do pace it more I think it's received better.

Code: Expectations (TI-PDC-EXPEC)

Words and phrases used to communicate teachers' professional development and pacing expectations within the change of technology integration.

I think the more seasoned in the classroom some of us are it was a little harder for the quick change but I think overall our faculty/staff has been amazing and I think everybody on the staff along with the professional development is so great about helping at any time.

Subcategory: Team (TI-TM)

Code: Support (TI-TM-SUP)

Words and phrases indicating support as it relates to the concept of team within the change of technology integration.

So I mean, team doesn't mean that all the time you have an exact same opinion as someone else, we make the best choice we can as a team and then go for it.

Code: Collaboration (TI-TM-COLL)

This code is used for words or phrases indicating collaboration as it relates to the concept of team within the change of technology integration.

So my challenge is just the little things that I come up against. I just need to still learn to get proficient where I could feel real comfortable. I really count on my younger co-teachers that are really more updated with it.

Code: School culture (TI-TM-SHCUL)

Words and phrases indicating school culture as it relates to the concept of team within the change of technology integration.

The overall moral is strong and the feeling of cohesiveness and support. Without that collaborative culture you just don't have that. You don't have the working together as a team . . . and this is a team.

Category 3: Systemic Change of Collaborative Leadership (CL)

Subcategory: Clarifying the change (CL-CLARCH)

Code: Process of collaboration (CL-CLARCH-PROCOLL)

Words or phrases indicating the process of collaboration as it relates to clarifying the change within the change of collaborative leadership.

Being willing to listen. . . the fact that you can be open and discuss something and nobody gets their feathers ruffled and that sort of thing . . . it's just professional and having that professional involvement with teachers . . .

Code: Collaborative culture (CL-CLARCH-COLLCUL)

Words or phrases indicating collaborative culture as it relates to clarifying the change within the change of collaborative leadership.

If you came out of a situation where you never really felt comfortable sharing and collaborating, it takes a lot longer to do that. You learn not to do that and so you know, it takes time and I think practice and just some experience . . .

Code: Paradigm change (CL-CLARCH-PARCH)

Words or phrases indicating paradigm change as it relates to clarifying the change within the change of collaborative leadership.

It's a new avenue for us because to come out of a past of not being asked what you thought or to enter into a survey that says how do you feel about something and get used to doing that . . . people always think . . . well, you all want to be asked my opinion but it really takes some time to learn how to do that cause it's such a new thing.

Subcategory: Teacher Role (CL-TROLE)

Code: Support (CL-TROLE-SUP)

Words or phrases indicating support as it is linked to the teacher's role within the change of collaborative leadership.

I think it takes a building of trust and not just from administration to the teachers, but also among the teachers of not being competitive among each other and keeping a secret about something you're doing. It a part of sharing and everybody growing that's more of a win-win and not just looking out for yourself.

Code: Teacher Voice (CL-TROLE-TV)

Words or phrases indicating teacher voice as it is linked to the teacher's role within the change of collaborative leadership.

I really feel like we are listened to and respected. That's huge.

Subcategory: Administrator Role (CL-AROLE)

Code: Support (CL-AROLE-SUP)

Words or phrases indicating support as it is linked to the administrator role within the change of collaborative leadership.

When teachers meet with administration, I believe we are heard. We are able to interact during meetings and I really believe we can come in and administration is ready to listen and respect our opinions. We are listened to and respected . . . that is huge.

Code: Paradigm Change Leadership (CL-AROLE-PARCH)

Words or phrases indicating a paradigm change in leadership from the administrator role within the change of collaborative leadership.

Years past it's more you were told what was going to happen rather than let's get everybody's opinion.

Subcategory: Support Processes (CL-SUPPRO)

Code: Professional Development (CI-SUPPRO-PD)

Words or phrases indicating professional development as a support process for the change of collaborative leadership.

When someone expressed being uncertain or unsure, I felt like the school did take more initiative and said well, what are your areas of concern and provided a selection of training you could choose from to meet the need. I feel like they've listened to our feedback for professional development.

Code: Pacing (CL-SUPPRO-PAC)

Words or phrases indicating pacing as a support process for the change of collaborative leadership.

That's probably the biggest thing, just to be able to not have to jump in quite so fast . . . pacing to get our feet wet and get used to the change.

Subcategory: Team (CL-TM)

Code: Support (CL-TM-SUP)

Words or phrases indicating support as it relates to the concept of team within the change of collaborative leadership.

When people are working collaboratively it's like any team when the team works together the team thrives . . .

Code: School culture impact (CL-TM-IMP)

Words or phrases indicating school culture impact as it relates to the concept of team within the change of collaborative leadership.

I think we do have a lot more of that than we had in the past. I think the school is more of a collaborative culture of decision making across the entire school.

Code: Paradigm change (CL-TM-PARCH)

Words or phrases indicating a paradigm change as it relates to the concept of team within the change of collaborative leadership.

I think being from old school it's hard because you think well, that was just done without huge input or whatever. I think the team input has been like a door open for more feedback from everyone involved. I think it is wonderful . . . so it is not just a few people making the whole decision for the team.

Category 4: Simultaneous Systemic/General Change (SSGC)

Subcategory: Clarity of the Change (SSGC-CLARCH)

Code: Professional development (SSGC-CLARCH-PD)

Words or phrases indicating professional development as it relates to clarity of change within overall general change.

I think they present it [changes] and they present what's going on behind the scenes and the reasons for the change. The main thing is to explain it well and to clarify the reasons backing the changes and then research professional development . . .

Code: Support (SSGC-CLARCH-SUP)

Words and phrases indicating support as it relates to clarity of change within overall general change.

Discussing with us, asking for our feedback, providing surveys, questionnaires, bringing in speakers . . .

Subcategory: Teacher Role (SSGC-TROLE)

Code: Coping Strategies/personal process (SSGC-TROLE-COP/PER)

Words and phrases indicating coping strategies/personal process as it relates to teacher role within overall general change.

I slowed down and took a breath and broke it down into baby steps just like we teach.

Code: Acceptance/resistance (SSGC-TROLE-ACCEP/RES)

Words and phrases indicating acceptance/resistance as it relates to teacher role within overall general change.

For me, I believe in being positive about it, so usually I go into it with a positive attitude.

Subcategory: Administrator Role (SSGC-AROLE)

Code: Support (SSGC-AROLE-SUP)

Words and phrases indicating support as it relates to the administrator role within general change.

Administration being there as a support, being open, being willing to listen.

Code: Awareness (SSGC-AROLE-AWARE)

Words and phrases indicating awareness as it relates to the administrator role within general change.

Our administration does a good job of reassurance, not just the educating but I really appreciate their reassurance.

Subcategory: Change Process (SSGC-CHPROC)

Code: Professional development (SSGC-CHPROC-PD)

Words or phrases indicating professional development as it relates to the change process within overall general change.

Yeah, training and time to get on board with it before it's needed to be put to use.

Code: Pacing (SSGC-CHPROC-PAC)

Words or phrases indicating pacing as it relates to the change process within overall general change.

I felt like I needed to break it [change] down and that's what I had to do. I think with anything one step at a time is easier but at the same time it goes so fast you have to keep up.

Subcategory: Team Membership (SSGC-TM)

Code: Collaborative culture (SSGC-TM-COLLCUL)

Words or phrases indicating collaborative culture as it relates to the concept of team within overall general change.

I think that the overall faculty and the staff just making the effort, more than ever allowing us to be a part of it and inviting our input . . .

Code: Support (SSGC-TM-SUP)

Words or phrases indicating support as it relates to the concept of team within overall general change.

And there's not one of them [team members] that will turn you away and say I don't have time for you today.

APPENDIX P

INTERVIEW QUESTIONS

Dissertation Study: Retrospective qualitative study focused on three systemic changes that occurred simultaneously in an independent K-12 school and the lived experiences of teachers with the change process.

Reduction of class size

Technology integration

Collaborative leadership style

Question suggestions for interviews based around the 3 main issues listed above then followed by general questions concerning change:

I. Lowered Class Size

A. Introductory questions:

1. Can you tell me about class size prior to six years ago?
2. Can you tell me if this impacted your teaching or not and if so, please explain?
3. How did you feel about the push toward lowering class size?
4. What was your underlying basis for this?

B. Follow-up questions:

1. Looking in retrospect, what has the lowered class size done?
2. Can you explain this in detail?

C. Probing questions:

1. Do collaborative leadership and integration of technology tie in here? If so, how?
2. Can you take me through any changes that a smaller group made in how you set up classroom management? Instruction?

D. Specifying questions:

1. How did you actually feel when you had what you felt was “too many” students?
2. How did this change, or did it, when class size was lowered?

E. Direct questions:

1. When you think of doing your best teaching, is class size a part of this?
2. Has the reduction in class size effected others at the school?
3. Is it viewed as important and if so, please clarify in what way(s)?

F. Indirect questions:

1. How do you believe others view the lowered class size commitment at the school?
parents? students? faculty? community?
2. How do you feel the school will continue the commitment to lowered class size?

Note: Structuring questions, Silence, and Interpreting Questions will also be interjected as needed such as:

*I would like now to introduce another topic? (as I change between the main 3 issues)

*Is it correct that you feel _____?

II. Technology Integration (Smartboards, Macbooks for all teachers, 1:1 device movement in Middle/Upper School, Ipod/Ipad/Macbook carts in Lower School)

A. Introductory questions:

1. Can you tell me about the move that began six years ago to a more active hands on integration of technology here at the school?
2. Can you describe what this meant for you as an educator?
3. How did you feel about the heightened priority and importance placed on integration of technology as classroom tool for learning and how did you handle that?

B. Follow up questions:

1. What steps were taken in this movement?
2. What steps did you take personally?

C. Probing questions:

1. How was the increased integration of technology viewed by others? faculty? staff?
parents? students?
2. What is the feeling now at the six year mark?

D. Specifying questions:

1. Did the integration of technology present issues? If so, please explain.
2. If issues were presented, how were they dealt with?

E. Direct questions:

1. Has integration of technology had an impact on the school? on you personally?
2. Describe the six year journey in detail.

F. Indirect questions:

1. Where do you see the integration of technology going from here?
2. How do you see the faculty members handling this in the future?

Note: Structuring questions, Silence, and Interpreting Questions will also be interjected as needed such as:

*I would like now to introduce another topic? (as I change between the main 3 issues)

*Is it correct that you feel _____?

III. Collaborative leadership style

A. Introductory questions:

1. Can you describe in as much detail as possible the change to a more collaborative leadership style that began 6 years ago?
2. Please discuss whether or not this had an impact on you.

B. Follow up questions:

1. Could you please describe (contrast/compare) the changes you witnessed or experienced?
2. Describe in detail this journey over the past 6 years?

C. Probing questions:

1. Can you give a more detailed description?
2. Can you give further examples?

D. Specifying questions:

1. In your view, did this new leadership style present any issues? Please explain?
2. In your view, what was the net result for the overall school from this change in leadership style?

E. Direct questions:

1. How would you describe the six year journey into a more collaborative style?
2. If you had any surprises or discoveries in this journey, please describe these.

F. Indirect questions:

1. Explain what you observed across the school, as the overall reaction to this new leadership style and change over the six years.
2. How do you believe other faculty members viewed this change then? and now looking at the six year journey?

Note: Structuring questions, Silence, and Interpreting Questions will also be interjected as needed such as:

*I would like now to introduce another topic? (as I change between the main 3 issues)

*Is it correct that you feel _____?

General questions concerning change:

1. What did you do when you first learned about the change (that you did not initiate yourself)? (classroom size reduction, technology integration, collaborative leadership)

2. What did you see your role as being?

3. What do you see the administration's role as in the process of change?

4. What did you do to help yourself adjust to these changes?

5. What did you do to work with these multiple systemic changes? (classroom size reduction, technology integration, collaborative leadership)

6. How do you view multiple systemic changes now that you have acted on them and the initial phase of their introduction is past?

7. What factors do you feel affected the change process for you? assisted/helped or inhibited/obstacle?

APPENDIX Q
EMERGENT THEMES

