Rural School Learning Partnerships: A Comparative Case Study Using Social Network Analysis

by

Emily Humphrey Grace

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Approved by

Ellen Reames, Associate Professor, Educational Foundations, Leadership, and Technology
Frances Kochan, Professor in Educational Foundations, Leadership, and Technology
Linda Searby, Associate Professor in the College of Education's Department of Educational Foundations, Leadership and Technology
Leslie Cordie, Assistant Professor of Adult Education in the College of Education's Department of Educational Foundations

Abstract

Schools across the nation have responded to stringent accountability measures in No Child Left Behind Act of 2001 (NCLB) and later by the Obama administration's American Recovery and Reinvestment Act (ARRA) (2009). In addition to those policy decisions there had also been a strong call to reform the leadership of K-12 schools from national, regional and state organizations. The purpose of this comparative case study to examine the internal and external learning partnerships between school staff in two rural elementary schools. Elementary School A, a low-performing school was from a school system undergoing the school improvement process, termed "Turnaround", while Elementary School B was an above-average performing school from a rural district without significant educational problems. By examining two schools the researcher learned more about the collaborative nature of those two school organization's learning partnerships. The researcher also explored the relationship between the extent of internal partnerships in those two schools and compared that to their perceived involvement in external partnerships. SNA was critical in this study because it was used to show who the collaborative actors were and how dense these connected collaboration networks appeared to be. This study was organized using four lines of research for the conceptual framework. Communities of Practice (Kensler, Reames, Murray & Patrick, 2012; Wenger, 2009), collaboration, faculty learning circles and partnerships. The researcher believed that collaboration was essential to the successfulness of a school's culture. The researcher also believed the number of internal partners as well as the frequency of collaboration between those internal partners could be an indicator of the successfulness in working with external partners such as universities of higher learning. The current research, in part, supported the idea that some

schools and school districts were less prepared to partner with universities and other outside agencies. The same would be true with educational leadership preparation programs at universities. The research indicated that neither Elementary School A nor Elementary School B were significantly different in their perceptions of collaboration. Density and betweeness centrality were weak and indicated that very few actors in either school were collaborative. Furthermore, administrators were the primary collaborators. Teachers were not collaborative with each other. Silos still existed. The conceptual framework utilized supports the fact that both schools in the study need to improve the structures and processes in the school that would encourage effective learning partnerships.

Acknowledgments

Philippians 4: 6-7 "Be anxious for nothing; but in everything by prayer and supplication with thanksgiving let your requests be made known unto God. And the peace of God, which passes all understanding, shall keep your hearts and minds through Christ Jesus."

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complete my sons were there to support me. Thank you for all the classes and meetings I had to drag you to. I love you more than life itself. No matter what we have gone through, everything was worth it to have you two amazing sons in my life. I thank God for you every day. I hope my hard work will be an inspiration for you to never give up and to work for your goals knowing I will be there to support you. Remember that God assures us all things are possible through Him.

Philippians 4: 13 "I can do all things through Christ who strengthens me".

Table of Contents

List of Tables

List of Figures

Abbreviations

ACORN- Association of Communities Organized for Reform Now

ALSDE-Alabama State Department of Education

AMSTI- Alabama Math and Science Technology Initiative

ARRA- Americas Recovery and Reinvestment Act

ASCD- Association for Supervision and Curriculum Development

CCRS- College and Career Readiness Standards

CCSSO- Council of Chief State School Officers

CIP- Continuous Instruction Plan

CoP- Community of Practice

ISSLC- Interstate School Leaders Licensure Consortium

MCEC- Military Child Education Coalition

NAESP- National Association of Elementary School Principals

NCLB- No Child Left Behind

NCPEA- National Council of Professors of Educational Administration

PACT- Project Alabama Consortium for Turnaround

PARCA- Public Affairs Research Council of Alabama

PDS- Professional Development Schools

PSEL- Professional Standards for Educational Leadership

PTO- Parent Teacher Organizations

RTT-Race to the Top

SACS- Southern Association of Colleges and Schools

SB-CEU- State-Board Continuing Education Units

SNA- Social Network Analysis

STP- School Turnaround Plans

UCEA- University Council of Educational Administration

UCINET- Social Network Program

Chapter I: Overview of the Study

"As educational partnerships and collaborations have become more popular in the last several decades, researchers and practitioners have sought to understand why arrangements flourish and flounder" (Barnett, Hall, Berg, & Camarena, 2010, p. 10).

Schools across the nation have responded to stringent accountability measures in No Child Left Behind Act of 2001 (NCLB) and later by the Obama administration's American Recovery and Reinvestment Act (ARRA) in 2009. Those calls to reform is only the most recent measures to promote school improvement where emphasis are placed on providing quality teachers in every classroom and quality administrators at the head of every school building. In addition to those policy decisions there has also been a strong call to reform the leadership of K-12 schools from national, regional and state organizations. Starting with the Levine (2005) report higher education institutions were condemned for lacking rigor and relevance in their leadership programs. Professors and university administrators were criticized for being out of touch with the type of leaders needed in 21st century K-12 schools.

The answer to those accountability measures meant national organizations such as the University Council of Educational Administration (UCEA), National Council of Professors of Educational Administration (NCPEA), the Council of Chief State School Officers (CCSSO) and the National Association of Elementary School Principals (NAESP) examined the current state of school leadership and created standards for practitioners. The Professional Standards for Educational Leadership began with the following rationale:

> Grounded in current research and the real-life experiences of educational leaders, they [PSEL's] articulate the leadership that our schools need and our students deserve. They are student-centric, outlining foundational principles of leadership to guide the practice of educational leaders so they can move the needle on student learning and achieve more equitable outcomes. (National Policy Board for Educational Administration, 2015, p. 7).

In Figure 1 the ten PSELs are clustered to create a theory of action to guide aspiring and practicing leaders and can also assist states and leadership preparation programs in developing critical skills, dispositions and knowledge need for 21st century administrators. Explicit and implicit mention of collaboration and partnership are evident in these most recent national standards.

The 10 PSEL's were assembled in three related clusters that are designed to reflect how leadership can influence positive student outcomes. Cluster one is curriculum, instruction and assessment, and community of care and support for students. The second cluster was professional capacity of school personnel, professional community for teachers and staff, meaningful engagement of families and community operations and management. Cluster three was mission, vision and core values, ethics and professional norms, and equity and cultural responsiveness. Of note, the PSEL clusters emphasized collaborative internal and external partnerships with such language as "Establish and sustain a professional culture of engagement and commitment to collaboration, collective efficacy, and continuous improvement" (p.15) and "Build and sustain productive partnerships with public and private sectors to promote school improvement and student learning (National Policy Board for Educational Administration., 2015,

p. 16). States, such as Alabama, are presently addressing needed changes to align K-12 professional development and higher education leadership preparation with the new PSELs. No doubt that forming partnerships based on collaborative practices will continue to be an important part of leading and teaching in public schools and will be recognizably evident in national, regional and state benchmarks.

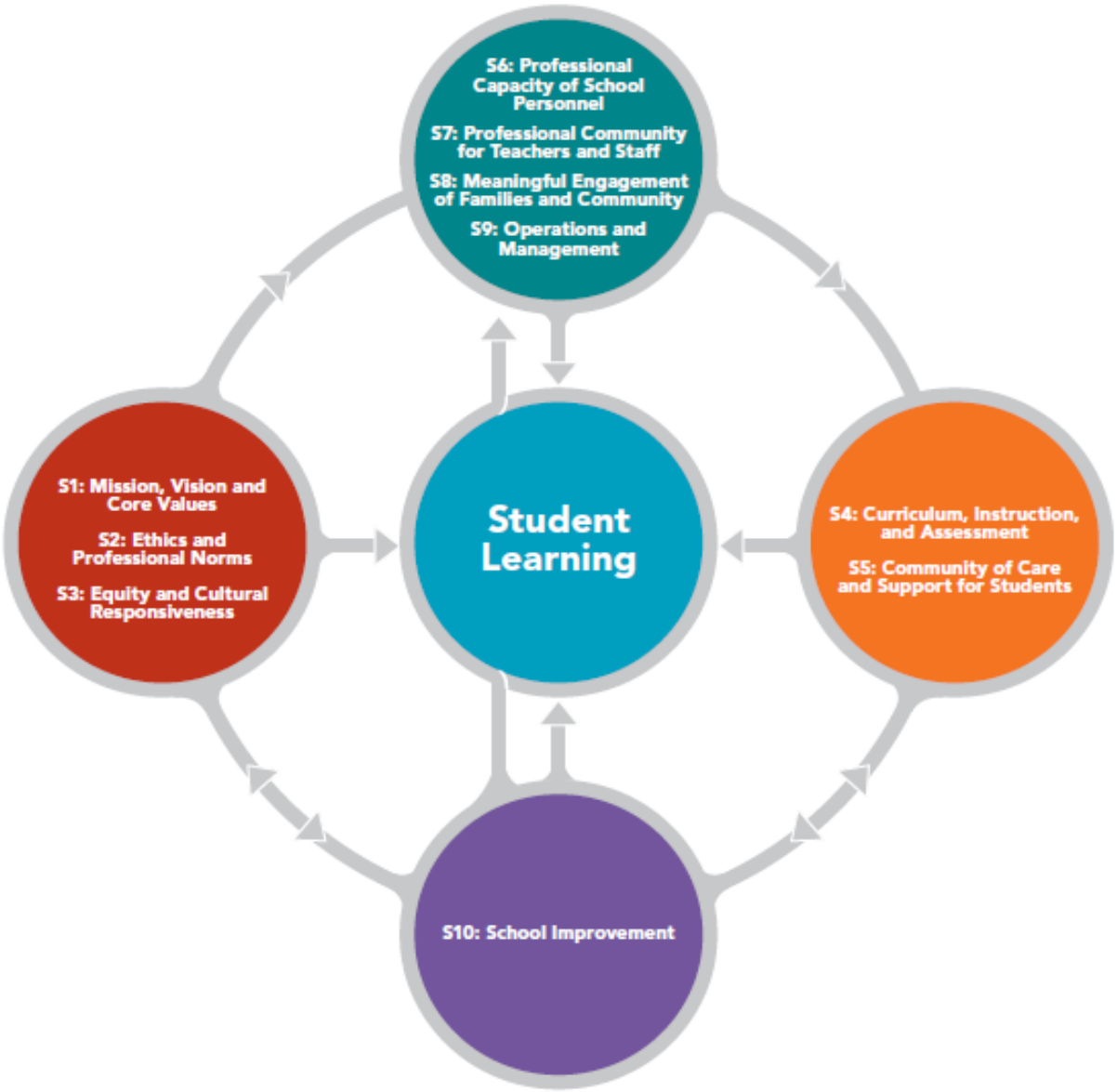

Figure 1. Professional Standards of Educational Leadership Clusters

There is little evidence that attention to partnership development is occurring between leadership preparation programs and K-12 school districts (Coleman, 2016; Hudson, 2016). What scant evidence there is suggests that for K-12 school districts to understand the value of partnering with higher education leadership programs they must be able to partner amongst themselves (Coburn & Russell, 2008; Daly, Moolenaar, Bolivar, & Burke, 2010; Essex, 2001). In other words, they must have the skills, knowledge and dispositions to do the partnership work.

The same was true for higher education leadership preparation programs. Higher education has been criticized heavily for being detached and unaware of the needs of school systems (Bottoms & O'Neill, 2001; Hess & Kelly, 2005; Levine, 2005). Others, including the Alabama State Department of Education (ALSDE) have suggested that operating in silos is no longer an option for higher education leadership preparation programs (Buskey & Topolka-Jorissen, 2010; Reames, 2010; Kochan, 2010). Collaborative partnerships between higher education leadership programs and K-12 school districts are required to design, implement and evaluate these preparation programs.

Conceptual Framework

The present study borrowed from three lines of research for the conceptual framework. Communities of Practice (Kensler, Reames, Murray & Patrick, 2012; Wenger, 2009), collaboration, faculty learning circles and partnerships.

Communities of Practice.

Wenger, McDermott & Snyder (2002) define communities of practice as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (p. 4). Wenger et al.

(2002) further describe communities of practice as including "three fundamental elements: a domain of knowledge, which defines a set of issues; a community of people who care about this

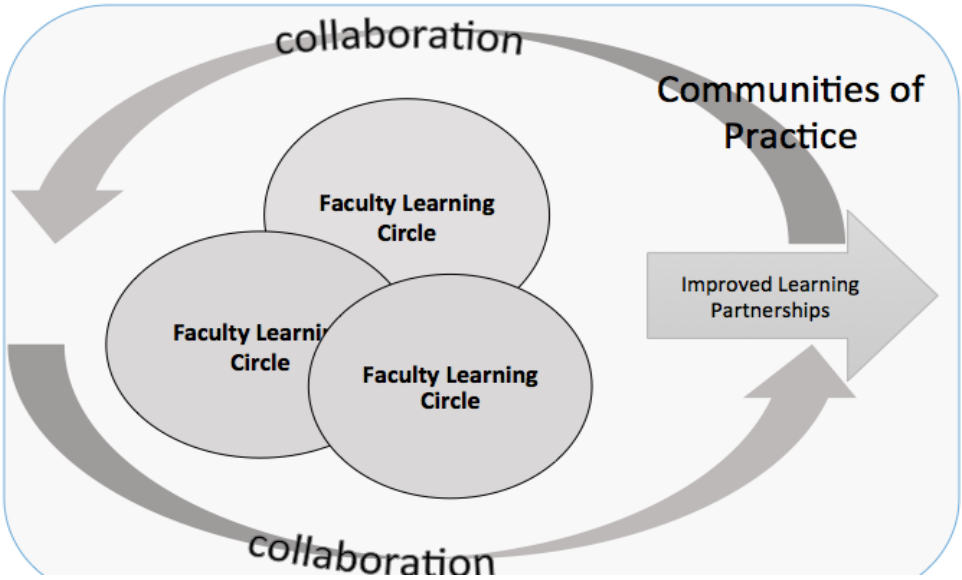

Figure 2. Internal and External Partnerships

domain; and the shared practice that they are developing to be effective in their domain" (p. 27). Later, Wenger, White, & Smith, (2010) would explain communities of practice as learning partnerships. "Its [community of practice] learning capability is anchored in a mutual recognition as potential learning partners" (p. 12). Wenger suggested four important areas for partnership development. 1) What is this partnership about? 2) Who should be at the table for this partnership to work? 3) What should members do together to reap the benefits of the partnership? 4) Who will lead and be responsible for the sustainability of the partnership?

In communities of practice leadership comes from formal and informal sources and is distributed amongst the members within the organization and outside the organization as well. This suggests that these partnerships can be internal as well as external. Primarily the information will be shared with internal partners but community boundaries are crossed and

knowledge is shared externally when needed, (Wenger et al., 2002). In essence, these internal and external partnerships increase knowledge sharing and intellectual capital.

Learning partnerships.

Learning partnerships are defined as intensely collaborative endeavors which are focused on mutual goals (Saltiel, 1998). Fullan & Langworthy (2014) referred to this learning partnership as "Deep learning" (p. i) and equated it with connecting individuals with their "core mutual motivations" (p. i). The school faculty, as partners in learning, come out of their professional silos and work together to collectively solve problems and mutually construct meaning. Faculty partners define the issue at hand, set the norms for the partnership, define who will be part of the partnership and decide how the partnership will meet to keep the momentum going, Wenger (2009). These are identified as internal learning partnerships because the focus is within the school and school system.

Evidence suggests a school's internal learning partnerships will become stronger when collaboration is allowed to flourish. In collaborative school cultures teachers exchange resources and participate in social relationships more frequently (Moolenaar, Sleegers, & Daly, 2012). Relationships become more symbiotic rather than cooperative. Teachers experience more polished instructional skill sets, become more knowledgeable in regards to how students learn, communicate with parents more effectively and learn many more teaching practices from their peers (Goddard & Van Alberti, 2007; Pounder, 1998). School culture, instructional practices and problem solving all become more meaningful (Fullan, Hord & Von Frank, 2014).

Partnerships can also exist between K-12 schools and districts and external organizations. For example, K-12 schools and districts have partnered with external agencies such as business and industry, higher education in situations, community agencies, professional associations and

military organizations. The largest share of these partnerships have been between schools and business and industry. This is not a new phenomenon and these partnerships have a rich history in the literature (Newmann, Secada, & Wehlage, 2007; Scales et al., 2005). A great deal of focus on external school partnerships began in the 1980's because of the publishing of *A Nation At Risk* (Risk, A. N. A. ,1983). The report considered business partnerships as the single greatest factor to improve education. Acceleration of these business-education partnerships occurred in the 1990's with the School-to-Work Opportunities Act (1994).

Other examples include military partnerships such as the Military Child Education Coalition (MCEC). MCES was founded in 1998 to advocate for military children and families and their unique educational needs. MCEC forged strong partnerships with K-12 and higher education institutions and has also built a strong alliance with usiness and industry. In higher education the Holms Scholars created Professional Development Schools (PDS) in the late 1980's to provide additional supports for teacher professional development. The Holmes Group recognized early on that partnering with K-12 would be a powerfultool for assisting school systems with putting a qualified teacher in every classroom.

There are two models of organizational partnership that were instrumental in the development of this project. The Barnett et al., (2010) typology for innovative partnerships included the independent model, vendor model, collaborative model, symbiotic model and spin-off model. A continuum from very simple or cooperative to very interdependent or collaborative suggested that as partnerships developed they became more linked and stable.

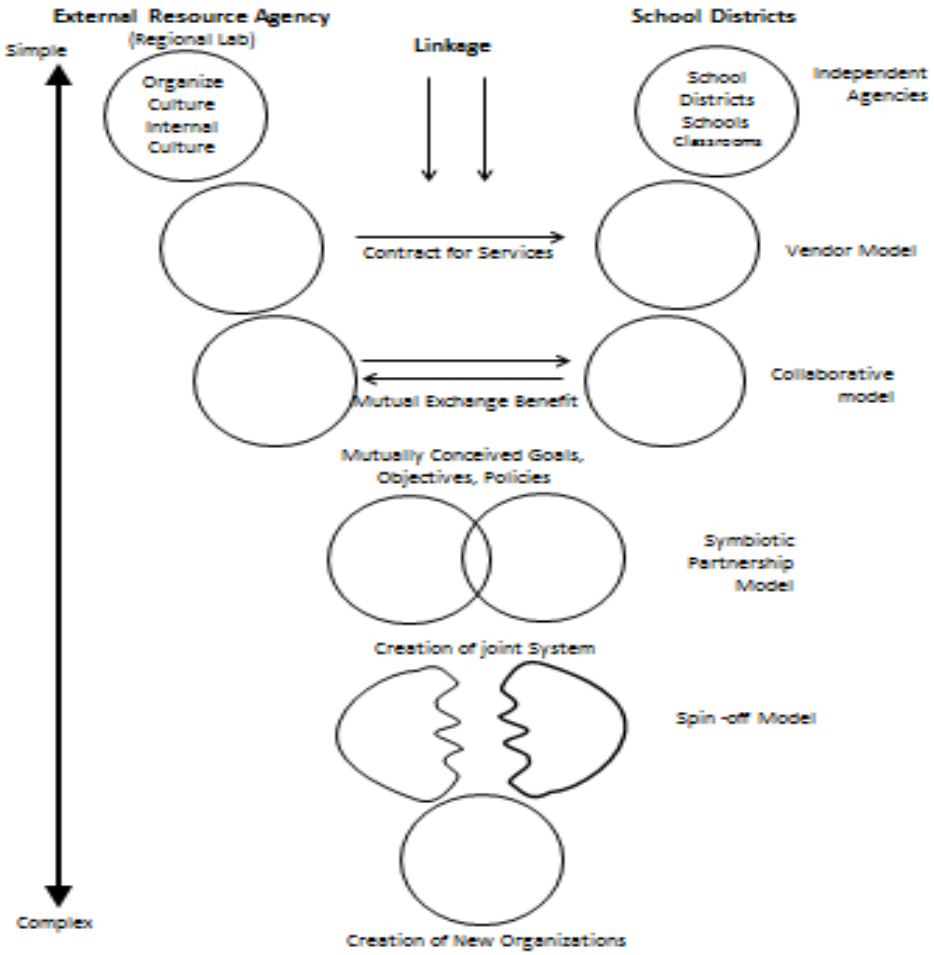

Figure 3. Typology of Innovative Partnerships (Barnett et al., 2010)

A second partnership model which was directly related to the development of K-12 school and university educational leadership preparation programs was developed by Korach, Seidel and Salazar (2012). This model examines a "third space" theory. This theory of partnership places the faculty members as well as the local school and district leaders on the same side. This allows all three of these partners to collaborate and problem-solve together to bring about the best learning for their students, involvement of parents and community members, as well as keeping up to date on the most current research available. The Barnett et al, (2010) and the Korach et al.,

(2012) models emphasized collaboration as essential to the development of internal and external learning partnerships.

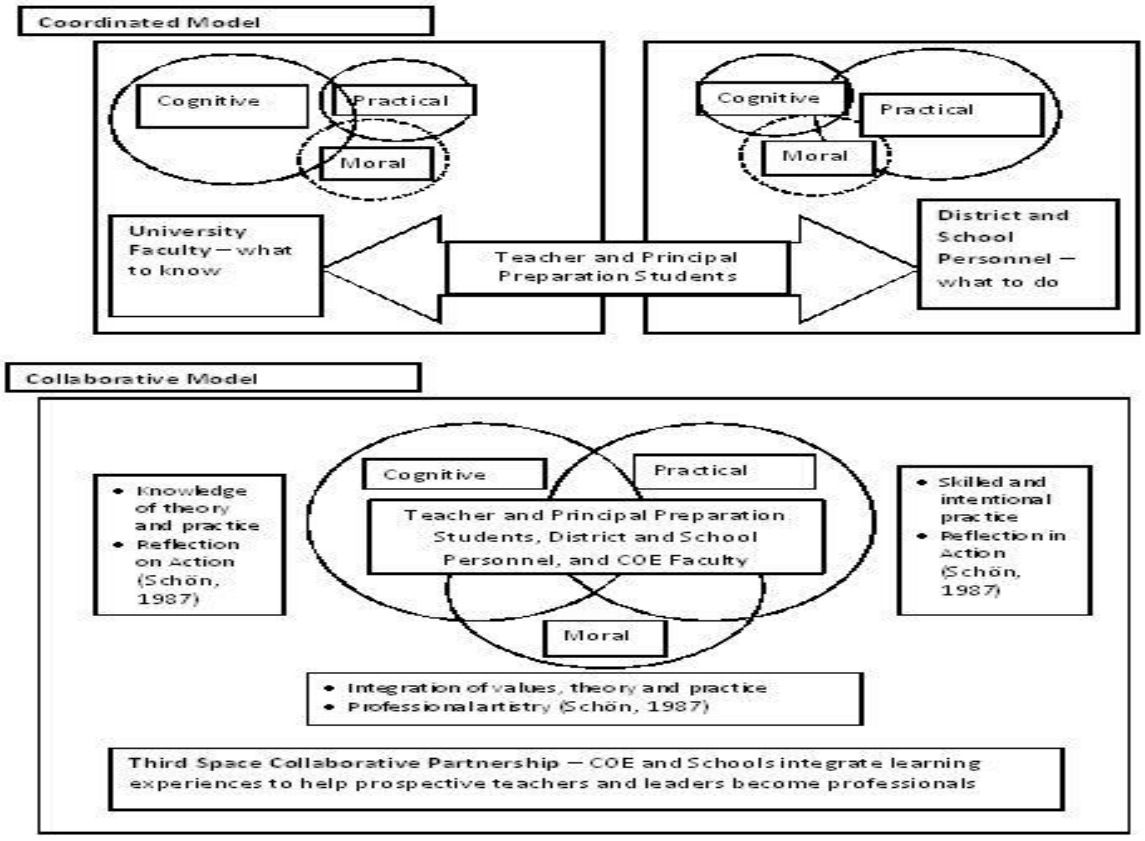

Figure 4. Conceptual Model of Coordinated and Collaborative Apprenticeships. (Korach et al., 2012, p. 6)

Collaboration.

Collaboration is a process when members of a team "work interdependently to achieve common goals" (Eaker, 2002, p. 11). Goddard, Goddard, and Tschannen-Moran (2007), along with Moolenaar et al. (2012), argued that any relationship between collaboration and student achievement most likely occurs indirectly due to a positive affect collaboration may have on teaching practices (Goddard et al., 2007; Moolenaar et al., 2012). Others suggest that structured teacher collaboration is a component that is critical to the process of improving instruction and

increasing student achievement (Blankstein, Houston, & Cole, 2008; DuFour, 1998, Hord & Sommers, 2008; Schmoker, 2005; Stone & Barlow, 2005). Research suggests that collaboration leads to the sharing of knowledge, breaks down teacher isolation, collectively empowers teachers, develops a shared language and understanding, and promotes a culture of professional respect. As noted by Stone and Barlow (2005),

> The right kind of continuous, structured teacher collaboration improves the quality of teaching and pays big, often immediate, dividends in student learning and professional morale in virtually any setting. Our experience with schools across the nation bears this out unequivocally. (p. 76)

Collaboration facilitates learning by providing practitioners of differentiated abilities opportunities to discuss, debate, observe, and share practices (Lave & Wenger, 1991; Levine & Marcus, 2010; Wenger, 1998)

Learning Circles.

Learning circles have been identified in the literature as bringing practitioners together in a structured collaborative iterative cycle of reflection, learning, planning and action. Members use collective wisdom and knowledge to solve topics of common interest (citations). In our conceptual framework the learning circles would be used to represent instances when teachers and administrators work together to solve problems. Horizontal teaming (planning on grade level) and vertical teaming (planning across grade level) are two examples of learning circle practices. Building level leadership teams and leadership groups consisting of principals and central office personnel are additional examples of possible learning circles.

Purpose of the Study

The purpose of this study was to examine the internal and external learning partnerships between school faculty in two rural elementary schools. Learning partnerships have the potential to take the study of partnerships in a new direction. First, learning partnerships take a deeper look at partnership factors. Elementary School A was a school undergoing the school improvement process, termed "Turnaround", while Elementary School B was an above-average performing school district without any significant academic problems. While collaboration was the focus of the present study, in the future, other variables may be important to the study of partnership development. For example, (Diaz-Gibson, Zaragoza, Daly, Mayayo, & Romaní, 2016). found trust to be a critical factor. Patterns of communication is yet another area and a fourth factor may be hopefulness of the actors. More in-depth research into these may unveil other factors that facilitate or hinder partnership development

In the literature, high performing schools are often recognized as having healthy school cultures, more meaningful relationships between faculty members, partner in regards to curriculum and instructional matters and are tied to the communities they serve. These are often the same areas outlined for areas of improvement in low performing schools. These factors may suggest why some schools and school districts appear less prepared to partner with universities and outside agencies and may suggest "readiness" factors that should be considered when developing a partnership.

The present study used Social Network Analysis (SNA) to answer important research questions related to describing the collaborative nature of the internal and external learning partnerships. SNA is a set of inquiry tools used for analyzing human interaction and exploring relationships between individuals, groups and communities (Wasserman & Faust, 1994). SNA is

not new to the social sciences but application of its methods in educational leadership is. To date, there are less than 250 SNA studies involving educational leadership. Using the search terms *"social network analysis"* and *"educational leadership partnerships"* there are less than five relevant studies between the years 2010 and 2015. "The use of Social Network Analysis and Theory to analyze teachers' relationships in schools has grown 250% between 2000-2010" (Daly, 2010, p.10). Although the interest has risen and the use of SNA has increased there is still not a clear and direct model to follow this type of analysis.

Statement of the Problem

In this comparative case study, the researcher performed a social network analysis of two rural elementary schools in order to determine the extent of collaboration in their internal and external learning partnerships. One above-average performing and one low performing rural elementary school were selected in order to provide the researcher with comparative data on the dependent variable, collaboration.

Research Questions:

1. What is the difference in density and centrality of collaboration between an above average academic performance school and a school in turnaround?

1a. Collaboration Density?

1b. Collaboration Centrality?

2. To what extent do faculty members collaborate in an above average academic performance school and a school in turnaround?

3. To what extent do faculty perceive their internal partnership to be collaborative in an above average academic performance school and a school in turnaround?

4. Using a frequency count, how many external partnerships are identified by the two schools?

Limitations of the Study

The following are limitations imposed on the study:

- The study was only conducted during the first year of the turnaround grant and does not examine the social network before or after the Turnaround Grant.
- The study examined only the internal partnerships of one school system involved in the Turnaround Grant.
- The study examined the internal partnerships between the teachers and faculty and did not examine the relationships between the district level employees.

Definitions

- Actors – synonymous with nodes
- Agents – synonymous with nodes
- Asymmetric – a unidirectional tie is indicated; tie is not reciprocated
- Binary Matrix – uses "1" if a relationship is present; uses "0" if no relationship is present
- Bonded Ties – ties that represent a mutual relationship between actors
- Collaborative Model of Partnership –an intensive and sustained mutual exchange and benefit. This model takes more time.
- Collaboration- a distinct form of partnership *(Barnett el al., 2010, p.21)* represents the highest form of interorganizational interdependence by "unit organizations and people for the purpose of achieving common goals that could not be accomplished by any single organization or individual acting along" (Swan & Morgan, 1993, p.19)
- Cooperation- "agencies remain autonomous, agreeing to work together only to accomplish a short-term, very focused goal such as sponsoring a joint conference" (Intriligator, 1992, p. 2)

- Coordination- requires some interdependency between organizations. *Barnett et al., 2010, p.20-21)*
- Directed Ties – relationships that go from a source to a receiver
- Edges – indicative of a relationship
- Ego – synonymous with nodes
- Homophily -is the principle that a contact between similar people occurs at a higher rate than among dissimilar people (McPherson, Smith-Lovin & Cook, 2001, p. 416)
- Independent Agency- an organization that already has the necessary resources, capacities, and skills to accomplish desired aims (Berg, Hall & Difford, 1996)
- Integrated Service Delivery- "School linked services or interagency collaboration. This entails schools using external community agencies such as the criminal justice system, social welfare agencies, and health care providers" *(Barnett et al., 2010, p.14)*
- Interagency Efforts- "Cooperative, coordinative, or collaborative" (Intriligator, 1992, p.2)
- Matrix - an arrangement of data into rows and columns (social network matrices are often square)
- Multiplex Relationship – more than one type of relation between actors
- Nodes – Individual people about whom the analysis is about
- Partnership- "A formed alliance of resources and expertise between organizations aimed at achieving a mutually desired outcome, one that is not likely to be realized without the involvement of both parties." *Barnett et al., 2010, p.14)*
- Points – synonymous with nodes
- Relations – synonymous with edges
- Simplex Relationship – a single type of relation between actors

- Sociogram – a graph that represents social network data
- Symbiotic Partnership Model- one that moves beyond the mutual gain each organization receives in the Collaborative Model to where there is a compounding of benefits through the joint effort. Mutually conceived goals, objectives, and policies, which can only be achieved through the combined effort of the partners.
- Spin-Off Model- when a partnership between two or more established organizations will become a new independent organization. This model may occur for political reasons.
- Symmetric – when a bonded tie is present; tie is reciprocated
- Ties – synonymous with edges
- Vendor Model- "where an organization requires a specialized resource which is best satisfied by contracting with another agency for that service," This model reflects a cooperative and/or coordinative relationship.

Chapter II: Review of the Literature

"So we're in a very challenging climate ... the very survival of schools is at stake ... a very high stakes system has a lot of very negative consequences [but] one of the positive consequences is that in order to survive it makes you go out there and work with other people. You realize you need to because you cannot do this by yourself, you need to find out how somebody else is making this work in a way that you're not at the moment, and it, ironically, can be a force for good in making schools work more together, collaboratively" (Keddie, 2009, p. 229)

Schools across the nation have responded to stringent accountability measures in No Child Left Behind Act of 2001 (NCLB). That legislation was the idea of President George W. Bush and Senator Ted Kennedy. The first purpose of NCLB was that all schools were accountable for student achievement, and second, the achievement gap between different groups of students would be diminished. After the efforts of NCLB current president Barack Obama continued to promote school improvement. More recently the American Recovery and Reinvestment Act (ARRA) has been passed which included Race to the Top. Race to the Top (RTT) as defined by Kirshner & Jefferson (2015) included funding guidelines based on four types of interventions such as turnaround, restart, closure, and transformation. In order to accomplish the goal of closing the achievement gap and preventing interventions such as turnaround or closure, educators must learn to work with others to find the best ideas, research, and resources to better serve all students.

Collaborative Educator Standards

Professional Standards for Education Leaders.

The Professional Standards for Educational Leaders (PSEL's) are student centered and focus on the leadership needed to adjust students learning and achievement. They were designed to ensure that educational leaders were ready to effectively meet the challenges and opportunities that arose for our students (National Policy Board for Educational Administration, 2015). The standards were published in 1996 by the Council of Chief State School Officers and were updated in 2008. Both lists were based on empirical research of what was most effective for students. The newest release in 2015 indicated changing student demographics and the need for standards to align with student needs. The research demonstrates that the leader influences student learning outcomes by creating a safe learning atmosphere and rigorous curriculum and instruction. The National Association of Elementary School Principals (NAESP), National Association of Secondary School Principals (NASSP), and American Association of School Administrators (AASA), UCEA and NCPEA were all involved in the newly developed 2015 PSEL standards. (National Policy Board for Educational Administration, 2015).

The 2015 PSEL's apply to all levels of educational leadership. This included principals, assistant principals, and any district leaders. The new PSEL's have a more specific emphasis on students and their learning to help prepare them for the workforce. The 2015 PSEL standards are as follows:

- *Standard 1: Mission, Vision, and Core Values*

This entails a shared mission or vision for the school and/or district.

"In collaboration with members of the school and the community and using relevant data, develop and promote a vision for the school on the successful learning and development of each child and on instructional and organizational practices that promote such success" (National

Policy Board for Educational Administration, 2015, p. 9).

- *Standard 2: Ethics and Professional Norms*

Leaders should act ethically to promote all students' well-being. "Act according to and promote the professional norms of integrity, fairness, transparency, trust, collaboration, perseverance, learning, and continuous improvement" (National Policy Board for Educational Administration, 2015 p. 10)

- *Standard 3: Equity and Cultural Responsiveness*

Leaders should strive for equal opportunity for all students.

- *Standard 4: Curriculum, Instruction, and Assessment*

Leaders should promote rigorous curriculum and standards.

- *Standard 5: Community of Care and Support for Students*

Leaders should develop a supportive school community for parents and students.

- *Standard 6: Professional Capacity of School Personnel*

Leaders should develop and monitor the professional practice of each school.

- *Standard 7: Professional Community for Teachers and Staff*

Leaders should develop a professional community of teachers to better serve students. "Establish and sustain a professional culture of engagement and commitment to shared vision, goals, and objectives pertaining to the education of the whole child; high expectations for professional work; ethical and equitable practice; trust and open communication; collaboration, collective efficacy, and continuous individual and organizational learning and improvement" (National Policy Board for Educational Administration, 2015, p. 15)

- *Standard 8: Meaningful Engagement of Families and Community*

Leaders should engage families to develop a beneficial relationship to serve students. “Build and sustain productive partnerships with public and private sectors to promote school improvement and student learning” (National Policy Board for Educational Administration, 2015, p. 15). This standard specifically mentions internal partnerships as well as external partnerships with public sectors for the improvement of student learning.

- *Standard 9: Operations and Management*

Leaders should manage resources to promote student’s success.

- *Standards 10: School Improvement*

Leaders should act as “agents” of continuous improvement.

(National Policy Board for Educational Administration, 2015)

Half of the eight Professional Standards for Educational Leaders (2015) specifically referred to partnerships and collaboration. Establishing and sustaining a professional culture of engagement of shared goals and expectations spoke directly to collaboration and internal partnerships between teachers, building-level administrators, and district office personnel. Building and sustaining productive partnerships with public sectors to improve student learning referred to the development of external partnerships without outside agencies such as businesses and establishments of higher education such as colleges and universities. To fully implement any of the 2015 PSEL’s a level of collaboration must be reached in order to successfully meet the needs of all students

Alabama Standards for Instructional Leadership.

The purpose of the Alabama Standards for Instructional Leadership is to “Enhance school leadership among principals and administrators in Alabama resulting in improved academic achievement for all students” (Alabama Learning Exchange, 2016). These standards were

developed based on previous research conducted by Interstate School Leaders Licensure Consortium (ISLLC), the Southern Association of Colleges and Schools, the Southern Regional Education Board, and 22 states. Alabama's State Board of Education and the Governor approved the eight standards of effective leadership in May, 2005.

- Standard 1: Planning for Continuous Improvement

The standard included the ability for leaders to work with teachers and other staff members to collaborate to establish and set goals as well as the ability to collaborate with external agencies such as Alabama Math and Science Technology Initiative (AMSTI).

- Standard 2: Teaching and Learning

The standard included the ability to engage staff in ongoing collaboration of implementation of research-based standards such as College and Career Readiness Standards.

- Standard 3: Human Resources Development

The standard encouraged collaboration between teachers and other employees to distribute responsibilities and duties to better allow each staff member to capitalize on their specific strengths.

- Standard 4: Diversity

The standard included the expectation that leaders participate in policy-making to better protect the rights of all students and includes addressing the diverse needs of all students.

- Standard 5: Community and Stakeholder Relationships

The rational for this standard was that cooperation and collaboration between schools, districts, parents, and the community was essential.

- Standard 6: Technology

The standard focused on the use of technology for curriculum and instruction use.

- Standard 7: Management of the Learning Organization

The standard focused on the equitable use of all resources for every student.

- Standard 8: Ethics

Table 1

Alabama Standards for Instructional Leadership

Standards	Number of Standard
Planning for Continuous Improvement	1
Teaching and Learning	2
Human Resources Development	3
Diversity	4
Community and Stakeholder Relationships	5
Technology	6
Management of the Learning Organizations	7
Ethics	8

The standard stated that leaders of a school or system should be an example of conduct and behavior for all employees as well as the community.

Those standards like the Professional Standards for Educational Leaders focused on the responsibilities and expectations of school leaders to meet the needs of all students through the use of collaboration and communication to better meet the needs of all students (Alabama Learning Exchange, 2016).

Alabama Code 290-3-3

The Alabama Administrative Code was updated September 30, 2015 and was developed to better educate and prepare both potential and current teachers in the expectations of a teacher

within the state of Alabama. What was of marked notice in the document was the expectation for collaboration amongst all school partners including teachers, school leaders and educational leadership preparation programs. The document also made a clear expectation that teachers, schools, interning teachers, and the university had a collaborative process including clear communications to ensure that each potential teacher is best prepared to teach the children of Alabama.

Communities of Practice

A Community of Practice (CoP) by definition is a place where people with the same interest in a common "domain" of knowledge can meet to engage in "Meaningful and authentic work; collaborate and interact with one another; and participate in ways that lead to the creation of ideas, strategies, and resources (Wenger et al., 2002). As effective educators those communities of practice should be the norm. Educators shared a common passion, experiences, and concerns with their students and their families. By sharing information, past experiences, ideas, and resources a relationship of trust was developed. According to Wenger et al., (2002), a Community of Practice had three sections: domain, community, and practice.

The first section, domain, contained the issues and concerns directly related to their specific field. "A shared domain creates a sense of accountability to a body of knowledge and therefore to the development of a practice (Linton, 2015; Wenger et al., 2002;). Wenger (1998) stated that there are three sections of the domain: topics and issues, questions, and shared understandings. The "shared understanding of their domain- it's purpose, its resolved issues, its open questions-allow them to decide what matters" (Wenger et al., 2002, p.30).

The second section necessary for a Community of Practice, according to Wenger et al., (2002) was community. These communities work together on issues and develop relationships.

The “Kind of coherence that transforms mutual engagement into a community of practice requires work” (Wenger et al., 2002, p. 74). A true community of practice won’t just happen and if not maintained will not last. Communities that put true commitment and time into their network will reap the best rewards. In developing those close relationships over common interests, such as students and their achievement, the results will carry over into celebrations of personal and public achievements including family celebrations, Wenger (1998).

The third necessary section for a Community of Practice was the relationship between participation and reification. Reification is the process of producing objects that transform the experiences in to “thingness” (Wenger, 1998, p. 58). Within a community of practice, one has a goal of gaining something from the collaboration. Teachers may want to get out of the collaboration, suggestions of interventions to use with their students or a scope and sequence that had been mutually agreed upon. “Successful practice development depends on a balance between doing activities which members explore ideas together and the production of things, like documents or tools” (Wenger et al., 2002, p. 38). In a study conducted by Linton (2015), teachers were given a communications journal, which served as the reification of their community practice. As a result, each teacher involved had a tangible document full of ideas, suggestions, and recommendations to better meet the needs of their students.

In communities of practice leadership came from formal and informal sources and is distributed amongst the members within the organization and outside the organization as well. That suggested that those partnerships could be internal as well as external. Primarily the information would be shared with internal partners but community boundaries were crossed and knowledge was shared externally when needed (Wenger et al., 2002). In essence, these internal and external partnerships increased knowledge sharing and intellectual capital.

Learning Partnerships

Learning partnerships are defined as intensely collaborative endeavors, which are focused on mutual goals (Saltiel, 1998). A learning partnership is a collaborative effort between two or more people where the expectations are aligned with one another and as a result teamwork is focused a common set of objectives. These partnerships may be internal or external.

Partnerships Defined.

Partnerships defined, was a relationship resembling a legal partnership and usually involving close cooperation between parties having specified and joint rights and responsibilities". Partnership was a commonly utilized term in the field of education. Partnerships between local schools and universities were not atypical for public schools. According to (Barnett et al., 2010) partnerships have even been included in the updated Elementary and Secondary Education Act.

Intent and Purpose of Partnerships.

Partnerships came in many different form and purposes. "Partnerships form a mutually rewarding relationship with the purpose of improving some aspect of education. The relationship must be based on the identification and acceptance of compatible goals and strategies. In addition, the partners should respect the differences in each other's culture and style striving to apply the best of both worlds to achieve established goals" (Zacchei, 1986, p. 17). What differs with each type of partnership was the intent and purpose of the partnership. Before developing a partnership with any person or group questions must be asked to determine the purpose of the partnership and to plan out the desired goals of the said partnership. Once that information was determined it would allow both partners the ability to decide what their "side" might gain from the partnership. According to Barnett et al., (2010) partnerships come possible risks that both

parties must be aware of and be willing to accept. With this step accomplished the partners can then begin. The partnership would go through a succession of stages. In communities of practice, leadership came from formal and informal sources and was distributed amongst the members within the organization and outside the organization as well. That suggested that those partnerships could be internal as well as external. Primarily the information would be shared with internal partners but community boundaries were crossed and knowledge was shared externally when needed (Wenger et al., 2002). In essence, those internal and external partnerships increase knowledge sharing and intellectual capital.

A study by Kochan & Mullen (2003) indicated educators had been instructed to develop leadership roles with collaboration as described in the Holmes Report (1995). In order to develop those learning partnerships, educators must first examine the culture of their own organization before reaching out to external partnerships. In the study by Kochan & Mullen (2003), they addressed four areas of collaboration and learning partnerships: (1) definitions, influences, and motivation; (2) types and extent of collaborative experiences; (3) positive and negative aspects of collaboration; and (4) lessons learned. The women in the study best described collaboration as a "marriage" because it undergoes so many changes, both positive and negative. The women in the study developed internal and external partnerships. The collaboration reached outside their immediate realm and reached out to other women in the field of education. According to those in the study the benefits of collaboration greatly outnumbered any disadvantages. "Therefore, those who collaborate will "always have to live in two worlds-one that rejects collaboration as a model for shared work and credit and one that glorifies it through the literature, as though it's a solution for everything" (Kochan & Mullen, 2003, p. 161).

Partnerships with Businesses.

Partnerships with businesses have also been something of a frequent occurrence for education and schools rely heavily upon the financial assistance given through these partnerships. One example of partnerships between businesses and schools were the adopt-a-school programs. Those programs allow businesses to donate materials such as food items, gift certificates, pencils, and clothing identifying the company, to students who have achieved honors for academics, attendance, or behavior. Estimates indicated that around 70% of schools have some type of relationship with businesses.

Other types of partnerships existed with businesses and universities that assisted teachers and administrators in educating students. An example is the Alabama Math, Science, and Technology Initiative (AMSTI). This program was directed by the Alabama Department of Education. The purpose was to assist educators in the teaching of math and science. That type of partnership allowed public school teachers to stay up to date with current research and trends in math and science. With new standards in science being released by Common Core, that program will continue to provide assistance with classroom teachers learning the standards and implementing them into the classroom to enhance student learning.

Partnerships with Parents.

Partnerships existed between parents and schools as well. Examples of this include the Parent Teacher Organizations (PTO). These parent teacher groups were just one example of ways parents could stay actively involved in the education of their children. PTO gave a forum for both parents and teacher to work together in developing a mutual plan of action for their children and students. Parents also proved to be good partners in shared decision making for curriculum decisions and assisting as a partner with the Continuous Instruction Plan (CIP). Parents were expected to take on a variety of roles, from attending school events and teacher/

parent meetings to raising money and serving as parent association leaders, as well as helping their children at home (Epstein, 1987; Henderson & Berla, 1994).

Sacramento, CA originated a partnership known as Sacramento Area Congregations Together (ACT). That organization actually trained educators to conduct home visits with parents rather than the students. According to Dingerson (2004) that program had proven so effective in engaging parents and improving student outcomes that it had expanded statewide.

K-12 Partnerships.

School-college partnerships offered significant promise for simultaneous educational renewal as defined by (Essex, 2001). The educational renewal mentioned in the Essex article was referred to the renewable between the partnerships of K-12 schools and universities. Partnerships between those K-12 schools and universities could help connect professional preparation of teachers. With the ever present need for school reform, public schools were being faced with new challenges. Those challenges range from new common core standards to unqualified teachers to financial burdens and responsibilities. Those challenges also refer to instructing students to come from high crime and high poverty areas. "Given the unique challenges faced by public schools and colleges of education, it is essential that they join forces in forming meaningful partnerships as one means of enhancing and improving instructional effectiveness and learning outcomes for students" (Essex, 2001).

It was true that not all partnerships were effective, especially those between K-12 schools and universities. "Often the University and the district were not ready to work with each other; in some cases, their leaders just do not know how or have the policy and governance systems to do so effectively and efficiently" (Berry, 2008, p. 10). Although all partnerships are not effective, the need for partnerships was apparent for several reasons. The first reason mentioned by Essex

was the need for educational reform. An example of those reforms would be Common Core standards. Those standards required that all students need a minimal level of proficiency on all state standardized tests. The second reason for partnerships mentioned by Essex, was the increased accountability for student achievement. By partnering with colleges of educationK-12 schools were able to work with those universities to help in the creation of teachers to better deal with responsibilities of the new standards and in improving turnaround schools. The third reason mentioned, was that public schools and colleges of education had similar financial constraints. By working together, they could eliminate some of the prohibitive costs incurred in the running of a school. Each of those reasons provided gave sufficient explanation for the development of those partnerships.

According to (Goodlad, 1994: Osguthrop, 1995) there was a set of characteristic necessary for an effective partnership between K-12 schools and universities.

- *An effective partnership has a clearly defined purpose and direction.*

This characteristic required that all members involved in the partnership must have understood the purpose of the partnership as well as how the goals of that partnership will be achieved.

- *An effective partnership is enthusiastically endorsed by a top-level leader in schools and colleges.*

The characteristic showed agreement from all levels following the top-down approach beginning with central office personnel and other top administrators. Each of those members had to be completely on board with the partnership and its goals for the partnership to be effective.

- *An effective partnership involves trust among partners.*

The characteristic clarified the need for trust and understanding between the partners. Each of the partners must understand why the other has become involved with the partnership. There

must be an open communication between members of the partnership about what each partner expects as a result of the partnership. In essence, what does each partner have to gain from the partnership?

- *An effective partnership involves open communication.*

An open communication in any relationship or partnership was essential. This was even more so true in an educational setting where standards and requirements were constantly changing. An open communication would ensure that all members of the partnership are aware of each stage in the progression of the partnership and its goals. This eliminated rumors and speculation, which typically cause negative feelings of not being included.

- *An effective partnership involves mutual respect among partners.*

The characteristic especially speaks to the relationships between K-12 schools and universities. Some college professors have been out of public classrooms so long that they are unaware of the changes that have occurred within the classroom. The opposite was that college professors were typically much more up to date on new research and literature that classroom teachers aren't aware of. A mutual respect must be developed for one another for this partnership to be effective. The ultimate goal for the relationship between a K-12 school and university was that of improving student learning.

- *An effective partnership provides tangible benefits for all partners involved.*

The characteristic was especially true of the partnership between universities and K-12 schools. That partnership should result index teaching and learning for students and the K-12 setting as well as students at the university level.

- *An effective partnership has mechanisms to assess progress and measure outcomes.*

The characteristic required that an ongoing assessment of data be conducted to determine whether or not the partnership had been successful. If the partnership had not been successful both sides would need to determine where the weakness lies and decide whether or not to correct that weakness or to terminate partnership.

"School college partnerships hold significant promise for renewal and improvement in education but must be vigorously supported and advanced by top leadership at public school and college levels" (Essex, 2001, p. 736). Past models of reform followed the theory that potential teachers learned all they needed to know within the university setting and would apply the information that they had been taught during their short practicum with public schools. According to Zeichner, (2010), university tenure-track faculty often don't interact with the actual school site members to set up field experience and internships. Those jobs are often left to potential doctoral students, which lead senior faculty to be out of touch with the needs of current teachers. In the new model universities were looking toward implementing had the opposite theory. The theory was that students be placed within a school setting and learn from the surroundings and their experience within the surroundings. Those students would learn from the practicing principals and teachers as well as from the parents and other stakeholders within the school. Shulman stated, "The aim of professional education is to engage in practice with a sense of personal and social responsibility" (Shulman, 2005 p.18) Past partnerships between universities and K-12 schools focused on the development of the teacher. New partnerships between universities and K-12 schools focused more on the student improvement. According to Korach (2012), One way to correct that problem was by having teacher and principal programs find more ways to integrate fieldwork with coursework in a more effective manner.

Research indicated several examples of current partnerships between K-12 schools and universities. One example could be found with a K-12 public school in Baltimore, Maryland. That study conducted by Ash (2011) showed that Baltimore schools were partnering with local universities so that gifted students were not held back in the classroom. The goal of working with local universities was to increase their potential for success in the admissions process of entering a university as well as the success maintained while in the university setting. Faculty and parents realized that the majority of federal funds went toward students with low performance. Stakeholders wanted to find a cost-efficient method for helping students with high performance. In that situation the partnership between universities were highly effective.

Another article by Domina (2012) indicated that universities and K-12 schools operate largely independently from one another. "This governance disjuncture is rooted in long-standing differences between the democratic and universalizing missions of America's K-12 schools and higher education's research, scientific, and leadership training mission" (Kirst-Ashman, 2007, p.244). Public schools were required to take in all levels of learners both high and low performing students. Universities on the other hand usually only dealt with high achieving students. The article conducted a quasi-experimental assessment of the K-16 partnerships in California. During the study local universities worked with K-12 educators in preparing students for college admissions. The research indicated that there are two types of partnerships between universities and K-12 schools.

The first type of partnership was programmatic. That type of partnership included tutoring services, teacher training, and other professional development. The second type of partnership was a comprehensive partnership. That type of partnership included building programs and creating the policy framework for these programs.

The conclusion of that quasi-experiment showed that the partnership was not as effective as had been hoped. According to the author it could take up to 10 years of partnership to show a positive effect. Although the short-term results were not as effective as hoped, the authors of the study claimed that partnerships between local universities and K-12 schools was an effective long-term strategy.

In another article by DeVoss, D.N., & Selfe, D. (2002), they demonstrated a partnership between K-12 schools and universities with a focus on technology and its uses. K-12 administrators from Escanaba, Michigan, contacted professors at the local university Michigan Tech, and asked if they would be willing to collaborate in developing a workshop for local teachers on technology and it's uses in the classroom. Michigan teachers were required to accumulate five State-Board Continuing Education Units (SB-CEU's) in order to renew their certificate each year. The goal of that partnership was to ensure they were meeting the needs and interests of all K-12 teachers with the use of incorporating technology in the classroom. "Not surprisingly, teaching new literacies is remarkably difficult in an environment where both technology and digital literacy practices change so rapidly that our schools-including our public schools, and especially our public schools in poor or poorly funded districts-cannot keep up" (DeVoss & Selfe, 2002, p.439). The workshop expanded to classes for students as well as teachers. The result of the partnership showed that teachers, students, and professors all had a better understanding of available technology, interest in technology and the ways technology could be incorporated in to the classroom every day. That partnership between local K-12 school faculty and student with universities was a model that could be replicated with other school systems facing similar concerns.

Research by Huziak-Clark, Nurnberger-Haag, and Ballone-Duran (2007) indicated a positive and imperative need to improve pedagogy through K-12/University partnerships. The purpose of their study was to define the effectiveness of a collaborative program between K-12 faculty and staff with university faculty and staff. They also included in this study a variety of science and mathematics graduate students. The purpose of doing that was to insure better content knowledge and inquiry-based teaching practices among the different participants. Each member of the partnership had to first have a better understanding of what inquiry-based teaching was. Each participant had to understand that "Inquiry may be referred to as a technique that encourages students to discover or construct information by themselves instead of having teachers directly reveal the information" (Huziah-Clark et al., 2007, p.311). Once each participant had a good understanding of inquiry-based teaching the focus was put on improving the collaboration with mathematicians and scientists to meet the new state standards for mathematics. At a university level the focus of the partnership was to improve their pedagogy skills by improving what and how they instructed undergraduates in not only the education department but in mathematics and science curriculums as well. At the K-12 level the benefits would include assistance from college level students willing to teach or aid in teaching new mathematical and scientific activities to public school students. On both levels the partnership had a plethora of benefits for each participant.

The study by Huziak-Clark et. al. (2007) used both quantitative and qualitative research methods. The study was conducted over a three-year span. The data was gathered in the form of surveys and journals. Observations were also a critical component to this partnership. At the conclusion of the partnership both participants had positive feedback about the partnership. The university participants learned to teach and speak at a level that all participants understood. The

K-12 participants learned how to turn theoretical standards and adapt them to make them more concrete for their students.

Research originated by Salas-Morera et al., (2003) indicated an increase in engineering skills taught in high school students due to a partnership with local universities. The goals of this K-12/university partnership were to provide better information to high school students about engineering as a profession and to improve basic skills needed for an engineering degree. Participants of that partnership felt the partnership was necessary to declining enrollment in engineering students at local universities.

This partnership developed in stages with university level mathematics and science professors working with K-12 educators to train them in the skills required for students to enter the engineering program at the university level. The next stage included identifying actual engineers who were available to come and work with K-12 teachers and delivering content on engineering. The final stage included having classes specifically for 11^{th} and 12^{th} grade students taught by K-12 teachers and university personnel.

The framework for that study was similar to that of Hunley, Whitman, Baek, Tan, Kim et al. (2010) who also focused on increasing the number of applicants entering the engineering field. Hunley et al. (2010) attracted more engineering students by focusing on K-12 schools and having them offer more hands-on activities and to increase the knowledge base of students in the fields of science and mathematics. This study also referred to one conducted by (Wilson et. al. 2010). In this study the focus was again on increasing the number of engineering students entering the university level. The difference in the study by Wilson, Krakowsky, & Herget (2010) was his use of retired scientist and engineers who would come in to the schools and

would assist K-8 teachers in working with students and even in working with parents after school hours to increase the understanding of parents.

The research available for K-12/University partnerships was expansive. School partnerships with local universities had been a longstanding relationship that is critical for ensuring competent teachers in classroom. Whitford (2014) stated that relationships between the schools and universities can created new "synergies" that bridged the gaps between classrooms and clinical training at universities. The research I examined all led to a positive outcome and had a win-win relationship. Each of those studies provided a framework that could be followed by other K-12 schools and universities alike. Collaborative partnerships between Colleges of Education and K-12 had the ability to increase innovative practice-based instruction that will benefit both teacher and student preparation (Korach et al., 2012).

Models

A model developed by Korach et al. (2012) examined the partnership relationship between schools and universities. This model examined a "third space" theory.

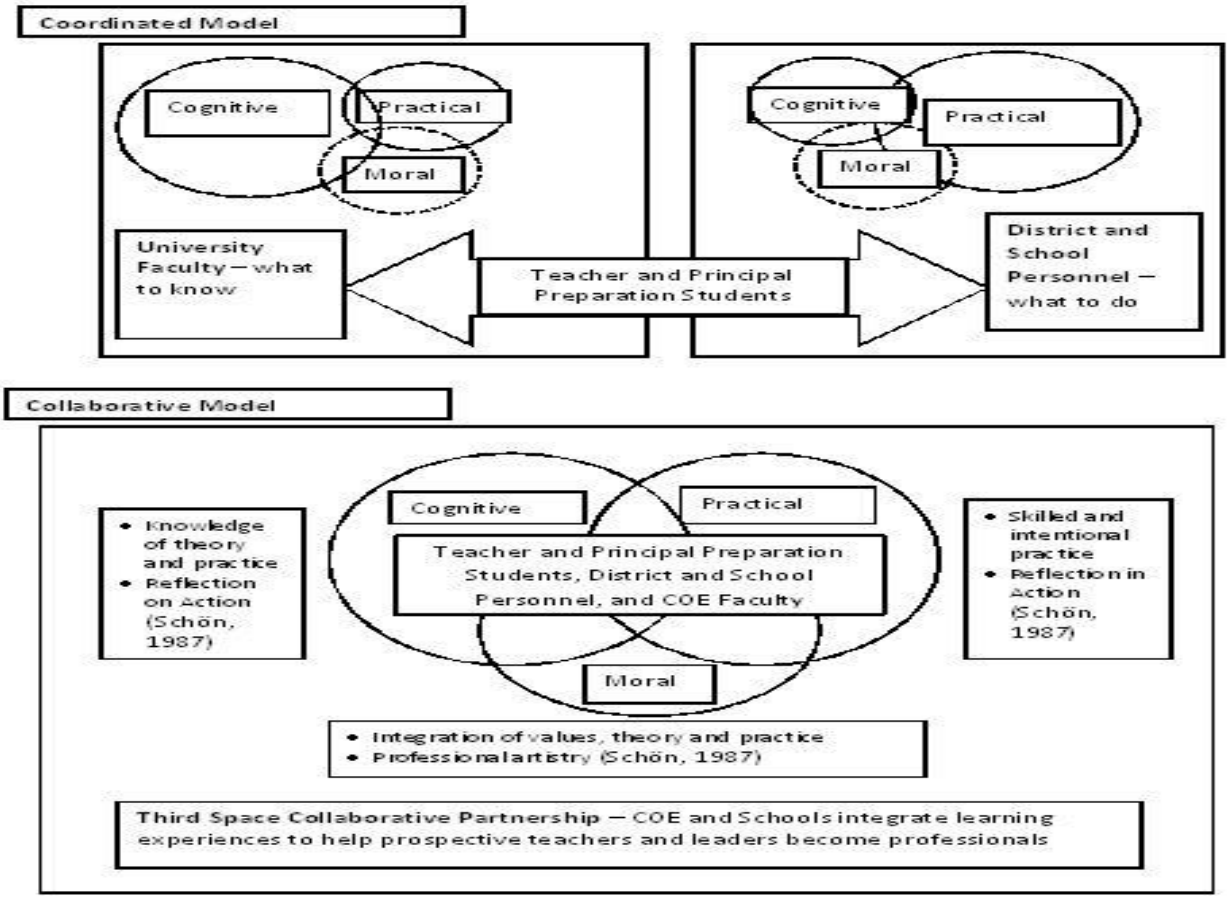

Figure 5. Conceptual Model of Coordinated and Collaborative Apprenticeships (Korach, S., Seidel, K., and Salazar, M., 2012, p. 6)

This theory of partnership placed the faculty members as well as the local school and district leaders on the same side. That allowed all three of these partners to collaborate and problem-solve together to bring about the best learning for their students, involvement of parents and community members, as well as keeping up to date on the most current research available.

This "Third Space" theory had positive and negative aspects. One negative aspect was that the collaboration between all members would not be successful if all members were not prepared to work together. "Often the university and the district are not ready to work with each other; in some cases, their leaders just don't know how or have the policy and governance systems to do so effectively and efficiently" (Berry, Montgomery, & Snyder, 2008, p.10). The

positive aspects of that theory were equally as important. One strength of the model was the ability for the partnership to meet particular needs of each partner, which included the "Recruitment, preparation, and retention of quality teachers and principals" (Korach et al., 2012, p. 7).

The partnership would go through a succession of stages. Trubowitz (1986) created an outline of the stages a partnership will go through. He described the process as their "growth and development". The following are the stages depicted from his outline:

- *Stage I:* Hostility and Skepticism: Partners learn about one another, recalling previous negative experiences with partnerships.
- *Stage II*: Lack of Trust: Trust and confidence in one another's expertise and capabilities begin to develop.
- *Stage III*: Period of Truce: Mutual participation in a joint project in initiated.
- *Stage IV:* Mixed Approval: Early successes are recognized and those not participating are removed from the project.
- *Stage V:* Acceptance: Partners acknowledge and celebrate mutual benefits of the project.
- *Stage VI*: Regression: Changes in staff, funding, and resource allocation challenge the direction and stability of the partnership.
- *Stage VII*: Renewal: The transfusion of new people and ideas regenerates the partnership.
- *Stage VIII*: Continuing Progress: Partners maintain their commitment and involvement, expecting the nature of the relationship to change over time.

Barnett et al. (2010) also presented a framework for partnerships and the development that occurred between these relationships. Barnett's framework spanned from simple to complex partnerships. The first facet Barnett examines was that of the Vendor Model. That model

occurred when a partnership was needed with an outside source for a specific consideration. That could be both monetary in the form of donations or non-monetary with the need for access to locations or resources.

The next facet Barnett examined was that of the Collaborative Model. The Collaborative Model was what was typically thought of as a partnership model. In that type of partnership the purpose for the partnership was less specific then that of the Vendor Model. In that facet both parties must be equally satisfied by the purpose and goals of the partnership. "The success to the collaboartive model is that the linking agents have patience and the ability to listen" (Barnett et al., 2010, p. 25). The Collaborative Model worked more slowly than the previous model so both parties had to be willing to remain committed and faithful to the partnership.

The subsequent model mentined by Barnett was the Symbiotic Partnership Model. That model was considerably more complex than the previous models. In that partnership both parties set goals, objectives, and policies. In that type of relationship different persons had very specific roles in the partnership. That model may have dinclude bringing an employee from a partnering organization in to the other partnering organization to assist the partnership.

The last model mentioned in the typology by Barnett et al. (2010) was the Spin-Off Model. That model was the most complex of the framework. That model occurred when a partnership was so effective that it could branch away and create a new entitiy entirely. If that relationship occurred the next step was to make a collective decision as to the next steps to be taken.

In addition to the previously mentioned partnerships were the internal partnerships found within school systems between teachers and their co-workers as well as between teachers and their local administration. Using the framework developed by Barnett et al. (2010), an

examination could be made as to where the school currently was and where it needed to move. "Teacher collaboration may benefit teachers' practice in many ways, which in turn will affect student achievement" (Moolenaar, Sleegers & Daly, 2011, p. 251).

Once an examination was determined than the subsequent steps would be how to bring about a more collaborative partnership within the school to increase the low- performance of that school. In order to do that an examination of the partnerships between K-12 organizations and local universities had be examined more closely.

Partnership in Educational Leadership

"Having effective and meaningful school and state department connections appears to be an essential element in maintaining credibility and ensuring that universities continue to have a significant role in preparing educational leaders" (Shoho, 2011, p.4)

Partnerships with higher education, primary and secondary schools and districts, were based on the foundation that the partnerships would enhance the current educational leadership programs while preparing future educational leaders, (Barnett et al., 2010; Reames & Kochan, 2015). With the publication of *Tomorrow's Teachers: A Report of the Holmes Group,* Holmes Group (1986), colleges of education and leadership had

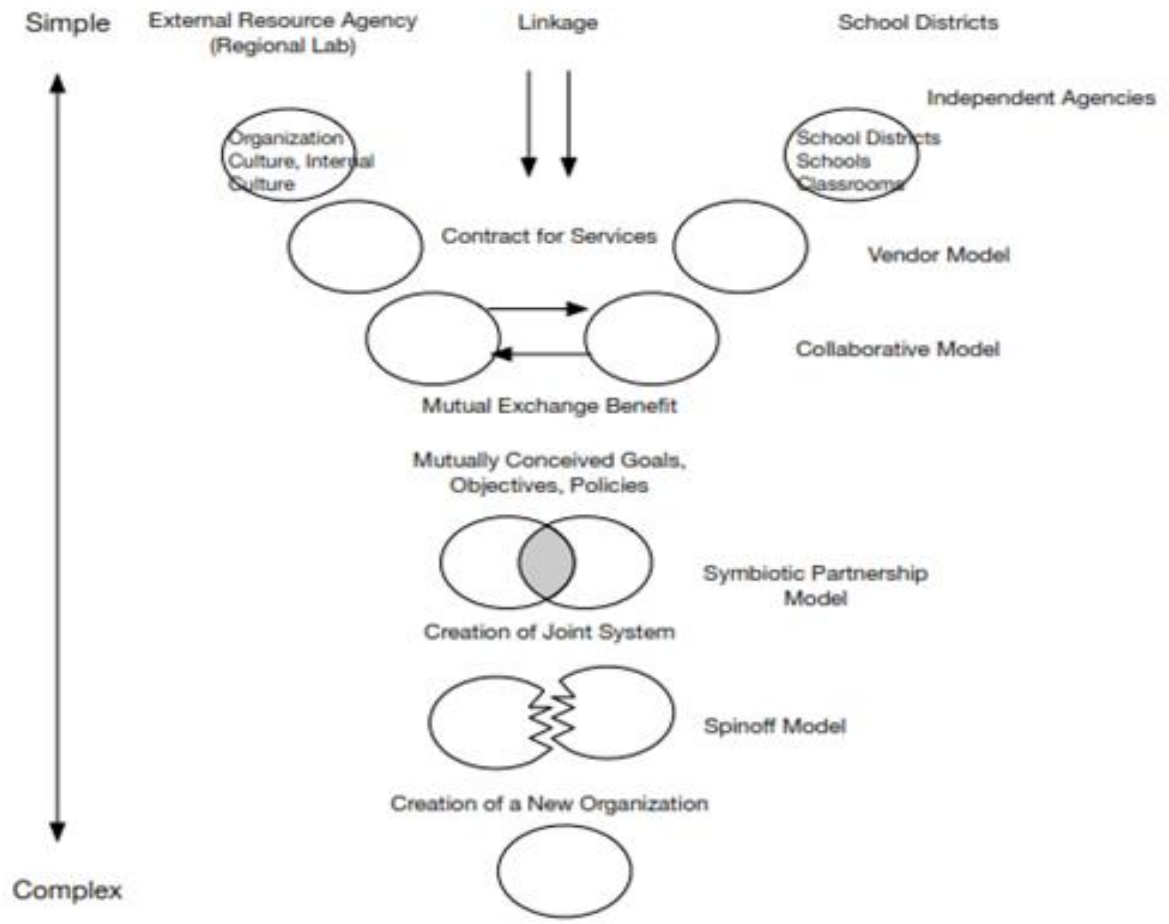

Figure 6. Adapted from the conceptual framework proposed in "A typology of partnerships for promoting innovation," by B. G. Barnett, G. E. Hall, J. H. Berg, & M. M. Camarena, 2010, Journal of School Leadership, 20, p. 23.

been encouraged to develop external partnerships with local school districts. The report specifically mentioned, "creating professional development schools" which would have increased the rigor of teacher education programs and would have increased the collaboration with K-12 schools. The "No Child Left Behind" (NCLB) law defines "highly qualified" teachers as persons with subject matter mastery, but without traditional university- based teacher education classes (Levine, 2006, p.14).

There was little evidence that attention to partnership development is occurring between leadership preparation programs and K-12 school districts (Coleman, 2016; Hudson, 2016).

What scant evidence there was suggested that for K-12 school districts to understand the value of partnering with higher education leadership programs they must be able to partner amongst themselves (Essex, 2001; Coburn & Russell, 2008; Daly, Moolenaar, Bolivar, & Burke, 2010). In other words, they must have had the skills, knowledge and dispositions to do the partnership work.

In a report by Levine (2006), they examined the controversy of how to prepare those teachers to become "highly qualified" and better meet the new and more rigorous standards for students. The report labeled programs of education leadership as "inadequate to appalling" (Levine, 2005, p.23), and preparation programs for teachers to be "largely ill equipped to prepare current and future teachers for the new realities" (Levine, 2006, p. 12). The report went on to state the institutions of educational leadership should be implemental in collaborating with national, state, and regional institutions to develop new standards and policies.

The Interstate School Leaders Licensure Consortium (ISLLC) Standards were developed by the Council of Chief State School Officers and were in collaboration with the National Policy Board on Educational Administration (NPBEA) to help strengthen preparation programs in school leadership (Van Meter & Murphy, 1997). Barber and Meyerson (2005) stated:

Professional Standards for Educational Administrators (2015) set the bar for what principals needed to know and be able to do to improve teaching and learning. Standards built around research-based competencies that are known to improve student learning could produce leaders who knew how to support teachers, manage curriculum and instruction to promote student achievement, and were able to transform schools into more effective organizations that foster powerful teaching and learning for all students. (p. 21)

In a separate report produced by Reames & Kochan (2015), one avenue for developing these partnerships resides in the creation of advisory councils. The advisory councils would only be effective if the councils meet on a regular basis. A separate study by Kochan & Sabo (1995), stated that that advisory councils had several obstacles such as; 1) lack of recognition and 2) personnel turnover 3) being unable to implement new ideas to do controversy with university stipulation and 4) the work of universities being primarily on research and not the development of partnerships. Other factors also hindered the development of these external partnerships such as time, money, personnel, and lack of support, (Reames & Kochan, 2015). Five theme areas that should have been considered before developing a partnership with higher education facilities were the following:

> "(1) the nature of change in a partnership is idiosyncratic because of the diverse stakeholders involved; (2) resources become a far more significant element in terms of both use and flexibility than they do in more traditional preparation programs;(3) relationships are a vital element in the success or failure of a partnership, as they require time and energy to develop and sustain; (4) enabling bureaucracies are needed in order to promote meaningful engagement among partners; and (5) organizational theory offers valuable insights regarding partnerships, but it remains largely an untapped resource in current partnership efforts" (Breault & Breault, 2010, p. 437).

Research by Wilmore (1999), explored a program developed at The University of Texas at Arlington. In that study a team was created to examine the needs of the universities as well as the community and local school districts. The surrounding school districts funded an "administrative internship" to participate in the yearlong study. The purpose of the study was to

develop collaborative cohorts to learn from each other's experiences and expertise. Those interns came from various sectors of education both primary and secondary and included faculty from private and public school systems. The participants in the study worked at their schools during four days a week while the fifth day entailed the students being at the university or taking field trips to hear speakers who were experts in their fields. Those students had to attend the university during the month of June as well. That type of collaboration was yet another example of an external partnership where public and private schools were reaching out to universities for their expertise. "When a district has a need, university faculty, are there to make it happen" (Wilmore, 1999, p. 448).

At the completion of the year the interns were asked what they missed the most about the project. All of the interns stated the collaboration was what they missed most. According to the author Wilmore (1999) the key to the successfulness of the program depended on the mentor relationship between the university and the school districts. At the time of publication this program was in its third year.

There was little evidence that attention to partnership development was occurring between leadership preparation programs and K-12 school districts (Coleman, 2016; Hudson, 2016). What scant evidence there was suggested that for K-12 school districts to understand the value of partnering with higher education leadership programs they must be able to partner amongst themselves (Coburn & Russell, 2008; Daly et al., 2010; Essex, 2001). In other words, they must have the skills, knowledge and dispositions to do the partnership work.

Collaboration

Teacher Collaboration.

Collaboration among teachers has not been the norm historically (Goddard et.al. 2007; Lortie,

1975; Rosenholtz, 1989b; Sarason, 1996)

The Alabama Administrative Code was updated September 30, 2015 and was developed to better educate and prepare both potential and current teachers in the expectations of a teacher within the state of Alabama. What was of marked notice in the document was the expectation for collaboration amongst all school partners including teachers and school leaders. In collaborative school cultures teachers exchanged resources and participated in social relationships more frequently (Moolenaar et al., 2012). Relationships became more symbiotic rather than cooperative. Teachers experience more polished instructional skill sets, became more knowledgeable in regards to how students learn, communicate with parents more effectively and learn many more teaching practices from their peers (Goddard et al, 2007; Pounder, 1998). School culture, instructional practices and problem solving all become more meaningful (Fullan et al., 2014).

Collaboration "Is a process in which organizations exchange information, alter activities, share resources, and enhance each other's capacity for mutual benefit and common purpose by sharing risk, responsibilities and rewards" (Himmelmann, 2002, p.3). Much research had been done to examine the relationships between teacher collaboration and student achievement. Teacher collaboration constituted a key form of enactive experience in schools, which social cognitive theory positions as critical to the development of the professional capabilities about which efficacy beliefs refer, (Bandura, 1982; Goddard & Goddard, 2015). According to (Friend & Cook, 1992; Mostert, 1998; West & Idol, 1990) teacher collaboration was focused instead on interactions with other teachers. Although student achievement may have increased due to teacher collaboration it was really an indirect byproduct (Goddard et al. 2007). Recent findings showed that teacher collaboration was positively related to differences among schools in student

mathematics and reading achievement (Goddard et al. 2007; Goddard & Goddard, 2015). Due to collaboration between teachers their level of skill sets increased and had a positive effect in bolstering the confidence of the teachers involved which in turn promoted an increase in student learning and achievement (Mostert, 1998; Phillips & McCullough, 1990; Trent, 1998).

Change involved restructuring fundamental beliefs and ideas that teachers have about what was important for students to learn and how materials and methods may be used so that learning was achieved (Fullan, 1982). The dissemination and sharing of information in a school system was critical for the successfulness of a school and school system. "All change involves learning…conditions that support learning must be part and parcel of any change effort" (Fullan & Miles, 1992, p. 749). All learning and dissemination of information was a collaborative process, which involved the exchange of information, examples, level of skills, and knowledge. In order for the classroom teacher to be effective they must first be knowledgeable in the district expectations and state guidelines concerning behavior and curriculum. With the state standards recently being changed to accommodate Common Core Standards and for Alabama, College and Career Readiness Standards, it was more imperative that teachers met to discuss the standards and to share any expertise they had in a particular area. Meeting on a regular basis ensures that each teacher in a grade level was aware of the expectations and was able to develop a timeline or scope and sequence so as to have had a definite date of completion.

Another form of teacher collaboration was that of a mentor program. Typically, new teachers received a mentor that was at the same grade level and was funded by the district office with a stipend, Cuddapah & Clayton (2011). Those mentors primarily met to discuss local rules, guidelines, and expectations as well as being available to help with any questions or concerns they might have. Although a mentor was indeed a form of collaboration the field of expertise is

limited whereas a group of teachers would be available to give a much larger realm of experience and resources. Unfortunately, not all teachers make for effective mentors, Wang & Odell (2002). That fact makes it even more critical that a team be in place to assist new or first year teachers. The mentoring process could be both an internal and external partnership. Assigning a mentor to school principals and teachers without consideration of gender, personality, and purpose could lead to more conflicts than help (Kent, Kochan, & Green, 2013). (Kochan, F. K., & Pascarelli, J. T.,2003), defines successful mentoring as:

Two or more individuals willingly forming a mutually respectful, trusting relationship focused on goals that meet the needs and foster the potential of the mentee, while considering the needs of the mentor and the context within which they both must function (p.284).

The more teachers collaborate the more they are able to discuss methods, vocabulary, and skills that were used in new standards such as Common Core. Collaborating with others, whether co-workers of mentors, allowed teachers to feel less isolated and more focused on behavior and learning (Goddard & Goddard, 2015; Erb, 1995).

Other forms of collaboration were available concerning the planning of curriculum both horizontal planning, across the grade-level, as well as vertical planning, above and below the grade-level. Those expectations of collaborative efforts were specified in the Alabama Code of Ethics, Alabama Learning Exchange (2016). Teachers were "in the trenches" and were more knowledgeable about the needs of their students and their families and should be a part of any decision making process. "They are thus a school system's primary reservoir of organizational knowledge about means and ends" (Conley, Schmidle, & Shedd, 1988, p. 262–263). Teachers that were involved in decision-making develop a shared ownership and were more likely to implement the decision. Although teachers were a firsthand source for the needs of the students

they may not be aware of current research in their field and thus are less likely to implement. That establishes a need to develop external partnerships.

Collaboration between teachers extended beyond internal partnership, teachers in a mutual K-12 setting, and extended to external partnerships with higher education. Programs such as the Alabama Math, Science, and Technology Initiative (AMSTI) were examples of external partnerships. The program was directed by the Alabama Department of Education. The purpose was to assist educators in the teaching of math and science. That type of partnership allowed public school teachers to stay up to date with current research and trends in math and science. With new standards in science being released by Common Core, that program would continue to provide assistance with classroom teachers learning the standards and implementing them into the classroom to enhance student learning. The external partnerships with universities were documented and if properly planned and implemented could be an advantageous situation for all involved. There was "A positive and imperative need to improve pedagogy through K-12/University partnerships" (Huziah-Clark et al., 2007, p. 319).

In a study conducted by Briscoe & Peters (1996) a group of teachers was recruited to complete a three-week course during the summer. Teachers worked along with university personnel on project-based learning. The intent of the study was to determine the level of collaboration between the participating teachers as they learned new research and attempted to change their own teaching practices. Meetings were planned to encourage collaboration with teachers from various schools. The results from that study indicated that the collaborative efforts of these teachers contributed to the success they had in their classrooms in teaching project-based learning. The collaborative efforts of that study were not all positive. Teachers who no longer met collaboratively with other members went back to their previous way of teaching.

Professional Development was another area that benefited all members when teachers were allowed a part in the decision making process for what was needed. Teachers needed to feel free to admit what weaknesses they may have had in instruction and to ask for professional development on those topics. In order to have open dialogue, shared values, and common goals, people must feel safe together. There must be enough trust between them so they can speak about what they believe in, disagree, and come to consensus without fear (Kahne & Westheimer, 2001; Kochan, Reed, Twale, & Jones, 1996). The teachers in the previous study mentioned stated, "Change cannot occur in a one-time, "show and tell" workshops" (Briscoe & Peters, 1996, p. 63).

Teacher collaboration, when used correctly, can benefit each member involved, teachers, students, and even administration.

Teacher/Leadership Collaboration.

The coauthors of Balanced Leadership, Waters, TJ., Marzano, R.J. & McNulty,B,(2005) wrote," The future demands on the school principal are massive. In order to meet the needs of all stakeholders, the principal needs to learn to share leadership responsibilities while understanding the implications of introducing change. (p. 8)

According to the Professional Standards for Educational Leaders (2015)., standard four stated "A school administrator was an educational leader who promoted the success of all students by collaborating with families and community members, responding to diverse community, interests and needs, and mobilizing community resources" (Barber & Meyerson, 2005, p. 26). In more traditional atmosphere teacher/leader collaborations consisted primarily of once or twice a month meetings to discuss decisions that had been made or information that needed to be disseminated from the District Office. Most often those collaborations did not

include all teachers, rather a lead teacher and a representative of each grade level. True collaboration did not exist in that type of traditional atmosphere. In those types of situation, the principal may have a degree of fear over relinquishing some of his responsibilities (Hill & Miller, 2013; Kochan et al.,1996).

Accountability was especially high for principals at that time. The National Association of Elementary School Principals (NAESP), National Association of Secondary School Principals (NASSP), and American Association of School Administrators (AASA), UCEA and NCPEA were all involved in the newly developed 2015 PSEL standards. (National Policy Board for Educational Administration, 2015). Those standards hold principals accountable for the success of their students and teachers. Other accountability for principals had been passed such as No Child Left Behind and American Recovery and Reinvestment Act (ARRA), which included Race to the Top. Each of those accountability standards added to the pressure of a school leader.

It was because of that pressure that school leaders needed to reach out to collaborate with the teachers in their schools. One method of collaborating with teachers was to create common planning times. That time was used for teachers and principals to collaborate, not as a time to regurgitate information typically seen in faculty meetings. When administrators make these meetings and the use of the material from those meetings mandatory, the collaboration becomes more meaningful, (Baumer, Ketterlin-Geller, & Lichon, 2015; Young, 2006). Those regular collaborative meetings were a time where special education teachers and instructional coaches can also be included to discuss data for the students they are involved with.

Baumer et al. (2015) recommended recording the information in a standard for that can be easily examined and updated. That document would also be a guide or agenda for future collaborative conversations. In that situation the administrators could help with those meetings

by focusing on (1) implementation strategies and (2) collective expertise development. Some schools implemented the use of "data rooms" for that purpose. Each meeting was held in the same place and could be reexamined at other times. In other situations, specific data meetings, also known as audits, took place to allow the building-level administrator, Instructional Coach, and classroom teacher to review the current data from students and to examine the best plan of action for the instruction of struggling students. During those meetings building-level administrators could help with the interpretation of data. Baume et al. (2015) suggested that those administrators may have even surveyed the teachers to better identify how much each teacher understands when interpreting state testing reports.

Another aspect where building-level administrators could assist teachers with collaboration was scheduling times to observe teaching. Not only the administrator observing the teachers but allowing blocks of times for teachers to observe other teachers. That allowed teachers to observe different classroom management, teaching styles, and interventions being used for student achievement. Those observations developed topics of conversations for upcoming meetings. At those meetings teachers could share what they observed and ask questions. Those observations also provided building-level administrators assurance that teachers were implementing the strategies and standards in the scope and sequence provided by the state and district office. When the accountability for student's achievement is so critical these observations are imperative. "Scholars have demonstrated empirically that the work of school leaders has indirect effects on student achievement, mostly through the support leaders provide to teachers" (Hallinger, 2003; Goddard & Goddard, 2015, p. 501).

According to Kochan et al. (2006), administrators needed to become "transcendent" meaning that they can transcend or overcome circumstances, traditions, and barriers to create

democratic environments as a natural part of their leadership role. Those barriers might include the changing curriculum, district policies, teacher implementation, trainings on new strategies, etc. Those leaders spent time in self-reflection and improvement and encouraged others to do the same. Those transcendent administrators were always looking for ways to improve to better serve their students and have the same expectations for their teachers.

Hill and Miller, while working with The Association for Supervision and Curriculum Development (ASCD) (2013), stated that most teachers don't receive any training in their teacher preparation programs to prepare them for working in shared leadership and compiled a list of skills that must be in place:

a) Leading colleagues in analyzing student work and achievement data.

b) Facilitating group discussions about improved instructional practices.

c) Locating research-based methods and strategies that may be outside the current collective team expertise.

d) Putting structures in place for team members to hold one another accountable for trying and using the strategies.

e) Comparing results for various strategies tried.

Hill and Miller (2013) also stated that principals had a hard time relinquishing their role to teacher leaders and needed to be willing to make changes to share the leadership role. They warned that a first year of implementation would not be 100% successful but that the success rate rose dramatically over year two and three. "Teachers grow as leaders as they incrementally learn new skills together in a safe environment encouraged by the principal and then apply these skills in their course-alike or grade-level team collaborations" (Hill & Miller, 2013, p. 65).

The collaboration for teacher and leader should extend outside the school walls to include

the input from parents and other community leaders as well as other external partners such as local universities to assist with professional development on the latest research and interventions found to be effective for struggling students. PTO gives a forum for parents, teachers and administrators to work together in developing a mutual plan of action for their children and students. Parents also prove to be good partners in shared decision making for curriculum decisions and assisting as a partner with the Continuous Instruction Plan (CIP).

> The complexity of the environment in which educators must operate and the escalating disengagement of the public with their schools has made it necessary for educational leaders to make internal and external community building a central priority of their leadership role (Kochan et al., 2006, p. 27).

School leaders and teachers needed to actively and collaboratively work on the culture of their school. Their culture should be one that was safe and collaborative and synergized to improve student achievement. The establishment of routine was necessary for success in collaboration between teacher and school leader as well as that between school and district.

School/District Collaboration.

> "The public school establishment is one of the most stubbornly intransigent forces on the planet. It is full of people and organizations dedicated to protecting established programs and keeping things just the way they are. Administrators talk of reform even as they are circling the wagons to fend off change, or preparing to outflank your innovation…" (Bennett, Finn, & Cribb, 1999, p.628)

Little evidence was available showing exactly what the District Office does concerning the implementation of collaboration in local schools (Honig, 2003). Although collaboration between schools and District Offices was similar to the collaboration process between teacher and building level administrators there were slight differences. The "Shifts in recent education policy increased the urgency to fill this knowledge gap" (Honig, 2003, p.293). The education policy shifts Honig (2003) referred to, included the No Child Left Behind Act of 2001 (Act, N. C. L. B. (2001), and later by the Obama administration's American Recovery and Reinvestment Act, (ARRA) (2009) as well as Race to the Top (RTT) which as defined by Kirshner & Jefferson (2015) included funding guidelines based on four types of interventions such as turnaround, restart, closure, and transformation. That had inherently placed pressure on school districts that performed poorly on standardized testing and caused a rise in public inquiry (Kohn, 2004). Those programs also expected school districts with low-performing schools to participate in measures of reform to increase student outcomes. Those schools who are unable or unwilling to meet those new standards risked being placed under sanctions. While some schools were resistant to change others simply do not know where to begin.

Studies conducted in the United States as well as Nordic countries state that those reforms were influencing how schools and districts were being organized and produced effects on the control of school's accountability, and the role of school superintendents (Bjork & Browne-Ferrigno, 2014). District Office personnel did not have a good track record as a whole with forgoing relationships with schools and developing collaborative relationships (Malen & Kranz, 1990; Spillane, 1996). Research on collaboration indicated that District Office tended to promote collaboration but enforced decisions that were made at a district level and not made

with building-level administrators in a collaborative process (Elmore & Burney, 1997; Honig, 2003)

According to Waters & Marzano (2006), effective collaboration occurred between schools and District Offices when all stakeholders were included in the collaborative process. The stakeholders include District Office personnel, board members, building level administration, teachers, and may have also included parents and students.

The collaboration between school and district should be focused on specific goals including: goal setting for the local schools, support of the district goals, monitoring achievement and instruction, as well as the use of resources to support achievement and instructional goals, (Honig, 2003; Waters & Marzano, 2006). In addition, the focus of effective superintendents was that of ensuring that all building level administrators remain on-task and focused on the goal setting process with the other stakeholders. That could to some degree be done by observation but was better served by meeting face to face in a collaborative meeting. Kowalski (2010) listed the roles of a superintendent in order of importance; (1) effective communicator, (2) manager, (3) instructional leader, (4) statesman or political leader, and (5) applied social scientist.

Building-level administrators have had a first-hand account of the needs of their individual faculty and students. The building-level administrators would be the ones primarily enforcing the agreed upon goals in the schools with their faculty. Walters & Marzano (2006) stated that principals must support the set goals set in place by the District Office both implicitly and explicitly. Implicit support for building-level administrators would be to do nothing to undermine the goals set by the district office or comment in any way that would make their school faculty feels they weren't in full agreement with the goals.

Another focus of the superintendent was to ensure all local schools had the necessary funding such as instructional resources, personnel, money, and time to ensure teachers are able to collaborate on a regular basis. “This relationship between school and district can be characterized by “autonomy” which is the exception and support to lead within the boundaries defined by the district goals” (Waters & Marzano, 2006, p.13). Although the District Office wanted to ensure each school was prepared it must have given a lenient hand to the building-level administrators. Only by meeting and speaking with the building-level administrators and other personnel from the school such as lead teachers could the district office fully understand the needs of the school.

Some building-level administrators stated they were included in major decision making with the district office but that tended to be issues such as personnel, budgets, standards and structures. Those decisions were typically made at the district level and passed down to building-level administrators and were not made in a collaborative partnership. Well- developed learning communities that involved all members of the school, including parents and students, were engaged in developing the organization and in learning together to improve it (Barth, 1990; Kochan et al., 2006).

Communities of Practice (CoP) were an example of how districts and schools could collaborate together. Those partnerships extended to internal and external partnerships. To accomplish a true community of practice with district office and local schools a collaboration between all parties were involved in those internal and external accountability processes. External accountability was addressed through public reporting mechanisms (Ross, Reed, Kochan, & Madden, 2003) and may have included the reporting of budgets or expenditures the system had. The external partnership far exceeded the reporting of budgets and instead reached out to partnerships with the community and universities to better serve students.

"School district offices need training so that the school leaders have a better understanding of the partnership and the importance of partnership development. Program coordinators could provide school district offices with this training and in doing so, they would start developing the partnership" (Coleman, 2016, p.147).

Learning Circles

Learning circles, also known as action circles "Involved taking a self-reflective, critical, and systematic approach to exploring your own teaching contexts' so as to become effective teachers" (Banegas, Pavese, & Velaquez, 2013). That type of learning could be equally as effective with students. Being self-reflected on any experience could lead to the development of new ideas and/or approaches Kolb (1984). Learning circles with teachers and students were conceptually similar to organizational learning. According to Collinson, Cook, & Conley (2006), organizational learning was multi-level because the level of learning was based on their individual level of learning. Both terms referred to the shared understanding of its members. That research examined learning circles involving collaboration among teachers as well as teacher collaboration with their students.

Learning circles with students required a positive attitude, an open mind, and a willingness to learn from others. According to Taylor, Gilligan, & Ward (1988), students may initially be confused by the learning circle process but will gradually come to terms with the process. The teachers' role in this process for students was one of a facilitator. In order for the learning circle to be effective the students must have a level of trust with the teacher/facilitator. The teacher in that situation might suggest or bring up essential questions or incidents and may include role-play. Those activities required a level of trust for effective collaboration. "School

connectedness is defined as the belief by students that adults in the school care about their learning as well as about them as individuals" (Furlong, Ritchey, & O'Brennan, 2009, p. 986).

In an article by Wade & Hammick (1999) the researcher examined the using of learning circles with students in health care education. The students involved showed emotions varying from freedom to frustration. The results of the study showed that learning circles must have a set of ground rules including confidentiality, sensitivity, as well as being non-judgmental. The goal would also be for the teacher to slowly release the role of facilitator and that a student step in to that role (Wade & Hammick, 1999). The research presented Wade & Hammick, (1999) included older students in a collegiate setting. In a different article by Allen & Tucker (2012) they examined the *Circle of Trust*, which is "the breaking down of walls between theory and practice" during the tragedy of Hurricane Katrina. The study focused on learning circles and the pedagogy posited by (Palmer, 1993, p. xvii-xviii):

> The central question in education is whether we are educating students in ways that make them responsible to the claims of community upon their lives. Are they simply learning to compete for scarce resources as isolated individuals, or are they learning how to create communities of abundance…both as learners and as citizens?

The study expanded later to include not only the original students at the University of Mississippi but also the local leaders of the communities involved with the aftermath of Hurricane Katrina. The learning circles focused on the perceptions and questions of those involved in the learning circles.

Learning circles were critical for teacher collaboration as well (Craig & Deretchin, 2009). indicated a need to have teachers explore and share various teaching and learning practices. By doing this exploration, teachers would have a better understanding of what to teach and how to teach depending on those involved. The learning circle may have taken the form of self-reflective journals, book clubs, action research groups, etc. In an article by Lovell (1990), she conducted a three-year collaboration between teachers from various public schools and a university professor. The group used journals to record their interests, environments, opportunities for professional development, as well as any dissatisfaction with the structures in each of their schools. The group then met on a regular basis to discuss those issues and to problem solve solutions for those issues. Learning circles for teachers involved inquiry-based learning and included the sharing of interpretations, pursuing ventures, and sharing experiences, (Craig & Deretchin, 2009).

Those learning circles also made new decisions based on previous experiences, which were shared by each member of the group. The research conducted by Craig & Deretchin (2009) focused on three contexts. The first included teacher learning in relation to reflection-on-action, meaning that future decisions would be based on their past experiences and the experiences of their colleagues. The second context included teachers supporting each other by sharing the responsibility of analyzing problems from their teaching. The third context included teachers using a combination of both contexts including sharing the responsibility of analyzing problems as well as using past decisions from all members of the circle to influence future decisions. Each of those situations used similar guidelines found in the learning circle for students. Each of the contexts mentioned required a positive attitude, an open mind, and a willingness to learn from others, (Taylor et al., 1988).

Learning circles were a very personal form of collaboration and had a valuable role in making student learning personal. Learning circles offered many opportunities to develop questions or ideas that are practice-focused, Wade & Hammick (1999).

Turnaround

"As districts nationwide struggle to meet the requirements of the No Child Left Behind Act, the U.S. Department of Education has shifted its focus to turning around the nation's lowest-performing schools" (Turnaround Schools, 2015).

In 2002 new legislation was passed for education entitled No Child Left Behind. This legislation was the idea of President George W. Bush and had two purposes. The first purpose with that all schools were accountable for student achievement and second the achievement gap between different groups of students would be diminished. No Child Left Behind consisted of five areas. All states were required to follow each of these areas. According to Elpus (2014) those areas consisted of having rigorous standardized testing based on each individual states standards, developing a plan where students in targeted groups had a stage set benchmark on all standardized test. Each school that didn't meet the required percentages would be met with consequences that would increase in severity. Schools had to implement teaching strategies based on their effectiveness and require that all teachers be highly qualified based on state defined standards. After the efforts of NCLB current president Barack Obama continued to promote school improvement. More recently the American Recovery and Reinvestment Act (ARRA) had been passed which included Race to the Top. Race to the Top (RTT) as defined by Kirshner & Jefferson (2015) included funding guidelines based on four types of interventions such as turnaround, restart, closure, and transformation.

Those programs also expected school districts with low-performing schools to participate in measures of reform to increase student outcomes. Those schools who were unable or unwilling to meet these new standards risk being placed under sanctions. While some schools were resistant to change others simply did not know where to begin. According to United States Secretary of Education, Arne Duncan, "NCLB has created a thousand ways for schools.to fail and very few ways to help them succeed"(Duncan, 2011, p. 186).

According to Collinson et al. (2006), organizational learning was multi-level because the level of learning was based on their individual level of learning. For turnaround schools that would be especially true based on those schools' particular needs, weaknesses, and strengths. Organizational learning also included inquiry, shared understanding of its members, behavioral and cognitive change, and lastly organizational change included embedding of research based, new practices and knowledge. Using organizational learning caused a school to be more proactive by looking ahead to see what the possible outcomes or results a new change might bring. Traditionally schools had taken more of a reactive approach when determining what changes needing to be made after examining data. Organized learning was still focused on aspects of education, such as data, but it also looked ahead to possible outcomes.

Because "all change involves learning…conditions that support learning must be part and partial of any change effort" (Fullan & Miles, 1992, p. 749). Collinson et al (2006) stated that based on research there were six conditions that would encourage organized learning within a school undergoing the turnaround or school improvement process. Those key six steps included prioritizing the need for learning for all staff members. Understanding why they were doing what they are doing was very important in order to gain each member trust or "buy in" for the process. The next of the six key steps was the dissemination of all knowledge, resources, and

skills available. Those may be found both in the school as well as outside partnerships. The third of the key steps was the focus on the human relationships within the school. School culture was critical to an effective learning environment. The fourth key step was the fostering of inquiry among students and staff. The fifth key condition to a school focused on organized learning was enhancing the democratic governance in a school. That did not mean that administrators weren't given the final decision but it did mean that the voice of all faculty and staff had been heard. Lastly, the sixth key element according to Collinson et al (2006) was providing for members' self-fulfillment. By "engaging in organizational learning and fostering the conditions that support it…school systems can better transform the demands of change into opportunities for improvement on their own terms" (Collinson et al., 2006, p. 115).

In research conducted by Peck & Reitzug (2014) they concluded that making quick fixes in the school turnaround process would be short term and ineffective. According to Peck & Reitzug (2014) the answer to school turnaround was two-fold, first to advocate making the school turnaround better and two, to completely re-envision educational reform as a whole. They concluded their research by encouraging schools-based social support services to be used. Community centered agencies were able to engage the student and their families as a whole.

Cucchiara, Rooney, and Kraft et al. (2015) found a close connection to school level working conditions and support. In that study the focus was placed on classroom teachers and how they perceived the turnaround process. Classroom working conditions examined include class size, workload, school culture, professional autonomy, and opportunities for enhancement or development. The study by Cucchiara et al (2015) concluded that teachers felt a great deal of pressure to meet not only the educational needs of a student but also the physical and emotional needs of the student. Those responsibilities on top of the implementation of new programs and

techniques used with the school turnaround were very stressful. The study also found that teachers with better working conditions were better equipped and more supportive of the turnaround process than teachers with less that positive working conditions.

A term found in conjunction with turnaround schools was reconstitution. Reconstitution was the identification of low-performance and the correction of that low-performance. Research indicated that reconstituting has been around since the mid 1980's. The term was used in relation to the desegregation decree that was a result of a lawsuit involving public schools in the San Francisco, CA area. "Although school reconstitution can take a variety of forms, generally speaking, this strategy involves removing a school's incumbent administrators and teachers (or large percentages of them) and replacing them with educators who presumably, are more capable and committed" (Malen, Cronginger, Redmond, & Muncey, 1999, p.8).

Reconstitution was one of the options available under the federal program, No Child Left Behind. The study by Rice & Malen (2003), detailed research conducted on school systems currently undergoing restructuring and the experiences they were enduring. According to the article there were three costs associated with restructuring a school/school system: a. task costs, b. social costs, and c. psychological costs. "Without accurate and comprehensive information about the range of costs and how these costs are distributed across individuals and organizations, policymakers in the early planning stages of program implementation could be ill equipped to judge whether the community has the appropriate levels of various types of resources to support the program" (Rice, 1996, p. 638).

The first costs, task costs, are the time and effort that was demanded of each participant in the restructuring process. The second cost, social costs, is the expense that came from internal partnerships being broken by the releasing and hiring of new staff. The third costs, psychological

costs, are the responsibilities each participant experiences due to their feeling of self-worth and self-doubt due the restructuring. Rice and Malen (1996) mentioned that the hiring of new staff, even those trained in the turnaround process, may not offset the decline in morale that each school would face. Members of the staff from any school undergoing the restructuring process experienced each of those costs.

Those costs were actually reflected in the data of the schools in this study. After restructuring occurred in year one the test data was actually lower than it had been previously. According to the authors, Rice and Malen (1996) that was due to the fact that salaries for faculty and staff had been reduced due to the amount given based on performance. The authors also mentioned that the new staff hired during the restructuring had less experience and educational credits than the teachers previously had which also led to lower performance on assessments. By releasing current staff, it eliminated the structure and scaffolding with routines that had previously been in place. Another negative impact observed in the study were that in releasing faculty the time constraint required in hiring staff resulted in hiring long term substitutes which knew even less about the curriculum and school as a whole.

Accountability was another key term with turnaround schools. According to Glass (2008), the reasons behind the increase in accountability, manifested most blatantly through high-stakes testing and standards-driven curricula, is the subject of much debate as to whether or not it is an ideologically based response to a manufactured crisis that obfuscates other realities and objectives. In a study by Reyes-Guerra, Russo, Bogotch, & Vasquez-Colina (2014), the views on accountability were quite harsh. This study made the comment that where accountability used to a method used by the system of education had now become the system. Another harsh view on accountability listed in this study was a comment made which stated

"Formal education is highly institutionalized, bureaucratic, curriculum driven and formally recognized with grades, diplomas or certificates"(Merriam & Baumgartner, 2007, p.29).

According to Glass (2008) the reasons behind the increase in accountability manifested most blatantly through high-stakes testing and standards-driven curricula, was the subject of much debate as to whether or not it is an ideologically based response to a manufactured crisis that obfuscates other realities and objectives or a political response to a real problem in US education. Regardless of the reason accountability for school's/school systems and was extremely high. In a study conducted by Reyes-Guerra et al. (2014) the level of tension between accountability perceptions of a public school district and university was examined. They looked at the perception data from three levels: 1) project developers, 2) curriculum workgroups such as classroom teachers, and 3) university professors.

Interest in low performing schools and what it took to repair a low-performing school had intensified. The interest in low performing schools and the need to repair the schools was justified. Schools unable to reverse student low-achievement face sanctions and may even include school closures. Research conducted by Cucchiara et al. (2015) on the achievement of quick and dramatic turnarounds of low performing schools revealed the necessity of various changes. In Daniel L. Duke's (2015) book, *Leadership for Low-Performing Schools,* he stated a very interesting misconception. That misconception was the perception difference between school administrators and classroom teachers and what causes low-performance in schools. Duke surveyed 19 school administrators and asked them to list the top 10 reasons they felt their school with low performing. Duke then asked 320 classroom teachers to do the same. The results of both surveys revealed how different the perceptions of the two groups were. The fact that both groups were unable to agree on the reasons for low performance was not relevant. What was

important was developing a uniform set of standards that each school would be able to follow. Those standards are as follows: a) reaching agreement on the conditions that need to be changed b) generating a sense of urgency for change without panicking inspiring trust while not tolerating incompetence c) inspiring trust while not tolerating incompetence d) expanding teachers' repertoire of instructional strategies and interventions and e) keeping the focus on low achievers without neglecting the needs of high achievers.

In another article by Finnigan and Daley (2010) a connection was drawn between the strength of connections between the stakeholders and student performance. The closer the connection between members at the school system the more successful a school was in the turnaround process. In this study Finnigan and Daley (2010) examined the leadership network at Dos Mundos. Dos Mundos School District was in its third year of not meeting Adequate Yearly Progress under NCLB. After conducting the network analysis, it revealed that there with little communication between site administration and district office personnel as well as the fact district personnel were essential to the distribution the key information.

In a similar study conducted by Shepard, Cook, and Cook (2012), they examined the relationships between teachers and students of a low-performing school in Washington state. Sunnydale School was able to make dramatic changes by developing close relationships between teachers and students. Students in that article commented they wanted to improve because they could tell the teachers and administrators truly cared about them and wanted them to succeed. "School connectedness is defined as the belief by students that adults in the school care about their learning as well as about them as individuals" (Furlong et al., 2009, p.986). Low-performance in that school was blamed on the fact that these students were minorities and were in a lower socioeconomic subgroup. That school was particularly successful in the "turnaround"

process due to the administration and teachers developing a partnership with the students. They were able to see a 92% graduation rate for the 150 students in the turnaround program.

An article by Mediratta (2007) detailed a group known as the Association of Communities Organized for Reform Now (ACORN). That group from Chicago had a sole purpose. The purpose was to demand the resources their schools needed to meet the new teaching mandates of NCLB. That group as well as others in Los Angeles, CA created community organizations for school reform. Those groups included parents, students, businesses, teachers, and community leaders whose purpose was to build a source of relationships that would enhance the school conditions for all involved.

The turnaround process could bring about change in the form on instruction, curriculum, and even a change in teachers and administration if necessary. Each school must develop a "Turnaround Plan" which outlined the academic goals for the students, the objectives to meeting those goals, and the strategies necessary to succeed with those goals. Typically, any school that receives financial assistance from Title I or other federal School Improvement Grants are responsible for having an academic plan in place that is in continuous review. With a turnaround school this process was similar but with much stricter guidelines and sanctions if they are not successful. Those plans were referred to as School Turnaround Plans (STP). Those plans were similar across the states in their expectations. These STPs consisted of goals, objectives, strategies, and more importantly timelines. "Some plans are unrealistically comprehensive, overloaded with activities, and full of minutiae rather than being focused and strategic" (Mintrop & Quintero, 2001).

Once a plan was needed the next step was for the school or district office to determine who should be a part of the planning process as well as who was "qualified" to lead the school in

that process. Sometimes the need to change the administration or faculty of the staff was necessary and a hard look had to be given to see if this change was needed. According to Duke (2015), both first-order and second-order changes must be made. First-order change consisted of the foundations of the process and could include the operational processes of the school. Second-order changes were more specific and related to the curriculum and its alignment to state standards such as Common Core standards. Duke (2015) suggested each school develop a 90-day plan to prepare to launch the turnaround process. That timeline would include the detailed schedule for conducting this action plan with specific dates for completion. At the end of this 90-day plan, the school's progress would be reevaluated for its effectiveness and changes would be made.

According to Duke (2015) the areas that school leaders could focus on to sustain improving school performance are: a) adaptive leadership b) faculty development c) re-culturing d) curriculum development beyond reading and mathematics e) community relations and f) troubleshooting. Once improvement was visible with test scores, efforts were put in to place for sustaining the level of success achieved. "Generally speaking, the ability of a school to sustain early successes depends on the continuity of leadership as well as distributed leadership" (Byrne-Jimenez, 2012, p.175). Making impulsive decisions with curriculum or faculty could reverse the success achieved.

As with most school changes the change had begun from the top down. Each school entering the school turnaround process had to have a strong level of support from the district level in order to be successful. The district support also included staffing the low-performing schools with personnel trained in working with turnaround schools.

With the need for more highly trained teachers in turnaround schools' universities were working to meet that demand.

School partnerships with local universities have been a longstanding relationship that was critical for ensuring competent teachers in classroom. (Whitford, 2014) stated that relationships between the schools and universities could create new "synergies" that bridged the gaps between classrooms and clinical training at universities. With the need for teachers trained in the school turnaround process, universities were designing new programs that cater to that need. Auburn University, University of Alabama, and Samford University/Departments of Educational Leadership were just a few such university that had created programs designed to put highly capable, trained teachers in to low-performing schools to assist in the turnaround school process. These universities had created a project entitled: *Project Alabama Consortium for Turnaround (PACT).* The project included the development of problem based/field experience curriculum that was focused on the needs of school leaders dealing with low-performance. Those teachers would be separate from other cohorts at the university because those teachers would have to make a commitment of two years at a priority school. Those teachers, once they had completed, would be given the title of "Turnaround School Specialist."

According to an article by Collinson et al. (2006), the reform schools that were undergoing with the turnaround process had little success and little long-lasting effect on schools. The article detailed a school system that rather than focusing on quick fixes for reform, focused more on the organizational learning of the school. Organizational learning according to that article were the prioritization of learning in a schools for all members, the dissemination of information and learning to all partners, human relationships, increasing inquiry, and increasing

the democratic decision making in a school while developing self-fulfillment in each staff member.

The dissemination and sharing of information in a school system was critical for the successfulness of a school and school system. “All change involved learning…conditions that support learning must be part and parcel of any change effort” (Fullan & Miles, 1992, p. 749). All learning and dissemination was a collaborative process, which involved the exchange of information, examples, level of skills, and knowledge. Because the dissemination of information was so critical an examination of the dissemination in a school would have been necessary and could be done through the use of Social Network Analysis.

School turnaround was a complicated endeavor that takes effort from each stakeholder within a school system. The process was not short and many steps must be taken to ensure the successfulness of the process. A partnership with a mutual goal must be established for the process to remain successful over time.

Social Network Analysis

Social network analysis was a set of methods for analyzing human interaction and exploring relationships between individuals, groups and communities (Wasserman & Faust, 1994). Social network analysis, originally termed interpersonal relationship studies, was first studied at Harvard University in the early 1930s. In 1954, the term social network was used. Later, in the 1960s social network analysis was used as an interdisciplinary field drawing from sociology, psychology, and anthropology. It was one of the first non-mathematic disciplines used in graph theory (Scott, 2000). Today social network analysis is used in a variety of fields and is gaining momentum in education. Social network analysis is being used to investigate a wide range of subjects (Monge, 2003).

Several SNA Social Network studied focused on teachers' relationships with one another and how their relationships affect social reform. Sustainability was a term often used with Social Network Analysis. Sustainability was the ability to maintain effective teaching strategies and approaches as schools face continuous changes in curriculum and expectations at the state and federal levels which also included the school turnaround process. "Existing research that attends to the role of teachers' social relations in sustainability finds that teachers' interactions with others are important because they provide access to knowledge, feedback, and social support that enables teachers to deepen their understanding and enactment of new approaches" (Cooper & Westlake, 1998, p. 406). Social network theory had a unique approach that examined these internal learning partnerships between teachers and allowed focus to be placed on the learning partnerships that are weakest in order to improve.

According to Coburn, Russell, Kaufman, and Stein (2012) education had begun addressing the way teachers worked together to improve collaboration and the depth of that collaboration. Coburn et al. (2012) goes on to state that the majority of research that has been done with education and social network analysis has primarily focused on the implementation of programs rather than how the interaction and internal learning partnerships sustained new instructional changes over time.

According to Moolenarr and Daly (2012), scholars have taken interest in the social networks that teachers develop and use that supported their teaching practices. "The use of Social Network Analysis and Theory to analyze teachers' relationships in schools had grown 250% between 2000 and 2010" (Daly, 2010, p.8) Although the interest had risen and the use of SNA has increased there was still not a clear and direct model to follow in this type of analysis. According to Baker-Doyle (2015), Social Network Theory has three principles 1) how the

structures of social networks can influence social capital; and 2) the characteristics of and resources held by actors in social networks can influence social capital; and 3) patterns of behavior such as homophily exist in social networks.

Social network analysis was made up of actors and relational ties. The term actor referred to each individual in an analysis. A relational tie was the bond between two or more actors in a social network analysis and in this case an internal learning partnership. Social network analysis used visual mapping to allow for easier interpretations of relationships present within an organization. Social network analysis provided insight for understanding teaching and learning (Haythornthwaite, 2005) The use of social network analysis and education identified the participants who were disadvantaged. The dissemination of information, resources, and training is critical for all schools and even more so with low performing schools. "Research can be a fundamental resource for understanding student interaction and participation and subsequently leading to improvement of teaching techniques and tools" (Martinez, Dimitriadis, Rubia, Gomez, & De la Fuente, 2003, p.354).

According to Degenne & Forse (1999), there were several assumptions a person made when using social network theory. The first assumption was that the actors within a network were considered interdependent and not independent. The second assumption assumed that relationships were connections that provided the sharing of resources like information. The third assumption was that the makeup or structure of the social network had influence on the information that is sent to and from individual actors. The fourth assumption was that the patterns of relationships within a social network could be both opportunities and constraints. That could be related to the actors themselves, in an internal learning partnership and the collaboration or lack of collaboration between them.

A Social Network Analysis could be examined both quantitatively and qualitatively. A quantitative SNA examined what each actor could possess or have and that what they have, such as information. According to Wasserman and Faust (1994) social capital was quantifiable in terms of network structures and the characteristics of actors within those structures. A qualitative SNA examined the relationships between actors in the network and the factors that affect the relationship and decisions.

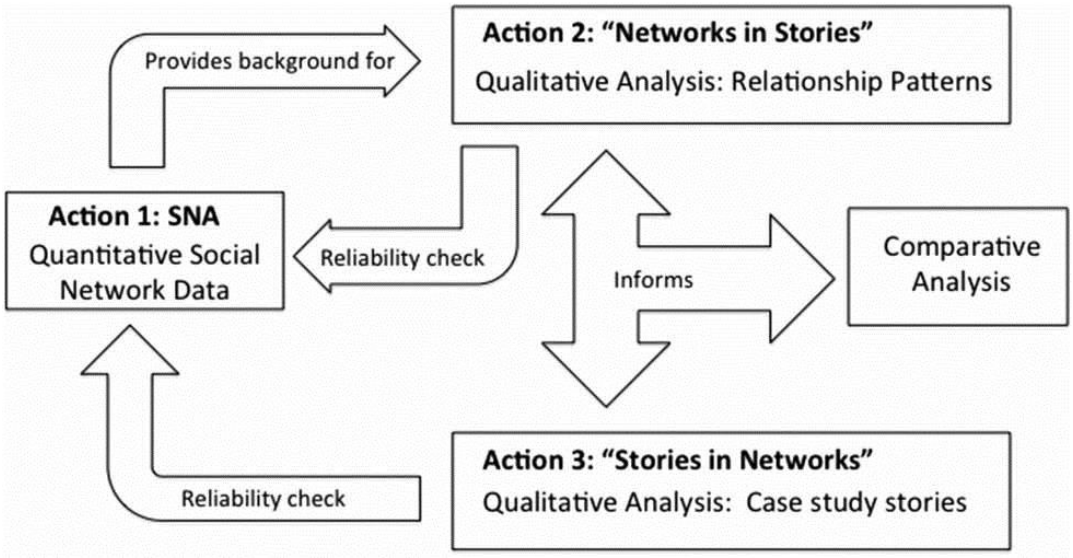

Figure 7. A tri-modal mixed-methods social network research model. (Baker-Doyle, 2015, p. 76. Copyright 2015 by the International Journal of Research & Method in Education)

Various computer programs were available for determining and interpreting a Social Network Analysis. A few of the Social Network programs available included UCINET, GEPHI, STRAPHVIZ, KRAKPLOT, NETMINER, PAJEK, SAMCA, and SIENA. For this case study, UCINET, developed by Steve Borgatti was used (Borgatti, Everett, & Johnson, 2013).

Social Network Analysis used terminology not commonly used in the field of K-12 education. It was critical to have a good understanding of this terminology. "Concepts of social network analysis have been developed over the last five decades and are well-established"

(Carrington, Scott, & Wasserman, 2005, p. 482). One term commonly found in social network theory was homophily. “Homophily was the principle that a contact between similar people occurred at a higher rate than among dissimilar people” (McPherson et al., 2001, p.416). Research by Daly (2015) used the analogy of “birds of a feather flock together.” Research by Daly (2015) also revealed that men were more likely to seek out other men for help. Women were more likely to seek out other women for help. The same scenario could be found with seeing out others of the same age, gender, and even level of education. Because of the level of familiarity with homophily the flow of informational resources in an educational setting were affected. Of particular concern would be the decreased dissemination of information within a low performing school such as the ones included in this current study with Smith County.

Another term used with social networking was self-efficacy. “Self-efficacy was one’s belief that he or she can successfully take actions to accomplish certain tasks or achieve goals” (Bandura, 1993, p. 128). Daly, Liou, Tran, Cornelisson, & Park (2013) described self-efficacy as ones’ capabilities to organize and manage situations.

In one article, Stepanyan, Mather, Dalrymple (2014), mentioned the term, “activity of altar”. That article refers to “activity of alters” as a means of showing preferential attachment. That term referred to actors that sustained a sense of popularity. Those actors would retain that level of elevation while other actors who were not preferred would not develop that popularity. Using that example and applying it to the teaching profession would indicate that teachers currently in a close relationship with administration would stay in that relationship whereas teachers without that close relationship to administrators would not develop that relationship and therefore miss being given key pieces of necessary information. That miscommunication would not be intentional but do occur due to those types of internal learning partnerships.

"Reciprocity" was another term used in social network analysis. That showed how often communication is occurring in a social network analysis. That aspect was a focus area for the level of collaboration in the school's examined in this study.

What made social network theory unlike other types of research was due to its focus on a network as opposed to an individual. Those networks were made up of "nodes "or "actors". Those nodes/actors represented people or teams and even departments within an organization such as a school. According to Daly (2015), the purpose of a social network analysis was to examine the relationships between the nodes. The relationships that were found to exist could help a school system better understand what type of internal learning partnerships existed as well as where changes need to be made to better serve the students within those schools.

"Social network analysis relied on well-defined measure to provide an important overview of network characteristics" (Carrington et al., 2005, p. 303). Social network analysis used "centrality". Centrality examined the degree of closeness between two actors. The nodes with a higher centrality, than the higher its access, to information or other resources in the network. "Closeness" was another SNA term and was a centrality measure of how quickly one actor can access the other. That would be of particular interest to stakeholders in an internal learning partnership and how they receive pertinent information in a timely fashion.

Two strategies existed for social network analysis. The first approach was the one used most frequently. That approach was known as "whole network analysis". In that approach the researcher selected the nodes to include in the study and collected data on the ties between the nodes in the study. In a "whole network analysis" a matrix of 1's and 0's was utilized to indicate the presence or absence of a tie. A negative aspect of "whole network analysis" was that of missing data. If that type of strategy was used on a day where actors are absent that would skew

the results of the analysis. Another approach of social network analysis was the "egocentric analysis" In that strategy the nodes were allowed to list the nodes or actors that they felt they had the most relationships with in their lives. That may include family, friends, and work associates. In the case of a school system that would include co-teachers, teaching assistants, assistant principals, principals, and other instructional coaches and assistants. A negative aspect of that approach would be that "it does not fully capture the structural features of entire networks that might be important to explaining some types of outcomes" (Borgatti, 2013, p.221).

In a study conducted by Stepanyan et al. (2014) the researchers found that participants that shared the same culture tend to interact among themselves. That research also produced an example of homophily and its effect on the participants and their interactions. In that study the researchers focused on the learning that took place in an online course where participants were multicultural. That study showed that facilitation between participants of different multicultural groups needed to be increased to improve the learning of the students. In addition, the study showed that changes or interventions may with the relationships between each actor would be beneficial for achieving improvements in education.

Additional studies by Chang, Lin, & Wu (2010) using social network analysis studied the ways in which organizing teams affected the communication among the team members as well as the teacher's ability to remain in control of those teams. The use of social network analysis has increased in the area of education. Several studies had used social networking service to examine how learners working groups over time as well as how learners were placed in groups or choose the groups in which they belong. SNA had been used to determine the patterns of relationships between teachers and had even been used to detect students using plagiarism. Social network analysis was useful in social situations but is limited in other disciplines.

The findings in research conducted by Daly et al. (2013) indicated that leaders that have a more outgoing or extravert personality are able to better relate to others and to go to others for advice. The researchers referred to this personality type as "neurotic". The framework used in that study was based on the assumption that educational leaders influenced the flow of information to other people within the social network. The authors went on to hypothesize that a leader's personality effects that leaders network position and effects the flow of information within a social network. "Social network theory provides insight into the social processes involved in reform that are stretched across individuals and levels of the educational system" (Daly, 2012, p.2). That particular study focused on the relationship and interactions between leaders at a district level and leaders at a site level like principals and assistant principals in a local school. Researchers examined the incoming and outgoing information within a social network to determine an individual's position in that network.

The "in degree" of a social network referred to the amount and times that information is being sought from other members of the network. The "out degree" in a social network referred to how many times, and to what frequency, an actor sought advice and information from others within that social network. The focus of the study by Daly (2012) was to focus on how actors (leaders) come to have different positions in a network. "Network scholars argued that individuals who occupy different network positions also have different opportunities to access resources from other actors and as such may be at comparable advantage or disadvantage" (Ibarra & Andrews, 1993, p.237)

To better understand these positions, one must first understand what they entail. The *informal network position* consisted of peripheral actors and central actors. Central actors are those actors that are sought out by other actors for resources or information. The central actors

also have more opportunities to look to other actors for information. The peripheral actors are those that have fewer opportunities to receive information from others. Daly also stated that periphery actors are more likely to be isolated. Peripheral actors develop "disruptive innovations that enable the actors to access novel and non-redundant knowledge and information (Penuel & Riel, 2007, p. 614-615)

Personality traits also played a role in an actor's position within a social network. The research by Daly et al. (2010) followed the Five Factor Model of Personality. That model was also referred to as "The Big Five" The Five Factor Model consisted of five personalities. The first personality trait mentioned was extraversion, which consisted of being assertive, talkative, and sociable. The second personality within the model was conscientiousness. That trait consisted of being well organized and self-disciplined. The third personality trait was agreeable. Agreeable consisted of being good-natured and forgiving. The fourth trait mentioned was openness. Openness was being imaginative and resourceful. The fifth and last trait noted was neuroticism, which referred to earlier means any excessive feelings, which could include fear and anxiety. Researchers felt that leaders that have more traits from conscientious and extraversion tended to have more social ties within a network and have more traits typically considered by others as "leadership" traits. Extraverted personalities tended to have more networks and therefore were privy to more information.

In this study SNA was used to determine the relationship between the actors within two rural elementary schools. The purpose was to determine if the internal partnerships determined by SNA played a role in the low-performance of the school and if so could these be avoided by increasing the frequency and duration of communication by the actors.

Conclusion

In response to research, a close examination of the internal and external partnerships with employees from two rural elementary schools was conducted. The first, Elementary School A, a low-performing district and second, Elementary School B, a high-performing district. The focus of the study was to examine the internal partnerships of each elementary school and the external partnerships between the elementary school and outside agencies. The Social Network Analysis framework was used to examine the interaction and relationships as well as the collaboration with teachers and administration and the dissemination of information.

Chapter III: Methods

This study was designed to examine the internal and external learning partnerships of two elementary schools located in rural Alabama. The two elementary schools were distinguishable as low performing, Elementary School A and above average performing, Elementary School B in the area of student ACT Aspire state testing data. The low performing district was also in "turnaround" and was receiving additional financial and expertise resources from the ALSDE. These two particular rural elementary schools were chosen due to their similarities in size, racial makeup, and socioeconomic status based on average yearly income as well as the level of free and reduced lunches in each school. The study specifically examined the internal and external learning partnerships of one school that existed within the "turnaround" low-performing rural school, Elementary School A and one school that existed in the above-average performing rural Elementary School B. Both schools mirrored the demographics listed above. A survey was developed to gather data on teacher and administrator perceptions of their internal and external learning partnerships. These internal and external faculty partnerships were defined as the extent of collaboration between players within the school organization and outside the school organization.

Purpose of Study

The purpose of this study was to examine the internal and external learning partnerships between school staff in two rural elementary schools. Elementary School A, a low-performing school was from a school system undergoing the school improvement process, termed "Turnaround", while Elementary School B was an above-average performing school from a rural

district without significant educational problems. By examining two schools the researcher learned more about the collaborative nature of those two school organization's learning partnerships. The researcher also explored the relationship between the extent of internal partnerships in those two schools and compared that to their perceived involvement in external partnerships. It was suggested that schools that are more prepared to collaborate internally were more successful with external partnerships. SNA was critical in this study because it was used to show who the collaborative actors were and how dense these connected collaboration networks appeared to be.

Research Design

A comparative case study design was used for this research. Comparative case studies are used to examine two or more cases and answer questions related to the reason why programs succeed or fail. In this case study the researcher was comparing the level of collaboration currently happening in a low academic performance, turnaround elementary school and an above average academic performance elementary school. Particular focus was placed on how each school perceived their density and centrality of collaboration as well as the perceived extent of internal and external partnership.

Comparative case studies can be used to answer questions about how and why programs are successful as well as not successful and can use a combination of both qualitative and quantitative methods. Although challenges may arise when combining or mixing the two research methods they can also inform each other and can fill in gaps of critical information. "Regardless of one's involvement in Mixed Methods Research, the role of numbers and proportions, while contested at times, can be meaningful to the practice of qualitative research" (Sandelowski, Voils, Change & Lee, 2009, p. 8).

Cohen, Manion, and Morrison, (2000) described quantitative methods as a set of predetermined hypotheses involving a question based instrument where analysis of data is performed with statistical tests. Qualitative research takes the research beneath the surface (Creswell, 2003). It is the approach that allows for the understanding of emerging themes and is usually examined with open-ended questions.

Comparative case studies can be used to better understand the successfulness of certain interventions (Goodrick, 2014, p. 1). The frequency and density of collaboration was the primary focus of the research in this study. A survey was developed and used to gather information from the faculty in the two schools. The researcher used social network analysis to determine what internal partnerships existed and to what degree the relationships were reciprocal.

The research began by having participants in the turnaround elementary school, Elementary School A, complete a survey to determine what internal partnerships existed between faculty and administrators. The same survey was also given to an above-average performing rural county, Elementary School B, in Alabama. The surveys were then compiled using a social network analysis program known as UCINET to give an overall visual diagram of the partnerships.

The researcher offered the following chart to support the comparative case study:

Table 2

Research Questions and Data Collection Instruments

Research Question	Data Collection Instruments
1. What is the difference in density and centrality of collaboration between an above average academic performance school and a	SNA

school in turnaround?	
1a. Collaboration Density	
1b. Collaboration Centrality	
2. To what extent do faculty members collaborate in an above average academic performance school and a school in turnaround?	ANOVA
3. To what extent do faculty perceive their internal partnership to be collaborative in an above average academic performance school and a school in turnaround?	ANOVA
4. Using a frequency count, how many external partnerships are identified by the two schools?	Frequency Count

Faculty from the Elementary School A, the low-performing district and faculty from the elementary school in Elementary School B, the above-average performing district, were invited to participate in the study. Actual rankings of schools were not publically released from the Alabama State Department of Education. The two rural districts used were chosen based on the similarities in rural locations, race, number of free and reduced lunches, size of student population, and socioeconomic status of the surrounding town. Based on recent ACT Aspire results, Elementary School A, the low-performing school was ranked in the bottom 1/3 of rural schools in the state of Alabama while Elementary School B, the above-average performing

school, was ranked in the top 1/3 of rural schools in the state. Additional information to determine the academic performance status of the two schools was garnered from the Public Affairs Research Council of Alabama (PARCA). Elementary School A performed below the average for school poverty level and Elementary School B performed above the average for school poverty level.

Social Network Analysis (SNA).

Social network analysis (SNA) is made up of actors and relational ties. The term actor refers to each individual in an analysis. In this study each faculty member was an actor. A relational tie is the bond between two or more actors in a social network analysis and in this case an internal learning partnership as measured by collaboration. In this study the relational tie was studied to determine the level of collaboration currently happening within each of the two schools. Social network analysis uses visual mapping to allow for easier interpretations of relationships present within an organization. Social network analysis provides insight for understanding teaching and learning (Haythornthwaite, 2005).

A SNA can be examined both quantitatively and qualitatively. A quantitative SNA examines what each actor could possess or have and that what they have, such as information. According to Wasserman and Faust (1994) social capital is quantifiable in terms of network structures and the characteristics of actors within those structures. A qualitative SNA examines the relationships between actors in the network and the factors that affect the relationship and decisions. The SNA in this study examined the relationships between the actors in the network for Elementary Schools A and B and examined the factors of those relationships.

The survey questions in the study were calculated using UNICNET Version 6.618 for descriptive statistics. A node list was used to analyze the Collaborating Actors and an edge list

was used to analyze the Actors Frequency of Collaboration. Both questions were assessed with detail to density and betweeness centrality. Betweeness centrality examines the degree of closeness between two actors and refers to how quickly one actor can access another.

The "density" of a network refers to the percentage or number of ties within the network. Density is calculated by the number of actors minus one actor and divided by 2. Example: 42-41/2. The higher number of ties between the actors the denser the network is. Density is examined on a scale of 0 to 1 with 1 being a strong tie and 0 being no tie. According to Scott (2000), the denser the network the more easily information can travel through a network. In the study the denser the network, the more collaboration was currently happening on curriculum and instruction.

Research Questions

The following research questions guided the study:

1. What is the difference in density and centrality of collaboration between an above average academic performance school and a school in turnaround?

1a. Collaboration Density?

1b. Collaboration Centrality?

2. To what extent do faculty members collaborate in an above average academic performance school and a school in turnaround?

3. To what extent do faculty perceive their internal partnership to be collaborative in an above average academic performance school and a school in turnaround?

4. Using a frequency count, how many external partnerships are identified by the two schools?

Setting

The present study was conducted in two rural county school systems in a state in the southeastern United States. Elementary School A was a low-performing district while Elementary School B was an above average performing school district. Low performing was defined as having schools in the "turnaround process" and in the bottom 1/3 of the state in regards to annual ACT Aspire state student testing data. Above average performing was defined as having schools in the top 1/3 of the state in regards to annual state student testing data. Additional data from the PARCA organization was garnered in the selection process. All personnel at both schools were asked to participate. Participants were told their identity would be kept confidential and that the results of the survey and social network analysis would be shared with the schools.

Community Demographics.

Elementary School A, the low-performing school, was located in a rural community in the southeastern part of the United States with a population of approximately just over 59,000. The median income for this area was approximately $36,066. According to the most recent census, about 16.80% of families and 19.90% of the population were below the poverty line. Approximately 52% of the population for the area was Caucasian while 43.7% of the community was African American the remaining population being a small number of Hispanic and Asian races.

The community of Elementary School A, the low-performing school, houses seven public schools, five elementary schools, one middle school, and one high school. The high school graduation rate for the community was at 81.3%. Several possibilities of colleges and universities existed for the community to take advantage of including but not limited to, Troy (Phenix City Campus), Chattahoochee Valley Community College, and Auburn University.

Elementary School B was located in a rural community in a southeast area of the United States with a population of approximately just over 50,000. The median income for this area was approximately $44,000. According to the most recent census, about 12.60% of families and 15% of the population were below the poverty line. Approximately 74% of the population for the area was Caucasian, 20.2% of the community was African American, 6.3% of the community was Hispanic/Latino, and the remaining population being a small number Asian.

The community of Elementary School B, the above-average school, houses seven public schools, three elementary schools, one middle school, and one high school, and two K-12 schools. The high school graduation rate for the community was at 84.7%. Several possibilities of colleges and universities existed for the community to take advantage of including but not limited to, Troy (Dothan City Campus), Troy University, George W. Wallace Community College.

School Demographics.

Demographics from Elementary School A, the low-performing school, are listed below. Ethnicity, ASPIRE test results, Free and Reduced Lunch are presented in the following charts. Elementary School A had an ethnicity rate of 24% white male students, 21% white female students, 19% black male students, 25% black female students, 5% multi-race male students, and 5% multi-race female students. Elementary School A maintained both a free and reduced price lunch for their 467 students. Approximately 40.47% students qualified for free lunch while 20.56% students qualified for reduced price lunch. Of Elementary School A, 285 of the 467 students received free/reduced price lunch.

According to ALSDE (Alabama State Department of Education) the most recent results for the ASPIRE Assessment for Elementary School A, the low-performing school, had a

combined percentage of 18.28% third and fourth grade students ranked a four in Reading, with four being the highest, and a combined percentage of 23.46% third and fourth grade students rank a 4 in Math.

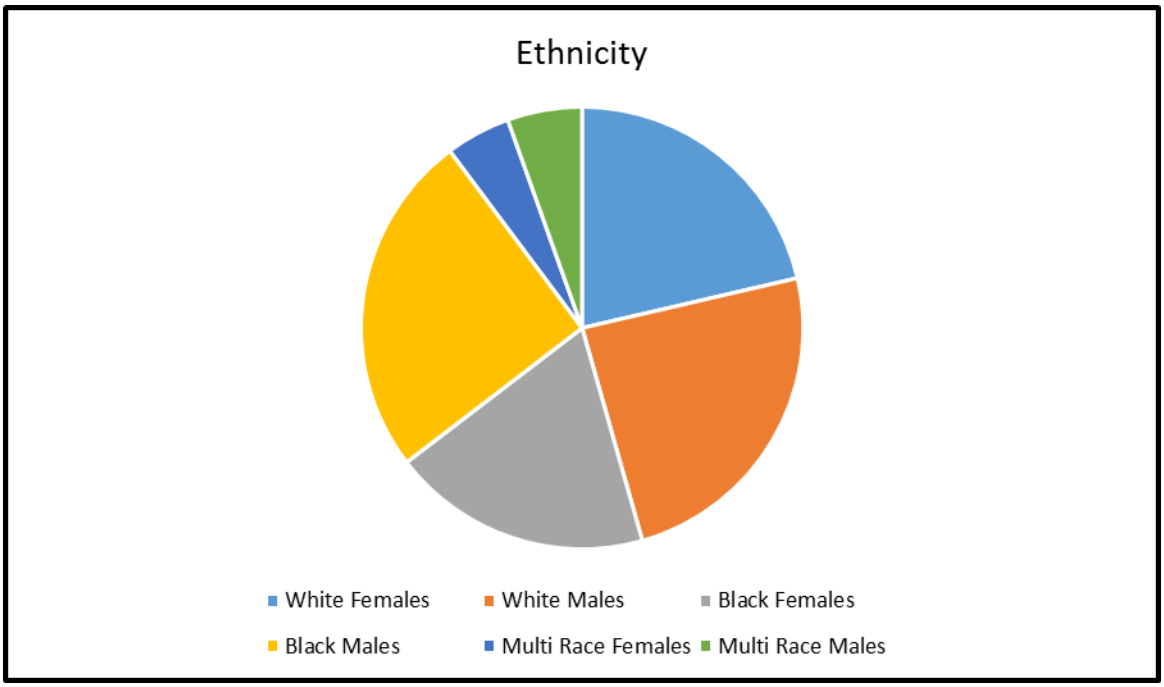

Figure 8. Elementary School A - Low Performing - Ethnicity

Demographics from Elementary School B, the above-average performing school, are listed below. Ethnicity, ASPIRE test results, Free and Reduced Lunch were presented in the following charts. Elementary School B had an ethnicity rate of 31% white male students, 30% white female students, 20% black male students, and 18% black female students. Elementary School B maintained both a free and reduced price lunch for their 429 students. Approximately 73.66% students qualified for free lunch while 6.06% students qualified for reduced price lunch. Of the students at Elementary School B, 342 of the 429 students received free/reduced price lunch.

According to ALSDE (Alabama State Department of Education) the most recent results for the ASPIRE Assessment for Elementary School B, the above-average performing school, had a combined percentage of 25.26% third and fourth grade students ranked a four in Reading, with

	Level 1	Level 2	Level 3	Level 4
3rd Reading	50.00	19.09	22.73	8.18
4th Reading	31.31	32.32	26.26	10.10
4th Math	10.31	56.70	26.80	6.19
3rd Math	15.45	31.82	35.45	17.27

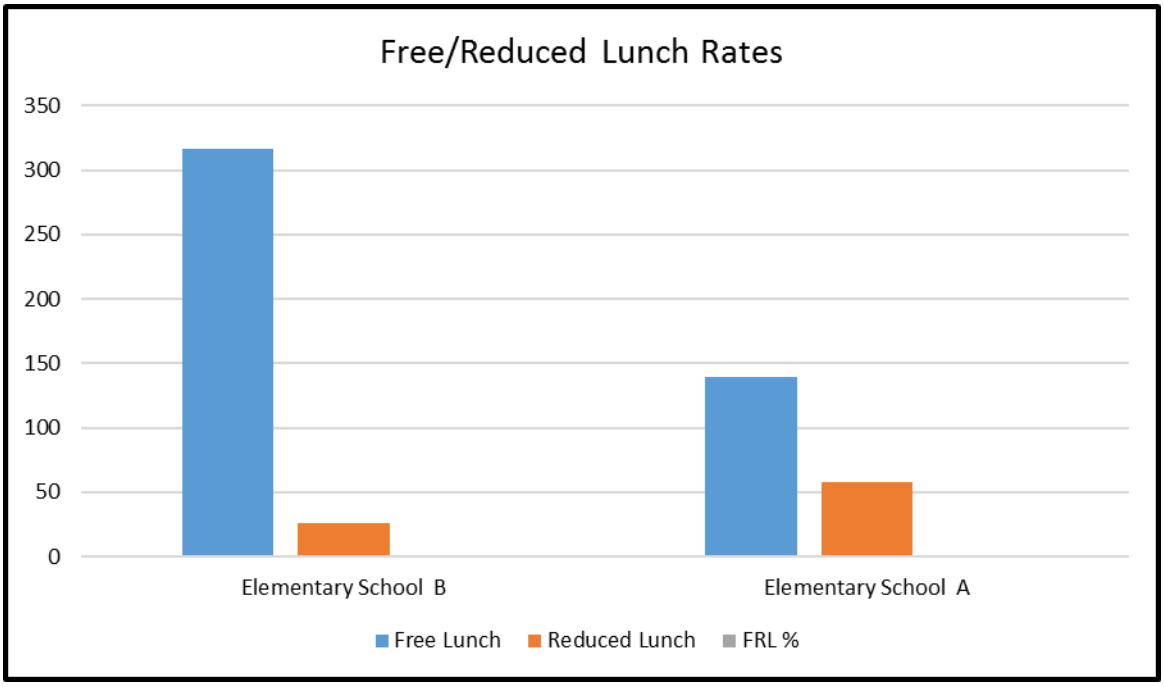

Figure 9 Elementary School A/ Low Performing/ ACT Aspire Results

four being the highest, and a combined percentage of 27.33% third and fourth grade students ranked a 4 in Math.

Role of Researcher

The role of the researcher for this study was to examine the internal and external partnerships currently in place for two rural elementary schools in Alabama. The researcher had served in the role of a classroom teacher for the past 16 years and had taught grades 8th, 6th, 5th,

4th, and 2nd. At the time of the survey, the researcher was in the position of a fourth grade teacher in an intermediate school. The experience as a classroom teacher gave the researcher an advantage with being knowledgeable about the possibilities for internal and external partners and local classroom teachers. The researcher also had experience in available resources due to living in or near the communities participating in the survey

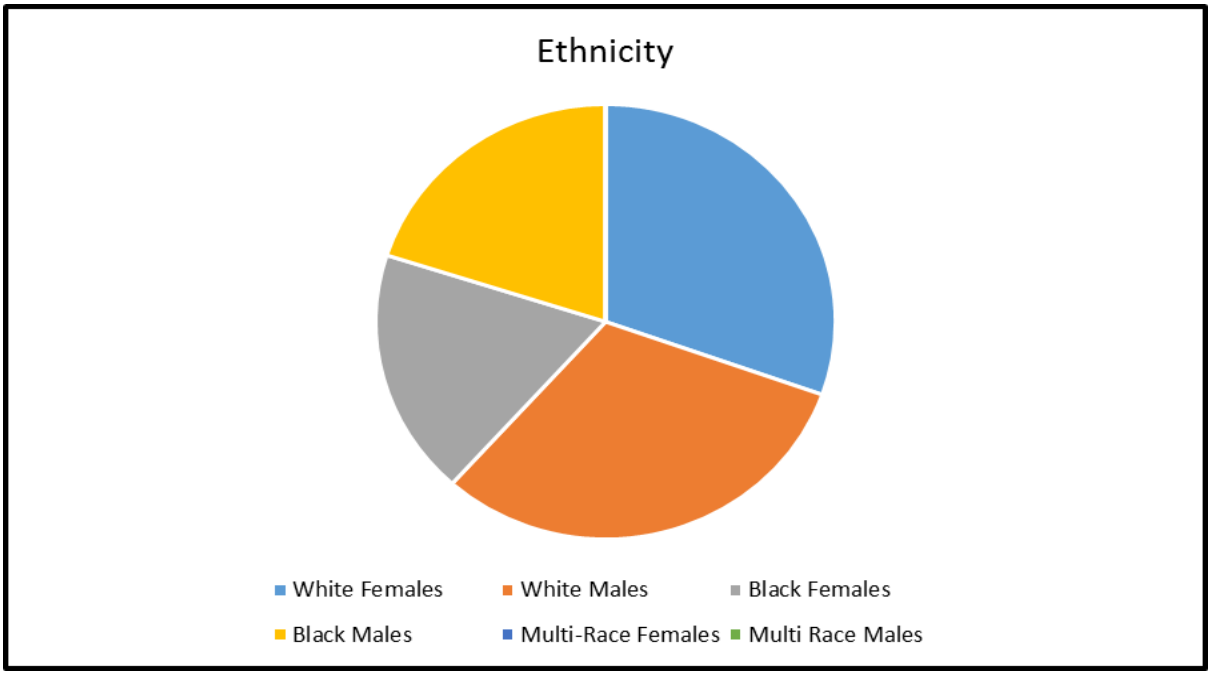

Figure 10. Elementary School B/ Above Average Performing School Ethnicity

Participants

The participants in this study were the 34 faculty members from Elementary School A, the low-performing school. The participants in Elementary School A consisted of 28 females and 5 males. The remaining participants were the 43 faculty members from Elementary School B, the above-average performing school. Elementary School B participants consisted of 32 females and 10 males. All teachers, administrators, and other personnel directly related to curriculum and instruction of students were asked to respond to a survey which included both Social Network questions as well as other Likert-Scale questions to be analyzed using ANOVA.

	Level 1	Level 2	Level 3	Level 4
3rd Reading	36.17	24.47	25.53	13.83
4th Reading	31.43	32.00	25.71	11.43
4th Math	11.43	52.86	32.86	2.86
3rd Math	12.77	29.79	32.98	24.47

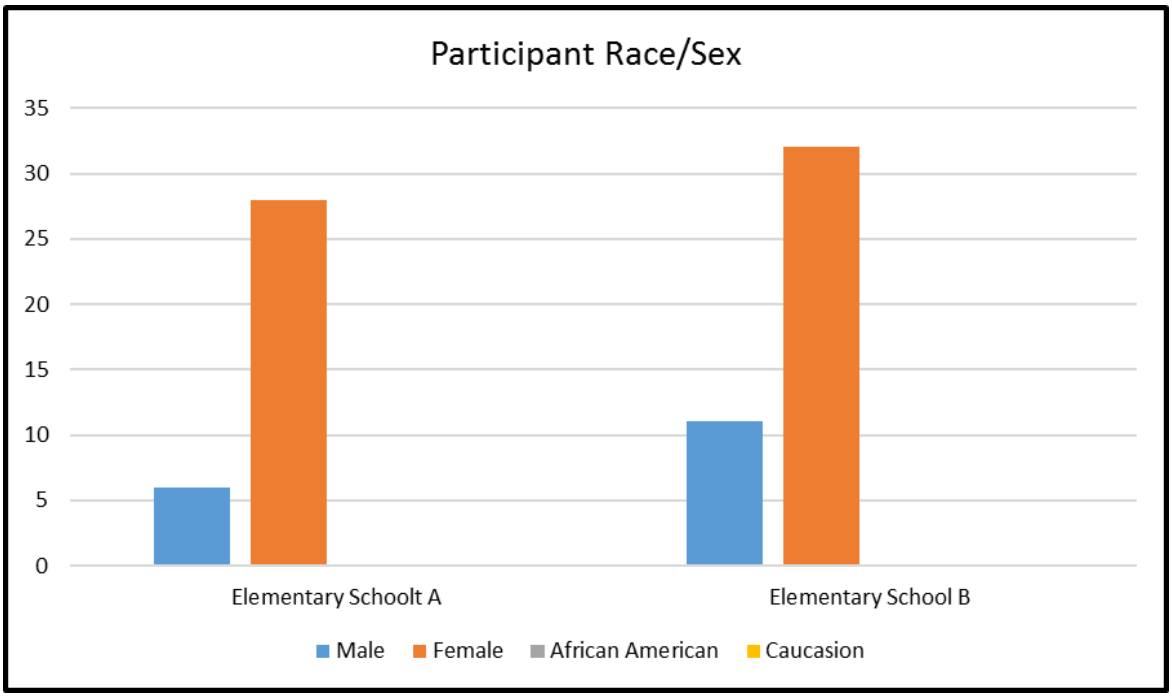

Figure 11. Elementary School B/Above Average Performing/ ACT Aspire Results

The survey was a paper pencil survey that was administered at the beginning of the 2016-2017 school year. The survey was administered in person during faculty planning days in August 2016. All school staff, from both schools studied, agreed to participate in the study by providing a signature in a form from the IRB office from Auburn University.

The survey was developed for each individual school and provided an approach that would provide a more whole picture of the network called a "bounded" approach (Scott, 2000).

This approach provided a list of the individuals in their network rather than relying on them to remember each individual's name. Participants were asked to select any or all of the individuals listed with whom they collaborate on curriculum and instruction. The survey took approximately 30-40 minutes to complete.

Limitations

The following are limitations imposed on the study:

- The study was only conducted during the first year of the turnaround grant and does not examine the social network before or after the Turnaround Grant.
- The study examined only the internal partnerships of one school system involved in the Turnaround Grant.
- The study examined the internal partnerships between the teachers and faculty and did not examine the relationships between the district level employees.

Data Collection Procedures

Survey Development.

The survey was developed with the use of two separate Expert Panels. The first panel consisted of four administrators. The researcher and panel members met to review each survey question and make changes necessary based on the expert opinion of those members based on their role in education as administrators. The second panel met approximately one week after the first panel and consisted of four classroom teachers. The panel reviewed the survey based on their experience as classroom teachers and made suggestions to altering the survey.

Survey Analysis

The survey included two SNA questions which were analyzed using the software program UCINET (Appendix A). UCINET allowed the researcher to render a visual graphic of

each school's internal partnership and answered research questions one. Survey question one asked respondents to identify the people the Collaborating Actors in their network. Survey question two examined the Actors Frequency of Collaboration.

Likert scale items, frequency items and demographic variables were used for the remainder of the survey. The Statistical Package for the Social Science (SPSS) was used for an analysis of those survey questions. Those questions were used to explore the perceived extent of collaboration between faculty members.

Research question one (a) explored the Collaboration Density while Research question one (b) explored Collaboration Centrality. Those were answered with survey questions one and two. Research question two probed participants to answer a series of collaboration questions about curriculum and instruction on a four point Likert scale of strongly disagree to strongly agree. That question was used to glean how collaborative the participants perceived the school culture to be. Those were answered with survey questions three and four. Research question three added an additional layer of insight to the discussion of the SNA analysis of research question one by having participants describe their perceived current and desired level of collaboration. This question was answered using survey questions five. Research question four identified the total number of external agencies faculty considered to be partners and the frequency with which they partnered with those individuals. Those were answered using survey questions five (a) and five (b). The final portion of the survey collected participant demographics such as number of years teaching experience, present position, how long they had served at the present school, ethnicity and gender (Appendix A).

Results were reported in Table 3 for the Collaboration Action Scale. The correlation coefficient between each of the 15 items and the total score on the Collaboration Action Scale

ranged from .836 to .928, thereby verifying that each of the items consistently measured what the total Collaboration Action Scale was measuring. The coefficient alpha if item deleted was increased for all 15 items. This informed the researchers that all items slightly decreased the reliability of the Collaboration Action Scale when included. All 15 collaboration actions were included in the final survey.

Table 3

Collaboration Action Scale

Collaboration	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
4a. Collaborate on lessons that lead to meaningful learning	.855	.983
4b. Have opportunities to collaborate and observe one another	.836	.984
4c. Collaborate to provide feedback around instructional strategies	.920	.982
4d. Collaboratively review student work to improve teaching practices	.910	.983
4e. Collaborate together to meet the needs of diverse learners	.920	.982
4f. Collaborate with others to implement new curriculum presented by the District Office	.928	.982
4g. Collaborate to help me refine and strengthen my teaching practices	.861	.983
4h. Collaborate to motivate students who show low interest in school work	.899	.983
4i. Collaborate to develop a variety of assessment strategies for your students	.889	.983
5a. Are continuously collaborating with teachers to learn new ideas	.916	.982

5b. Are willing to collaborate with teachers to take risks to make their district better	.888	.983
5c. Disseminate information from the District Office that encourage collaboration	.900	.983
5d. Collaborate with teachers to shape policies and procedures specific to their school	.890	.983
5e. Are encouraged by the District Office to collaborate	.859	.983
5f. Are continuously collaborating to develop new instructional approaches to support student achievement	.861	.983

Summary

The comparative case study explored internal and external partnerships with a specific emphasis on one dynamic of partnerships. In the literature, collaboration was cited as an important factor in partnership development and sustainability. Evidence supporting collaboration comes from two models of partnership development and a few studies which are specifically related to educational leadership programs and school system partnerships. The present study added to the discussion of collaboration as an important factor in partnership development in several important ways. First, partnerships were considered to be internal and external and reliant upon each other. Second, a new type of analysis, SNA, was used to explore the reciprocal nature of collaboration. This is new to the field of educational leadership studies and is one of the first of its kind. Third, SNA holds value for future studies of partnership. Factors such as trust, collegiality and hopefulness can all be explored in future studies to see if these can add to the puzzle of what makes a successful partnership. SNA will also allow us to study the players and their roles in partnership development and sustainability.

Chapter IV: Results

The comparative case study was conducted at two rural elementary schools in Alabama. Elementary School A was a low-performing school which housed seven public schools, five elementary schools, one middle school, and one high school. Elementary School A, the low-performing school was in "turnaround" and was receiving additional financial and expertise resources from the ALSDE. Elementary School B was an above-average performing school which housed seven public schools, three elementary schools, one middle school, and one high school, and two K-12 schools. These two particular rural elementary schools were chosen due to their similarities in size, racial makeup, and socioeconomic status based on average yearly income as well as the level of free and reduced lunches in each school.

The researcher in the study wanted to determine to what extent internal and external partnerships existed in the two rural elementary schools. One of the measures possible to measure the extent of internal and external partnership was determined to be extent of collaboration. Therefore, both internal and external partnerships were examined.

Purpose of the Study

The purpose of this study was to examine the internal and external learning partnerships between school faculty in two rural elementary schools. By examining two distinct elementary schools in terms of student academic performance, the researcher anticipated learning more about the collaborative nature of these two school organization's learning partnerships

Research Questions

The following research questions guided the study:

1. What is the difference in density and centrality of collaboration between an above average academic performance school and a school in turnaround?

1a. Collaboration Density?

1b. Collaboration Centrality?

2. To what extent do faculty members collaborate in an above average academic performance school and a school in turnaround?

3. To what extent do faculty perceive their internal partnership to be collaborative in an above average academic performance school and a school in turnaround?

4. Using a frequency count, how many external partnerships are identified by the two schools?

Reliability of the Survey Instrument

Reliability of the survey instrument was evaluated to ensure the relationship among items on the survey was strong. The Cronbach's alpha for collaborative actions was .984. One hundred percent of cases included were valid with zero cases being excluded. All 15 collaboration questions showed a strong relationship among the items within the scale. The overall reliability of the instrument was high (Table 4).

Table 4

Reliability Summary

Std. Deviation	Cronbach's Alpha	N of Items	Mean	Variance
21.0887	.984	15	41.833	444.732

Context of Study and Demographics

Community.

The population of this survey was gathered from two rural counties in Alabama. Elementary School A, a low performing school resided in a rural community that had a

population of 59,000. The median income was $36,066. According to the most recent census, about 16.80% of families and 19.90% of the population were below the poverty line. Approximately 52% of the population was Caucasian while 43.7% of the community was African American with 5% of the remaining population being Hispanic and Asian (Figure 12). The community of Elementary School A, the low-performing school, housed seven public schools, five elementary schools, one middle school, and one high school. The high school graduation rate for the community was at 81.3%.

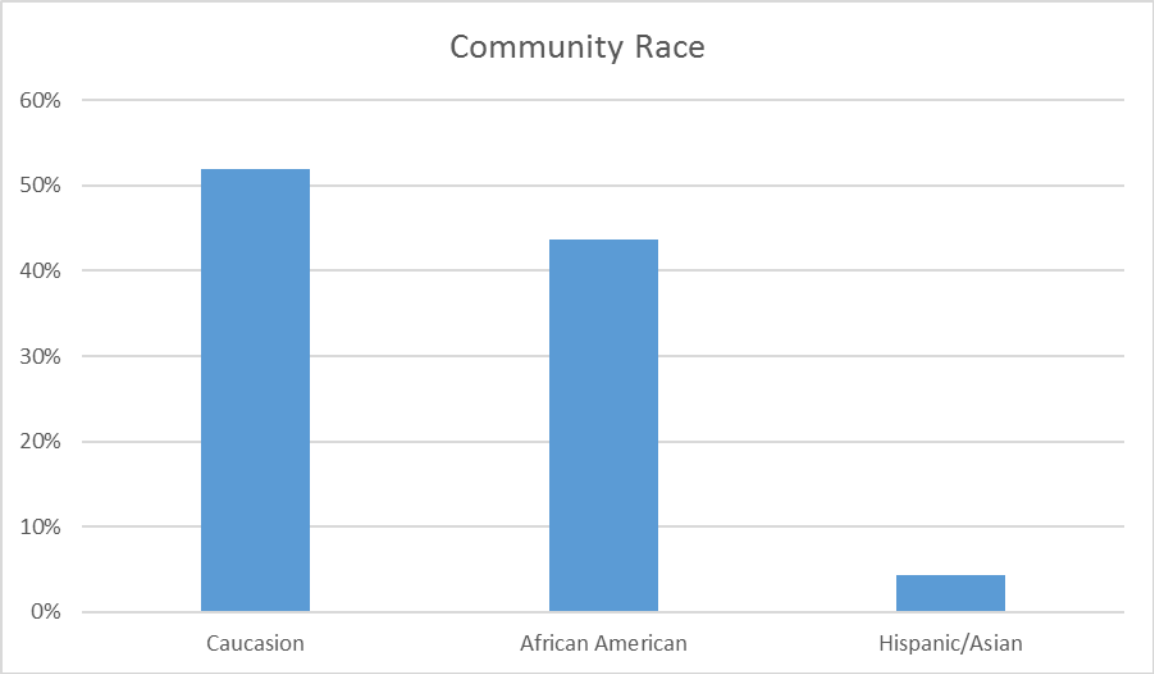

Figure 12. Elementary School Community A/ Low Performing

Elementary School B, the above-average performing school, was also from a rural community in Alabama. The county population was 50,000. The median income was $44,000. According to the most recent census, about 12.60% of families and 15% of the population were below the poverty line. Approximately 74% of the population for the area was Caucasian, 20% of the community was African American and 6 % of the community was Hispanic/Latino or Asian (Figure 13). The community of Elementary School B, housed seven public schools, three

elementary schools, one middle school, and one high school, and two K-12 schools. The high school graduation rate for the community was at 84.7%.

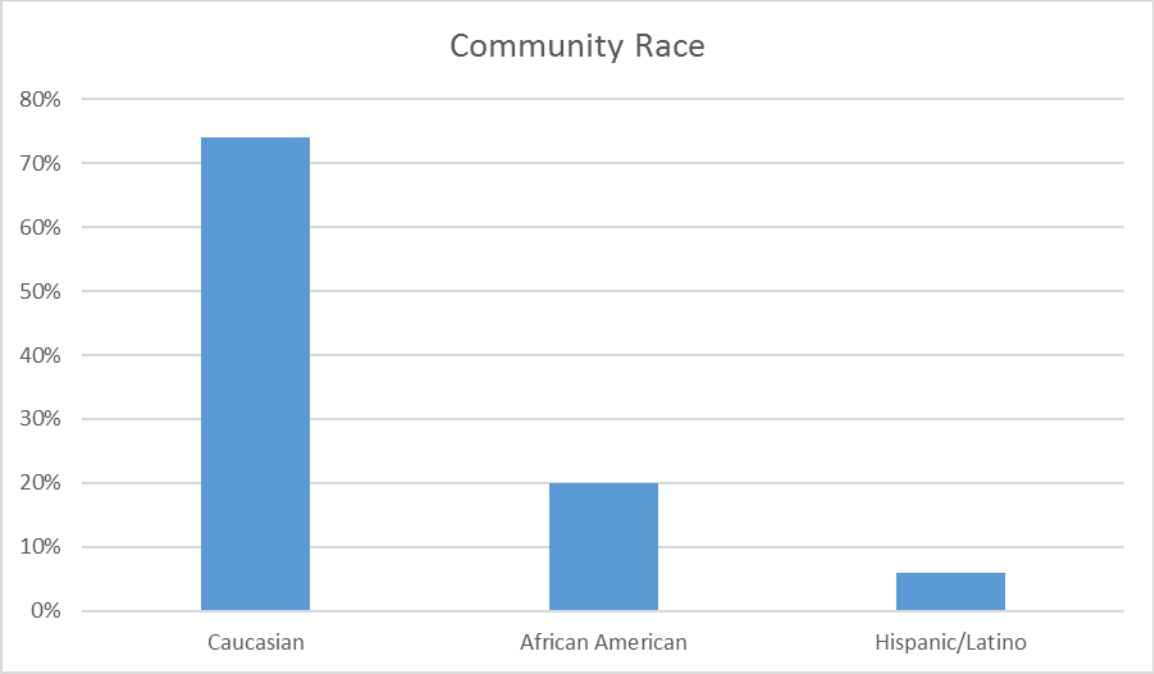

Figure 13. Elementary School Community B/Above-Average Performing

Schools.

Elementary School A, the low-performing school, had an enrollment rate of 467 students in a 3-5 intermediate setting. The ethnicity rate of Elementary School A was 24% white male students, 21% white female students, 19% black male students, 25% black female students, 5% multi-race male students, and 5% multi-race female students (Figure 14). Elementary School A, the low-performing school maintained both a free and reduced price lunch for their 467 students. Approximately 61% qualified for free and reduced lunch. (Table 5).

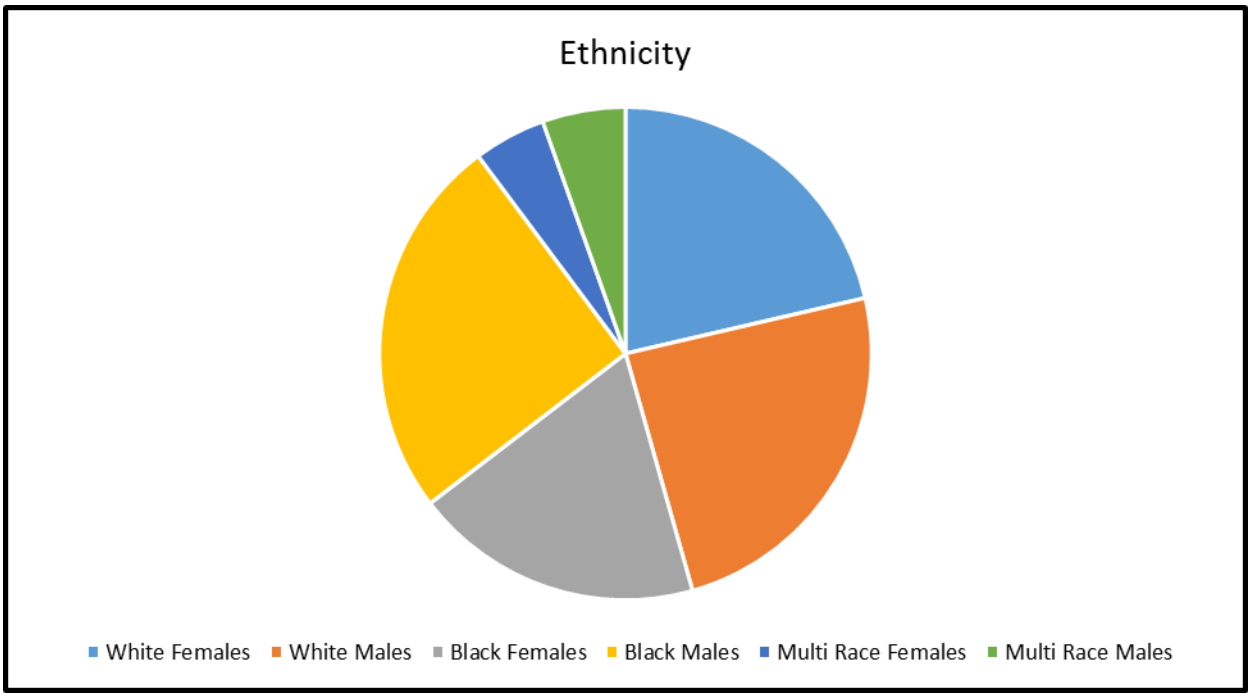

Figure 14 Elementary School A/Low Performing Ethnicity

Elementary School B had an enrollment rate of 429 students. The ethnicity rate of Elementary School B was 31% white male students, 30% white female students, 20% black male students, and 18% black female students. Elementary School B maintained both a free and reduced price lunch for their 429 students (Figure 15). Approximately 73.66% students qualified for free lunch while 6.06% students qualified for reduced price lunch. 342 of the 429 students at this school received free/reduced price lunch (Table 5).

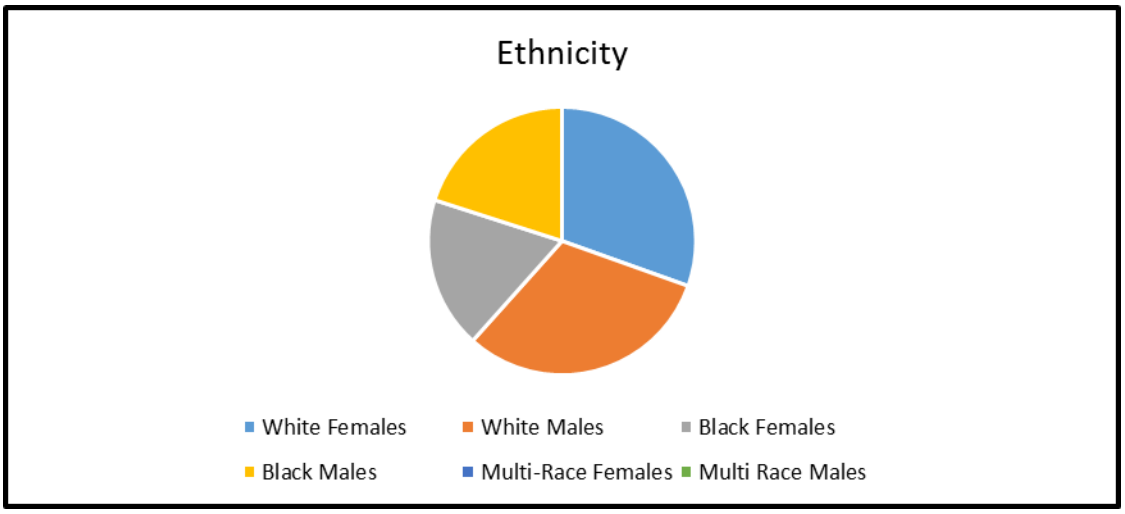

Figure 15 Elementary School B/Above-Average Performing Ethnicity

Table 5

Enrollment and Free and Reduced Lunch

	Enrollment	FRL
Elementary School A	467	285
Elementary School B	429	342

Participating Faculty.

The participating faculty at Elementary School A consisted of 33 faculty members. Of those participants who completed the survey, 39.4% (n=13) were males and 60.6% (n=20) were females. The participating faculty included classroom teachers, support staff, and administration. Eighty-seven percent (n=29) were Teachers, 3.0 (n=1) was an Instructional Coach, 6.1 (n=2) were Special Education Teachers, and 3.0% (n=1) were Administrators.

The ethnicity of those who completed the survey at Elementary School A were 57.6% (n=19) African-American, 39.4% (n=13) White/Caucasian, and 3.0% (n=1) Other (Table 6).

Table 6

Ethnicity of Faculty for Elementary School A, Low-performing

	Frequency	Percentage
African-American	19	57.6%
Asian	0	0%
Latino	0	0%
White/Caucasian	13	39.4%
Other	1	3.0%
Total	33	100%

The participating faculty at Elementary School B consisted of 42 faculty members. Of those participants who completed the survey, 22% (n=9) were males and 78% (n=32) were females. The participating faculty included classroom teachers, support staff, and administration. 81% (n=34) were Teachers, 4.8% (n=2) were Instructional/Resource Coaches, 2.4% (n=1) Special Education, 2.4% (n=1) Counselor, and 7.1% (n=3) Administrators.

The ethnicity data of those who completed the survey at Elementary School B were 33.3% (n=14) African-American, 4.8% (n=2) Asian, 0% Latino, 57.1% (n=24) White/Caucasian, and 2.4% (n=1) Other (Table 7).

Table 7

Ethnicity of Elementary School B Faculty

	Frequency	Percentage
African-American	14	33.3%

Asian	2	4.8%
Latino	0	0%
White/Caucasian	24	57.1%
Other	1	2.4%
Total	42	100%

Other demographic data collected included years of experience at their school and highest degrees (Tables 8-11).

Table 8

Elementary School A, Low-Performing School, Years of Experience at Given School

	Frequency	Percentage
1-5 Years	25	75.8%
6-10 Years	4	12.1%
11-15 Years	2	6.1%
16-20 Years	0	0%
21-25 Years	2	6.1%
Total	33	100%

Table 9

Elementary School A, Low-Performing/ Highest Level of Education

	Frequency	Percentage
Bachelor's Degree	24	72.7%

Master's Degree	7	21.2%
EdS	2	6.1%
PhD	0	0%
Total	33	100%

Table 10

Elementary School B Years of Experience at Given School

	Frequency	Percentage
1-5 Years	22	52.44%
6-10 Years	12	28.6%
11-15 Years	3	7.1%
16-20 Years	1	2.4%
21-25 Years	3	7.1%
Total	42	100%

Table 11

Elementary School B, Above-Average Performing / Highest Level of Education

	Frequency	Percentage
Bachelor's Degree	30	71.4%
Master's Degree	10	23.8%
EdS	1	2.4%
PhD	0	0%

Missing 1	1	2.4%
Total	42	100%

Data Collection Instruments

Comparative case studies could be used to better understand the successfulness of certain interventions (Goodrick, 2014, p. 1). A survey was developed and used to gather information from the faculty in the two schools. The researcher used social network analysis to determine the density and betweeness centrality to answer the first research question. Research question two used Analysis of Variance (ANOVA) to determine the extent of collaboration in a low performing school as compared to the above average school. Research question three asked school faculty to record the present extent of collaboration and the desired extent of collaboration. A repeated measures ANOVA was used for this question as well. Research question four used frequency data to determine the number of and frequency of collaborations with external partners.

Results

Research Question 1: What is the difference in collaboration between an above average performing school and a school in turnaround in terms of:

1a. Collaboration Density?

Density refers to the percentage or number of ties within the network. Table 12-13 summarized the density data for Elementary School A, the low performing, turnaround school and Table 14-15 summarized Elementary School B, the above-average performing school.

Elementary School A, Low-performing.

The coefficient sum in the second line of Table 12 indicated that there were 414 ties that occurred in the network. N of Obs. in the sixth row indicated there were 1,206 possible ties in the network. The average of ties (density) in the network is 0.329 which meant that the density was less than 50%. With a significant difference between the ties that occurred and the total ties that could have happened, it was concluded that the ties between the individuals in those networks were weak. Elementary School A, the turnaround, low-performing school exhibited weak ties in regards to collaboration. Very few of the faculty collaborated and therefore the internal partnership appeared weak.

Table 12

Descriptive Statistics Elementary School A, Low-Performing/Collaborating Actors

Density	0.329
No. of Ties	414
Std Dev	0.470
Avg Degree	11.500
Alpha	0.946
N of Obs.	1,206

The results below showed the responses for Elementary School A, the low-performing school to survey question two, Actors Frequency of Collaboration, which asked participants to select the frequency on which the actors go to others to collaborate on curriculum and instruction. Table 13 showed the output of the calculations using UNICNET Version 6.618 for descriptive statistics using an edge list. The average value as shown in Table 13 (density) in the network is 0.314 which meant that the density was less than 50%. With a significant difference

between the ties that occurred and the total ties that can happen it could be concluded that the ties between the individuals in this network were weak. Very few of the faculty collaborated, therefore the internal partnership was considered weak.

Table 13

Descriptive Statistics Elementary School A, Low-Performing Actors Frequency of Collaboration

Average Value	0.314
Total	352
Std Dev	0.878
Avg Wtd Degree	10.353

Elementary School B, Above-Average Performing.

The results below demonstrated the responses for Elementary School B, the above-average performing school, to survey question one, Collaborating Actors, which asked participants to select who they went to in order to collaborate on curriculum and instruction. Table 14 showed the output of the calculations using UNICNET Version 6.618 for descriptive statistics using a node list for Elementary School B. The coefficient sum in the second line of Table 14 indicated that there were 339 ties that occurred in the network. N of Obs. in the sixth row indicated there were 1,806 possible ties in the network.

The average of ties (density) in the network is 0.188 which meant that the density was less than 50%. With a significant difference between the ties that occurred and the total ties that could happen it was concluded that the ties between the individuals in these networks were weak. In Elementary School B, the above-average performing school, there were weak ties in regards to

collaboration. Very few of the faculty collaborated and therefore the internal partnership appeared weak.

Table 14

Descriptive Statistics Elementary School B, Collaborating Actors

Density	0.188
No. of Ties	339
Std Dev	0.390
Avg Degree	7.884
Alpha	0.909
N of Obs.	1,806

The results below indicated the responses for Elementary School B, the above-average performing school, to survey question two, Actors Frequency of Collaboration, which asked participants to select the frequency with which they went to other actors to collaborate on curriculum and instruction. Table 15 showed the output of the calculations using UNICNET Version 6.618 for descriptive statistics using an edge list.

The average value (Table 15) density in the network was 0.566 which meant that the density was just over 50%. With a significant difference between the ties that occurred and the total ties that could happen it could be concluded that the ties between the individuals in this network were weak to low moderate. Very few of the faculty collaborated and therefore the internal partnership appeared weak to low moderate.

Table 15

Descriptive Statistics Elementary School B, Actors, Frequency of Collaboration

Average Value	0.566
Total	1022
Std Dev	1.092
Avg Wtd Degree	23.767

1b. Collaboration Centrality?

Centrality in the study offered different perspectives of the positions an actor had in a network. Betweeness centrality indicated the distance between one actor and another actor. The actor with the highest betweeness was considered a gate keeper. A "gate keeper" was an actor with a high degree of centrality which meant they played a very important role in the flow of information between the other actors in the network. In the present study, betweeness would have referred to a faculty member as a "gate keeper" if they were important to the flow of information in regards to collaboration on curriculum and instruction.

Each category of actors in the following figures had a distinct color. Table 16 indicated which colors went with which positions.

Table 16

Colors Indicating Roles/Positions

Roles	**Colors**
Kindergarten	Purple
First	Orange
Second	Brown
Third	Blue
Fourth	Black

Fifth	Green
Sixth	Red
Seventh	Yellow
Administration/Including Instructional Coaches	Pink
Central Office	Navy
Special Areas/Aids	Teal
High School	Hot Pink

Elementary School A, Low-Performing, Betweeness Centrality.

The results below show the responses for Elementary School A, the low-performing school, to survey question one, which asked participants to select the faculty individuals with whom they went to for collaborating on curriculum and instruction. Figure 12 and Table 17 include the betweeness centrality for Elementary School A. Actor #2, the Assistant Principal, had the highest betweeness centrality with a betweeness score of 87.803 followed by individuals #1, the school Principal, and #21, a sixth grade teacher. The three individuals had a position of power in the network due to many of the other actors relying on them to collaborate. In terms of closeness this meant that those three actors had several short paths to collaborate with others and for others to collaborate with them concerning curriculum and instruction. These three actors were the "gate keepers" for collaboration on curriculum and instructional matters.

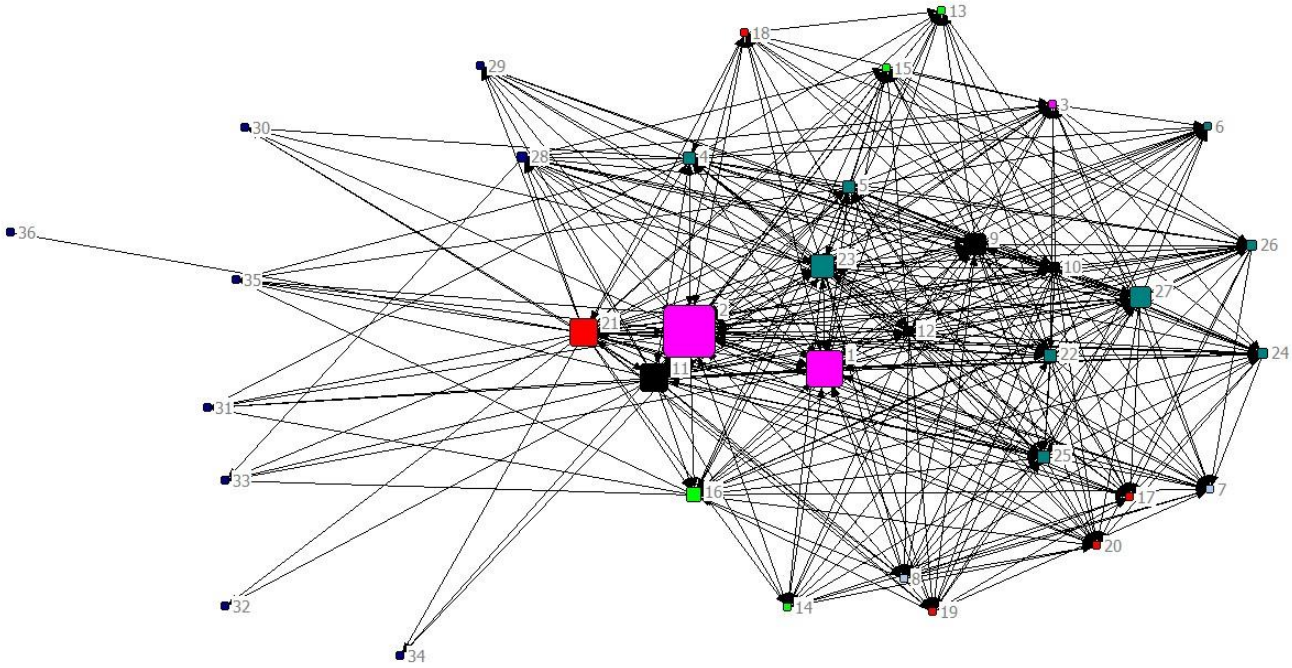

Figure 16. Elementary School A, Low-Performing/ Betweeness Centrality/Collaborating Actors

Table 17

Elementary School A, Low-Performing/Betweeness Centrality/Collaborating Actors

Actor	Betweeness
#2 Assistant Principal	87.803
#1 Principal	56.141
#21 6th Grade Teacher	40.552
#23 School Librarian	141.095

The results below showed the responses for Elementary School A, the low-performing school, to survey question two, Actors Frequency of Collaboration, which asked participants to select the frequency they go to other actors to collaborate on curriculum and instruction. From the plot in Figure 17 and the information displayed in Table 18, actor #23, the school's Media Specialist, had the highest betweeness centrality in the network with a betweeness of 141.095

followed by actor # 3, the school's Intervention/Resource Coach and actor # 25, a sixth grade classroom teacher. The three individuals described, had positions of power in the network and it was likely that others came to them and they reached out to others to collaborate in curriculum and instructional matters.

Table 18

Elementary School A, Low-Performing/Betweeness Centrality/Actors Frequency of Collaboration

Actor	Betweeness
#23 School Librarian	141.095
#3 Intervention Coach	99.414
#25 6th Grade Teacher	66.248
#1 Principal	0
#2 Assistant Principal	0

The frequency results indicated the three individuals had positions of power in the network due to many of the other actors who relied on them to collaborate. In terms of closeness this meant that these three actors had several short paths to collaborate with others and for others to collaborate with them concerning curriculum and instruction. In comparison, actors #1 and #2, the principal and assistant principal, had a betweeness score of 0 which indicated they did not have a position of power.

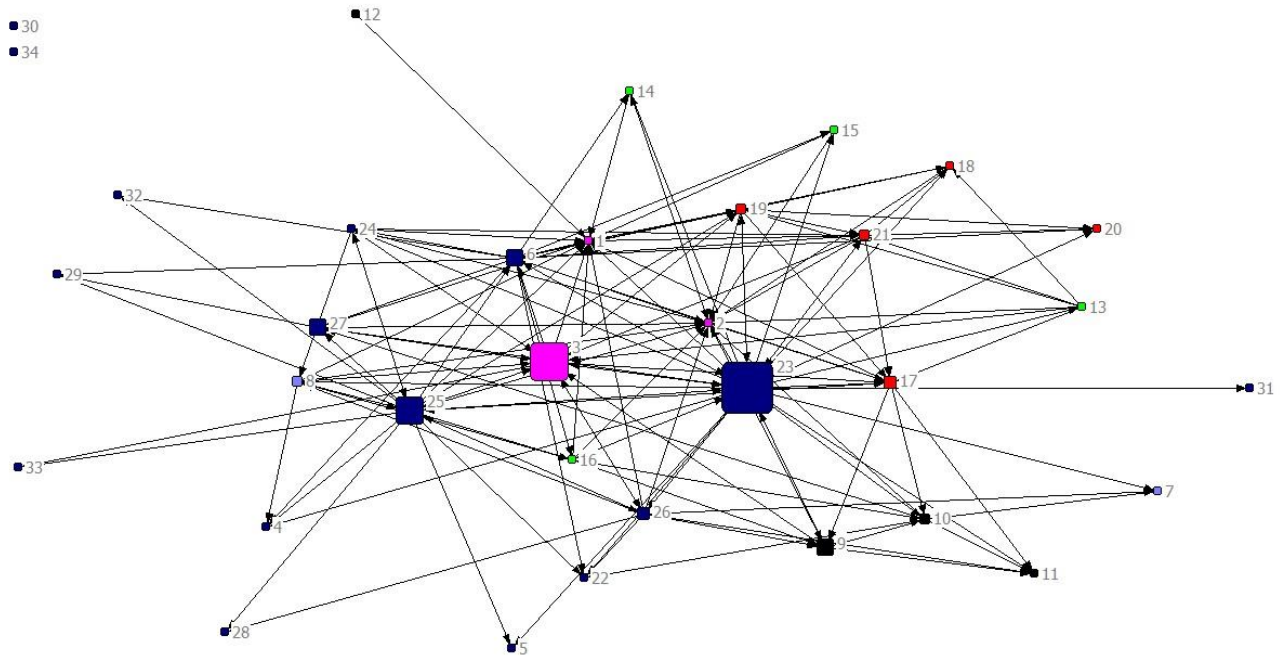

Figure 17. Elementary School A, Low Performing/ Betweeness Centrality Actors Frequency of Collaboration

Elementary School B, Above-Average Performing Betweeness Centrality.

The results below (Table 19) showed the responses for Elementary School B, the above-average performing school, to survey question one, Collaborating Actors, which asked participants to select the "who they go to" to collaborate on curriculum and instruction. From the plot in Figure 14 we see the results of betweeness centrality in the network. Actor #25, the Resource Teacher had the highest betweeness centrality with a betweeness score of 222.748. This was followed by individuals # 32, the school's Principal and # 29, the school's Enrichment Teacher. The three individuals had positions of power in the network due to many of the other actors relying on them to collaborate. In terms of closeness this meant that these three actors had several short paths to collaborate with others and for others to collaborate with them concerning curriculum and instruction.

Table 19

Elementary School B, Above-Average Performing/Betweeness Centrality Collaborating Actors

Actor	Betweeness
#25 Resource Teacher	222.748
#32 Principal	126.804
#29 Enrichment Teacher	86.363
#31 Media Specialist	0
#4 First Grade Teacher	0

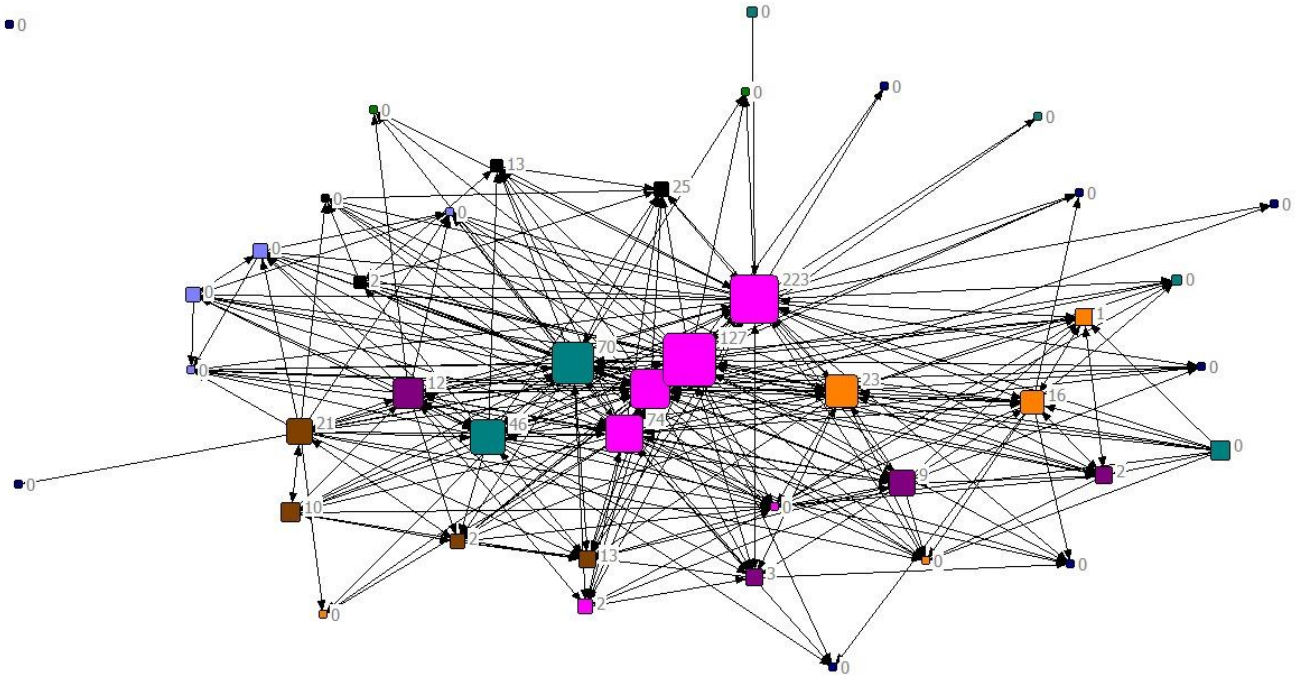

Figure 18. Elementary School B, Above-Average Performing/ Betweeness Centrality Collaborating Actors

The results below show the responses for Elementary School B, the above-average performing school, to survey question two, Actors Frequency of Collaboration, which asked

participants to select the frequency with which they went to collaborate on curriculum and instruction. The results of betweeness centrality in the network are represented in Figure 19 and Table 20. Actor #32, the Principal, had the highest betweeness centrality with a betweeness score of 98.057. This was followed by Actor # 20, a fourth grade teacher with a betweeness score of 84.55, Actor # 30, the Computer Technology Teacher with a betweeness score of 81.29 and Actor # 25 with a betweeness score of 80.64. These four actors had positions of power in the network due to many of the other actors relying on them to collaborate.

Table 20

Elementary School B, Above Average Performing/Betweeness Centrality Actors Frequency of Collaboration

Actor	Betweeness
#32 Principal	98.058
#20 4th Grade Teacher	84.555
#30 Computer Technology Teacher	81.292
#25 Resource Teacher	80.643

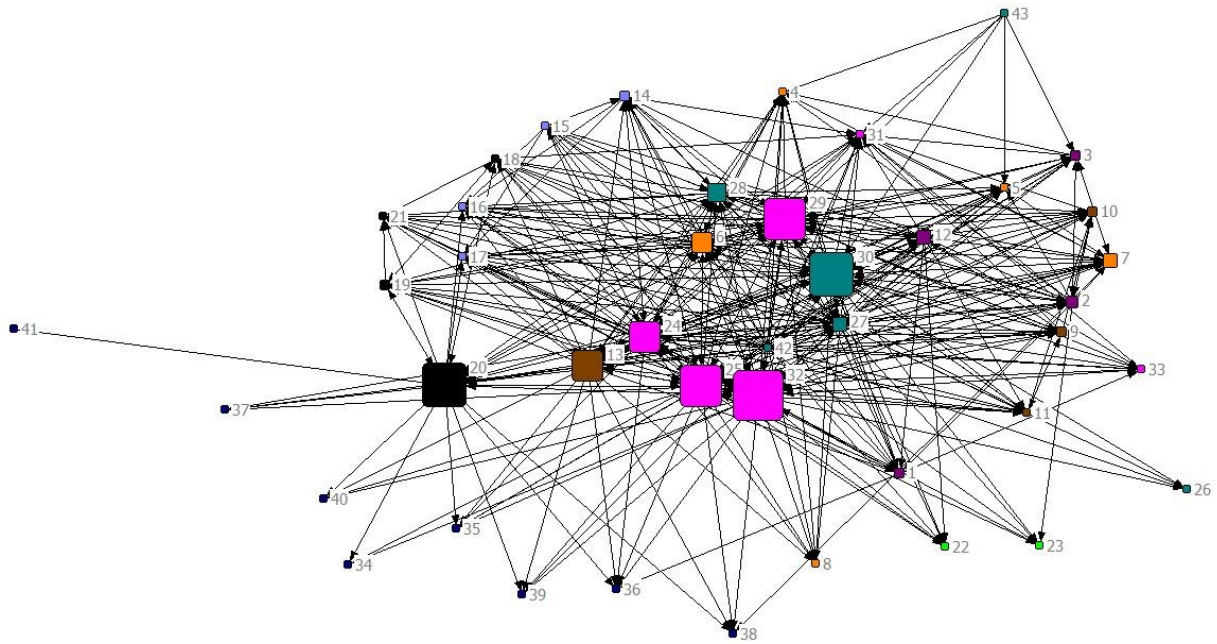

Figure 19. Elementary School B, Above-Average Performing/ Betweeness Centrality Actors Frequency of Collaboration

Summary of Research Question 1 using SNA.

The SNA analysis for collaboration in the two elementary schools indicated weak collaboration ties in both locations. Density was used to determine the weak ties and lack of internal partnership at both schools. The researcher then looked at betweeness centrality to gain an understanding of which actors and how often the actors were collaborating. In Elementary School A, the low performing school, the assistant principal, the principal and a 6th grade teacher had centrality betweeness, or short distances between these three actors and other actors. These three actors were "gate keepers" or actors who were intricately involved in the collaboration network. Others depended on them to collaborate. When research findings turned to the frequency of collaboration, the assistant principal and principal dropped from the network and were replaced by the school librarian, the instructional coach and a 6th grade teacher. In Elementary School A, the low performing school, the building level administrators were

considered important actors for centrality betweeness but not for frequency of interaction in regards to collaboration. In Elementary School A, with weak density in regards to collaboration ties, only three actors had a significant amount of betweeness centrality out of an entire faculty of 33.

In Elementary School B, the above average performing school, the resource teacher, the principal and an enrichment teacher had centrality betweeness, or short distances between these three actors and other actors. These three actors were "gate keepers" or actors who were intricately involved in the collaboration network. Others depended on them to collaborate. When research findings turned to the frequency of collaboration, the principal remained as an important actor in the network along with a 4th grade teacher, a computer technology teacher and a resource teacher. In Elementary School B, the above average performing school, the principal was an important actor for centrality betweeness and for frequency of interaction. The resource teacher was an important actor for centrality betweeness and for frequency of interaction. Additional actors for frequency of interaction in regards to collaboration were a 4th grade teacher and a computer technology teacher. In Elementary School B, with weak to low moderate collaboration density, only three actors had a significant amount of betweeness centrality out of an entire faculty of 42.

Research Question 2: To what extent do faculty members collaborate in an above average academic performance school and a school in turnaround?

Research question two was analyzed using ANOVA. One hundred percent of cases were included in the study and are displayed in Table 21. Table 21 indicated that Elementary School A, the low-performing school, had a mean of 2.99 and a standard deviation of .552. Elementary School B, the above-average performing school, had a mean of 2.82 and a standard deviation of

.360. The results indicated that there was no statistical difference between the extent of collaboration as reported by both Elementary School A, a low performing school and Elementary School B, an above-average performing school.

Table 21

Mean, Standard Deviation, and N for Participants Extent of Collaboration

	Mean	Standard Deviation	N
Elementary School A	2.9938	.55235	26
Elementary School B	2.8280	.36096	21

Levene's test of equality of error variances revealed a Sig. value of .293 which allowed us to assume equal variances in the sample (Table 22).

Table 22 below revealed the Test of Between-Subjects Effects indicated a df=1 a F (1, 45) =4.1, p=.242 and a Partial Eta Squared of .030 which indicated that statistical significance was not reached and the effect size was small. The Observed Power was low and was due to the small sample size. Future research should be conducted using a medium to large effect size of sixty or more per group observed.

Table 22

Tests of Between-Subjects Effects/Observed Power

df1	**F**	**Mean Square**	**Sig.**	**Partial Eta Squared**	**Observed Power**
1	1.405	.32	2.42	.030	.213

Research Question 3: To what extent do faculty perceive their present and desired extent of internal partnership to be collaborative in an above average academic performance school and a school in turnaround?

Question three was analyzed using a Repeated Measures ANOVA. Participants were asked to identify their current and desired extent of collaboration. Table 23 indicated for question five (a) that Elementary School A, the low performing school, had a mean of 1.517, a standard deviation of 1.517, and N=33 when indicating their current extent of collaboration. Table 23 also indicates that question five (b) showed Elementary School A had a mean of 2.64, a standard deviation of 1.496 and N=33 for their desired extent of collaboration. The results of the analysis were not statistically significant (Table 24). Elementary School A, the low-performing turnaround school, did not desire to change future collaboration from the present extent.

Table 23

Descriptive Statistics Elementary School A, Low-Performing

	Mean	Standard Deviation	N
Question 5a	2.64	1.517	33
Question 5b	2.64	1.496	33

Table 24

Repeated Measures Internal Partnership Continuum

	F	Sig.	Partial Eta Squared
Elementary School A	.000	1.000	.000

A Repeated Measures ANOVA was also completed with Elementary School B, the above-average performing school. Elementary School B, the above-average performing school, had a mean of 3.024, a standard deviation of 1.615, and N=42 (Table 25) for current extent of collaboration. Elementary School B yielded a mean of 2.929, a standard deviation of 1.6139 with N=42 for the desired extent of collaboration. The Repeated Measures ANOVA combined responses yielded an F value of 1.344, a Sig. value of .253 and a Partial Eta Squared of .032 (Table 26). There was no significant difference in present collaboration and desired collaboration for Elementary School B, the above-average performing school.

Table 25

Descriptive Statistics Elementary School A, Low-Performing

	Mean	Standard Deviation	N
Question 5a	3.024	1.6153	42
Question 5b	2.929	1.6139	42

The results indicated that neither Elementary School A, the low-performing turnaround school, nor Elementary School B, the above-average performing school, had a desire to increase their extent of collaboration.

Research Question 4: Using a frequency count, how many external partnerships are identified by the two schools?

Participants were asked to identify the external partners with whom they partnered. Teachers in Elementary School A, the low-performing school, identified a total of 19 partners. Teachers in Elementary School B, the above-average performing school, identified 71 external partners. See Table 27 and Table 28 for the partner list and number of times each was identified

as a partner.

Table 26

Repeated Measures Internal Partnership Continuum

	F	Sig.	Partial Eta Squared
Elementary School B	1.344	.253	.032

Table 27

Elementary School A, Low Performing – External Partners

External Partners	Number of Partners
AMTSI	1
Southeast Alabama Regional In-Service Center	2
University Curriculum and Teaching Departments	0
University School Leadership Preparation Programs	1
University Special Education Departments	2
Colleagues in other school districts	2
Relatives	4
Colleagues in state organizations (ALSDE, CLAS, NEA, AEA, SSA)	4
Community Colleges	3
Total External Partners	19

Table 28

Performing Elementary School B, Above Average Performing – External Partners

External Partners	Number of Partners
AMTSI	4

Southeast Alabama Regional In-Service Center	13
University Curriculum and Teaching Departments	2
University School Leadership Preparation Programs	2
University Special Education Departments	4
Colleagues in other school districts	14
Relatives	11
Colleagues in state organizations (ALSDE, CLAS, NEA, AEA, SSA)	13
Community Colleges	8
Total External Partners	71

Figure 20 and 21 displayed the frequency with which each of the schools partnered with external agencies. The possibility for interactions was never, daily, weekly, monthly and yearly. While Elementary School B, the above average performing school, listed 71 external partners as compared to Elementary School A, the low performing, turnaround school's list of 19, both schools had a similar lack of interaction with the partners. The never choice for interactions was marked far more frequently than the choices of daily, weekly, monthly and yearly.

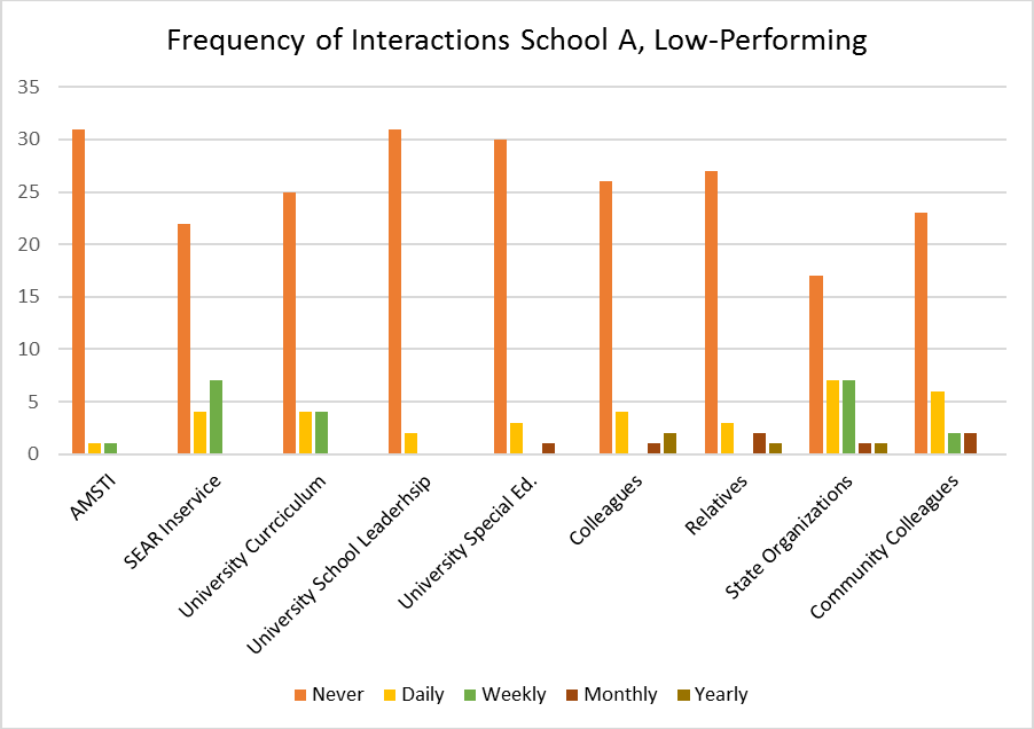

Figure 20. Elementary School A/ Low-Performing. Frequency of Interactions with External Partners

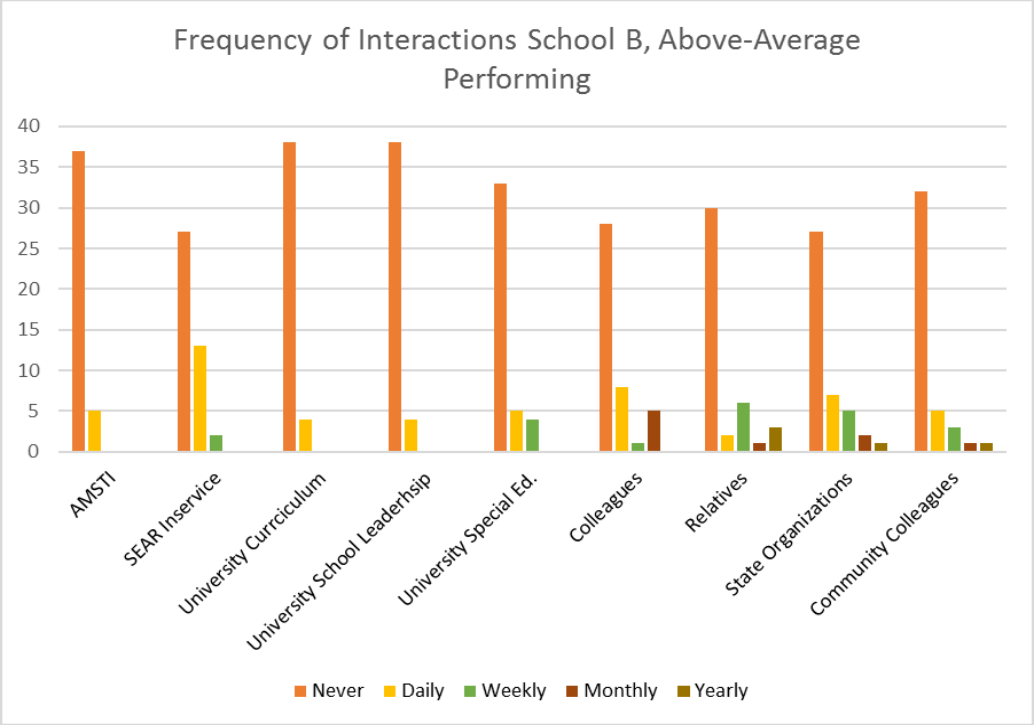

Figure 21. Elementary School B, Above-Average Performing. Frequency of Interactions with External Partners

Summary

In summary, the results indicated that the above-average performing elementary school and low-performing elementary school partnered with outside agencies with a similar lack of interaction. The SNA analysis for both elementary schools suggested weak collaborative ties for internal partnerships. Very few actors were collaborative and most of the collaboration rested with administrators or those that could be considered semi-administrators like media specialists and instructional coaches. Results from the repeated measures ANOVA's suggested there was no statistically significant difference in the extent of perceived faculty collaboration. Further ANOVA tests indicated that neither school wished to change the extent of collaboration in the future. In conclusion, SNA results, ANOVA's and external partnership frequency counts suggested no significant difference in collaboration regardless of school type. There was weak collaboration internally as well as externally in both schools. The following chapter will discuss the results and their implications for internal and external partnerships in the two participating rural schools.

Chapter V: Summary, Interpretations, Conclusions, and Recommendations

Chapter Five of this comparative case study provided the analysis of data collected and used to evaluate the extent of collaboration currently reported by faculty in two rural elementary schools in Alabama. The researcher used statistical measures such as Social Network Analysis, Repeated Measures ANOVA and frequency counts to analyze the results. The researcher examined the current density and betweeness centrality of collaboration to measure the extent of internal partnership, repeated measures ANOVA to capture faculty perceptions of their internal collaboration and frequency counts to measure the number of and frequency of interaction with each school's external partnerships.

The review of the literature included bodies of research related to the conceptual framework and the context of the study. Four lines of research were used for the conceptual framework. Communities of Practice (Kensler, et al., 2012; Wenger,2009), collaboration (Moolenaar et al., 2012), faculty learning circles and partnerships (Barnett et al., 2010; Korach et al., 2012). Because Social Network Analysis is fairly new to educational leadership studies, a section was included in Chapter Two.

Summary

Although a large amount of research existed on collaboration and partnerships, the use of social network analysis (SNA) in education is not well established. Furthermore, literature which investigates partnerships between K-12 schools, educational leadership preparation programs and other outside external education related agencies are not documented in the literature. Little attention had been paid to this area (Crow, 2016; Wallace Foundation, 2016). It provided

information that would be valuable for the schools represented in the study as well as other institutions of education. School leaders could use the findings of this study to alter or improve the collaboration in their schools as well as taking advantage of external education related agencies to increase the productiveness of their faculty and staff. The study could also assist in the beginning the conversation about factors that are critical to the success of partnerships between schools, school systems and university educational leadership programs.

The present study was conducted in two public rural elementary school settings. Elementary School A, a low-performing school, and Elementary School B, an above-average performing school. The two districts used were chosen based on the following similarities: rural fringe classification, racial make-up of student body, number of free and reduced lunch, size of student population, and socioeconomic status of the surrounding towns. Based on recent ACT Aspire results, Elementary School A, the low-performing school was in turnaround, while Elementary School B was rated as above-average performing by PARCA and was ranked in the top 1/3 statewide for academic performance. Elementary School A was one of seven schools in its district. Elementary School B was also one of seven schools in its district. Seventy-five teachers and administrators were represented in this case study.

The findings of the study contributed to the existing literature pertaining to collaboration and partnership development. Further, the findings from this study added insight to the importance of both internal and external partnerships. This study assisted in furthering the conversation about factors that are critical to the success of partnerships between schools, school systems and outside agencies such as university educational leadership and curriculum and teaching programs, as well as professional organizations.

Implications of Key Findings

Research Question 1: What is the difference in density and centrality of collaboration between an above average academic performance school and a school in turnaround?

1a. Collaboration Density

The researcher used the data generated in the SNA to analyze and interpret Question 1a, Collaboration Density. The "density" of a network referred to the percentage or number of ties within the network. Density was calculated by the number of actors minus one actor and divided by 2. Example: 42-41/2. The higher the number of ties between the actors the denser the network. Density was examined on a scale of 0 to 1 with 1 being a strong tie and 0 being no tie. According to Scott (2000), the denser the network the more easily information can travel through a network. In the present study collaboration density was measured using the 0 to 1 scale and both schools reported weak collaboration ties.

The researcher discovered during this process that both Elementary School A, the low performing school, and Elementary School B, the above-average performing school had density of less than 50%. Elementary School A had a possible density, or number of ties of 1,206 and only reached 414 of those connections. Elementary School B had a possible density of 1,806 and only reached 339 of those connections. Elementary School A, the low-performing school had a density of 0.329. Elementary School B, the above-average performing school had a density of 0.188. These density percentages indicated the ties or connections between the actors within these schools was weak and indicated that few faculty actors were collaborating.

The researcher noted that the lack of density could have been due to the absence of a set schedule to encourage collaboration. How often are these teachers put in a position to collaborate with other teachers of their grade level and others not on their grade level? A review of pertinent

literature related to school internal and external partnerships suggested the importance of collaboration in encouraging a healthy school culture. Furthermore, a collaborative school culture has been found to be important in connecting faculty to stronger instructional efforts and student achievement (Goddard et al., 2007) The "Kind of coherence that transforms mutual engagement into a community of practice requires work" (Wenger et al., 2002, p. 74). A true community of practice will not just happen and if not maintained will not last. Communities that put true commitment and time into their network will reap the best rewards. In developing these close, collaborative relationships over common interests, such as students and their achievement, the results will carry over into celebrations of personal and public achievements (Wenger, 1998).

1b. Collaboration Centrality

Centrality in this study offered a slightly different perspective from density by examining the positions an actor has in a network. Betweeness is the position an actor plays which indicated the distance between themselves and another actor. The actor that had the highest betweeness was considered a gate keeper. A "gate keeper" represents actors with a high degree of centrality. In the case of the present study, this means faculty members who played an important role in the flow of information between the other actors in the network.

The betweeness value indicated that an actor had a particularly important role in the network and was valuable in the dissemination of curriculum and instructional matters. These actions might have occurred because the actor had information about teaching strategies, it may have occurred because of the actor's connection to members of the school administration or their availability for collaboration. They may have had an important role because of experience or level of education or the actor may have been a "gate keeper" because of a relationship with

school or central office administrators. In any regard, the SNA did not explain why particular actors were gatekeepers.

Elementary School A, the low-performing school listed the Assistant Principal and Principal as the actors with the highest betweeness. Interestingly, when asked the frequency of which they go to important actors, the school librarian and the Instructional/Resource Coach were listed with the highest scores. In comparison, Elementary School B, the above-average performing school, listed Instructional/Resource Coach and the Principal as having the highest betweeness. When asked the frequency in which they go to these actors the Principal was once again named with the highest betweeness.

Although one would expect administration to have the largest amount of knowledge concerning expectations, day to day information, the researcher would not expect that the administrators would be as valuable as the Instructional/Resource Coach concerning new strategies, interventions to use in the classroom and collaboration in regards to curriculum and instruction. Instructional Coaches have primarily been funded by Alabama Reading Initiative (ARI). Recently, Alabama had restricted the funding of these positions to primarily K-3 dependent on demographics, poverty rate, and achievement level. Because of ARI grade limitations, instructional coaches must focus on early grades and may not be collaborating with grade levels beyond third grade. If that is the case, the lack of collaboration with the instructional coach may have been caused by the ARI restrictions. It is also true that ARI reduced the number of funded instructional coaches in the state because instructional coaching impact seemed questionable. The data from this study may support ARI's claim because an instructional coach only appeared one time as an important actor in the social network analysis.

In a highly collaborative environment, learning partnerships would be numerous and dense. Instead, what was noticed in both elementary schools was the lack of overall collaboration. In both schools the density and betweeness centrality measures only mentioned administrators, support personnel such as an instructional coach, media specialist, resource teacher, and an occasional member of the instructional faculty. Very few of the faculty actually expressed collaborating with their peers. With weak collaboration density ties and very few actors identified in both schools it cannot be concluded that internal partnerships were even moderately practiced. Teachers were possibly still operating in silos.

Research Question 2: To what extent do faculty members collaborate in an above average academic performance school and a school in turnaround?

Survey questions determined the extent faculty members collaborated in the above average academic performance school and the school in turnaround. A Repeated Measures ANOVA was used to analyze the survey data. There was no statistical difference between the extent of collaboration as reported by both Elementary School A, a low performing school (mean = 2.99) and Elementary School B, an above-average performing school (mean = 2.82). On a Likert scale of 1-4, with choices from strongly disagree to strongly agree, participant means fell between disagree and agree, suggesting extent of collaboration could be improved in both schools.

In order to accomplish the goal of closing the achievement gap and preventing interventions such as turnaround or closure, educators must learn to work with others to collaborate to find the best ideas, research, and resources to better serve all students. Collaboration as a mediating, indirect variable, can produce higher student achievement (Goddard et al., 2007). Recent findings show that teacher collaboration is positively related to

differences among schools in student mathematics and reading achievement (Goddard et al., 2007; Goddard & Goddard, 2015).

Due to the results indicating no significant difference in collaboration between an above-average performing school and a low-performing school administrators in both schools may want to develop a template to allow classroom teachers the freedom to collaborate with each other on matters of curriculum and instruction. Several previous research findings indicated in order for the classroom teacher to be effective they must first be knowledgeable in the district expectations and state guidelines concerning behavior and curriculum (National Policy Board for Educational Administration, 2015). With the state standards recently being changed to accommodate Common Core Standards and for Alabama, College and Career Readiness Standards, it is imperative that teachers meet to discuss the standards and to share any expertise they have in a particular area. Meeting on a regular basis ensures that each teacher in a grade level is aware of the expectations and is able to develop a timeline or scope and sequence.

Research Question 3: To what extent do faculty perceive their internal partnership to be collaborative in an above average academic performance school and a school in turnaround?

The researcher used a Repeated Measures ANOVA to determine the perceived extent of collaboration in an above-average performing school and a school in turnaround. This part of the survey had participants determine current and desired extent of collaboration for their school. Data indicated there was no statistical difference between the current extent of collaboration and the desired extent of collaboration as reported by both Elementary School A, a low-performing school and Elementary School B, an above-average performing. Elementary School A, the low performing school, had a mean of 2.929, a standard deviation of 1.6139 and Elementary School

B, the above average performing school, had a mean of 2.636, and a standard of deviation of 1.4962. Participants saw no need to improve future collaboration in their schools.

The researcher expected the participating faculty in both schools to perceive desired collaboration higher than current. One would expect faculties to want to improve collaboration because of its relationship to improving student learning outcomes (Goddard & Goddard, 2015; Goddard et al. 2007). This was not the case with either school. Both schools ranked themselves as "moderately collaborative" in the present and the future.

The researcher would encourage the administration in both elementary schools to develop a set schedule which ensures time is allotted for collaboration. Vertical and horizontal teaming would be a positive way to improve collaboration in schools. Elementary grade level teams need time to prepare, especially in times of changing standards such as Common Core. Grade level teams need time within their grade but also need time with grades above and below. Horizontal team meetings would encourage collaboration across grade levels. In collaborative school cultures teachers exchange resources and participate in social relationships more frequently (Moolenaar et al., 2012). Relationships become more symbiotic rather than cooperative. Teachers experience more polished instructional skill sets, become more knowledgeable in regards to how students learn, communicate with parents more effectively and learn many more teaching practices from their peers (Goddard et al., 2007; Pounder, 1998).

Research Question 4: Using a frequency count, how many external partnerships are identified by the two schools?

The researcher developed a chart of the external partnerships listed by each elementary school as well as a bar graph indicating the frequency in which those partnerships were utilized. When the researcher selected the choices for the survey they took in to consideration what

external agencies were available in each elementary school's district. The following table and graph display the selections and frequency of interactions.

Table 29

Low Performing Elementary School A

External Partners	Number of Partners
AMTSI	1
Southeast Alabama Regional In-Service Center	2
University Curriculum and Teaching Departments	0
University School Leadership Preparation Programs	1
University Special Education Departments	2
Colleagues in other school districts	2
Relatives	4
Colleagues in state organizations (ALSDE, CLAS, NEA, AEA, SSA)	4
Community Colleges	3
Total External Partners	19

Out of a faculty of 33, Elementary School A only selected having nineteen ties to the external partners listed on the survey. One consideration may be that the faculty are not aware that these agencies have something to offer to a K-12 setting and are not sure how to utilize them. Another consideration may be that the faculty simply were not aware they existed. The following table and graph display the results for Elementary School B, the above-average performing school.

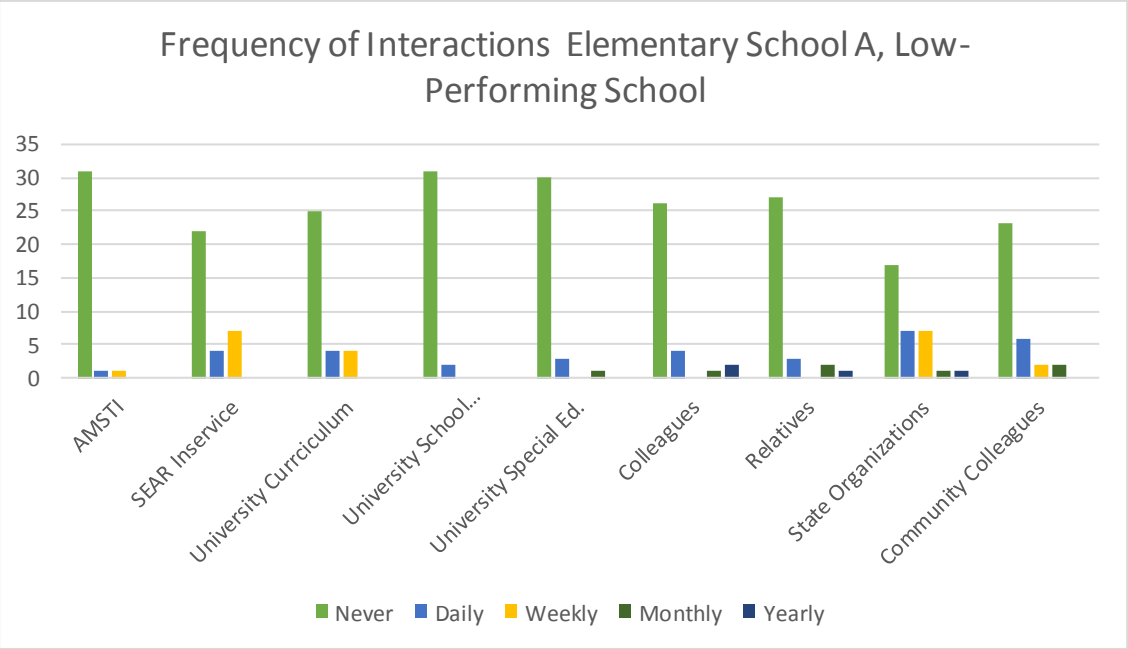

Figure 20. Elementary School A – Low Performing – Frequency of Interaction with External Partners

Table 30

Above Average Performing Elementary School B

External Partners	Number of Partners
AMTSI	4
Southeast Alabama Regional In-Service Center	13
University Curriculum and Teaching Departments	2
University School Leadership Preparation Programs	2
University Special Education Departments	4
Colleagues in other school districts	14
Relatives	11
Colleagues in state organizations (ALSDE, CLAS, NEA, AEA, SSA)	13
Community Colleges	8
Total External Partners	71

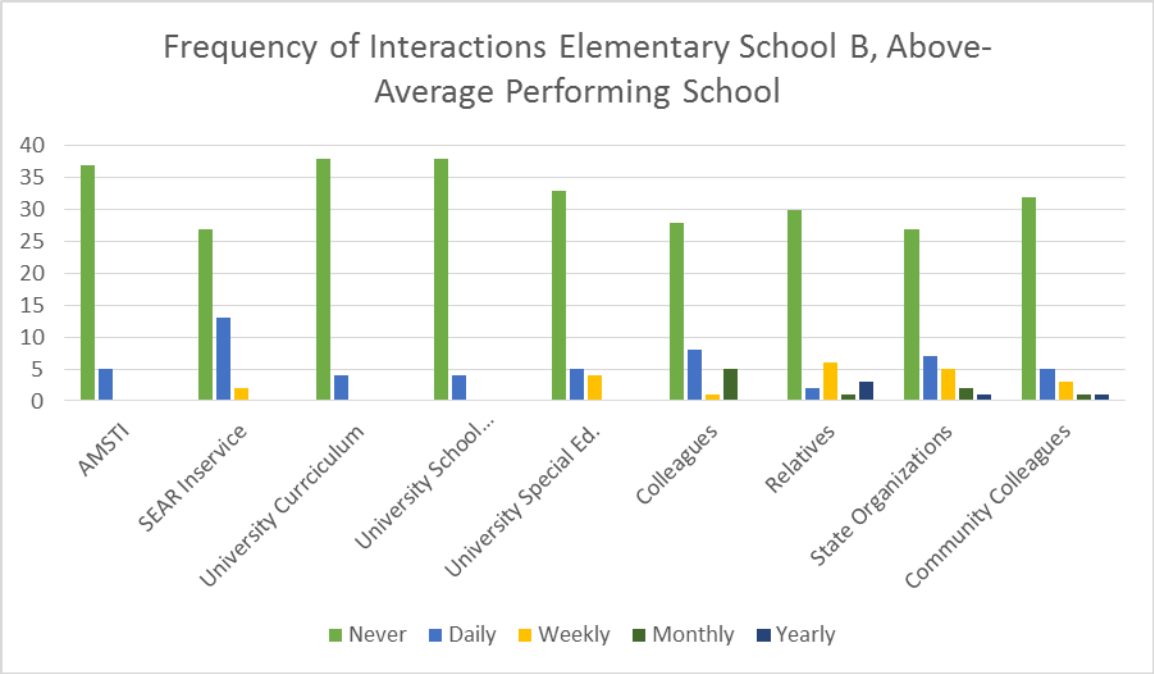

Figure 21. Elementary School B – Above Average Performing – Frequency of Interaction with External Partners

In comparison Elementary School B, an above-average school indicated having seventy-one ties. That number was almost four times higher than Elementary School A. Both schools were found in a similar environment with similar socioeconomic means. Both elementary schools had local colleges and universities who were willing to work with them and were in the school's regional area. Partnerships with higher education and K-12 school districts are based on the foundation that the partnerships will enhance the current higher education institution's practical connections as well as expose K-12 districts to the most current research. The partnership becomes mutually beneficial. Educational leadership programs and preparation are a case in point. By partnering with K-12 districts, leadership programs can prepare school leaders to best suit the context needs for K-12 districts and offer leadership students practical experiences in these districts (Reames & Kochan, 2015; Wallace Foundation, 2016).

According to Goodlad (1994) and Osguthrope et al., (1995), effective partnerships between K-12 schools and universities include a clearly defined purpose and endorsement by senior leadership in the school district and higher education institution. These external partnerships involve trust, communication, collaboration and respect for all parties. The external partnerships should be regularly attended to and nourished. The researcher found through literature that partnerships were more likely to be effective if central office personnel and other top administrators were involved and supportive of the partnership. Leadership matters and by leading partnership initiatives, district leadership signals to building level administrators and teachers that external partnerships are an important component for schools.

Conceptual Framework

This study was organized using four lines of research for the conceptual framework. Communities of Practice (Wenger, 2009; Kensler et al., 2012), collaboration, faculty learning circles and partnerships. This framework focused internal and external partnerships by examining the extent of collaboration in two elementary schools.

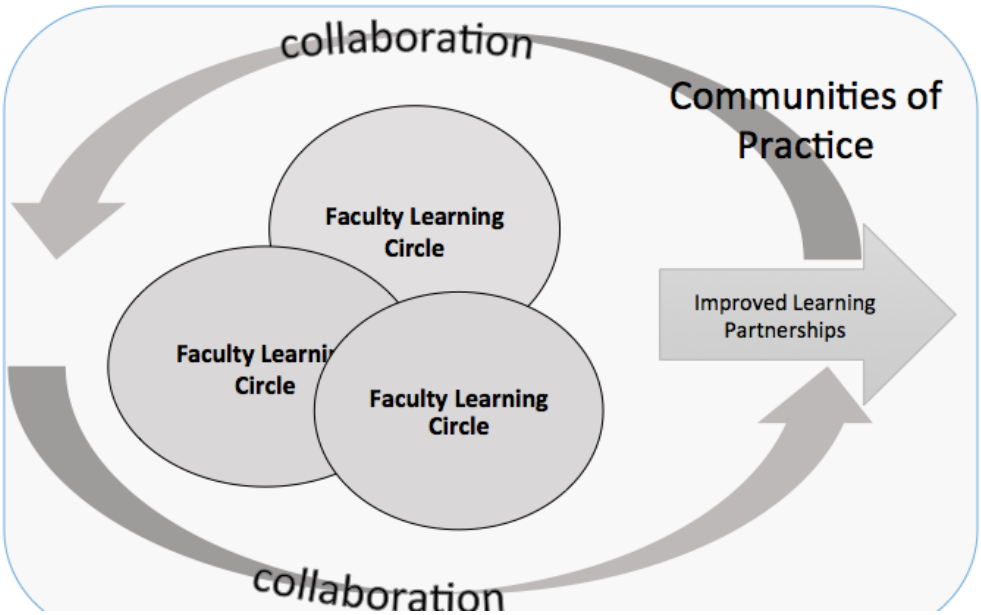

Figure 22. Internal and External Partnerships

The researcher believed that collaboration was essential to the successfulness of a school's culture. Collaboration facilitates learning by providing practitioners of differentiated abilities opportunities to discuss debate, observe, and share practices (Lave & Wenger, 1991; Levine & Marcus, 2010; Wenger, 1998). The researcher also believed the number of internal partners as well as the frequency of collaboration between those internal partners could be an indicator of the successfulness in working with external partners such as universities of higher learning. The current research, in part, supported the idea that some schools and school districts were less prepared to partner with universities and other outside agencies. The same would be true with educational leadership preparation programs at universities. "Given the unique challenges faced by public schools and colleges of education, it is essential that they join forces in forming meaningful partnerships as one means of enhancing and improving instructional effectiveness and learning outcomes for students" (Essex, 2001, p.732).

This study could be the beginnings of how those interested in partnering could attack the readiness of players to do so. It could also assist in beginning the conversation about factors that are critical to the success of partnerships between schools, school systems and university educational leadership programs. The data supported the fact that both schools needed to improve the structures and processes in the school that would encourage learning partnerships. Perhaps their external partnerships would increase in number and frequency of interaction if this were the case.

Recommendation for Future Research

This study provided the researcher with an opportunity to investigate what internal and external partnerships were present in two rural elementary schools and to analyze how the

collaborative partnership framework could be applied to school settings. The researcher was also able to explore what external agencies were available to the two elementary schools and whether or not those agencies were being utilized. While all data was found to be reliable it also revealed that neither Elementary School A nor Elementary School B were meeting their full potential for collaboration internally, as well as possibilities for their external partnerships. The findings from the present comparative case study indicated that future research is needed.

1. Future studies need to be replicated with a high performing school in comparison to a low performing school. Recall there were weak collaboration ties within both schools, external partnerships at both schools were not frequently reported and being used and there was little difference in perceived extent of collaboration between the two schools. Part of the study was designed to show differences and since few were found, the researcher feels that higher collaboration differences might be reported if the comparison became one based on starker performance indicators.
2. Additional research could be explored to focus on the role of the instructional coach. With the changing emphasis on instructional coaches being used only in K-3 and the lack of state wide funding of this positon, their role may be changing in some dramatic ways not yet recognized.
3. For future research the survey scale should be increased to a seven-point scale rather than a five-point scale to allow for more variability in the responses of the participants. Means were very similar for both schools. A survey designed with a larger scale would give participants more choices and thus increase possible variance.

4. Finally, future studies could explore other layers of the school's culture using SNA. Social network analysis can be used for multiple variables and relationships. Other examples include trust and communication structures.

Concluding Remarks

The researcher of this study was interested in examining the internal and external learning partnerships between school faculty in two rural elementary schools. Neither Elementary School A nor Elementary School B were significantly different in their perceptions of collaboration. Density and betweeness centrality were weak and indicated that very few actors in either school were collaborative. Furthermore, administrators were the primary collaborators. Teachers were not collaborative with each other. Silos still existed. Elementary School A reported very few ties to external partners and while Elementary School B had a larger number of reported external partners, their frequency of interaction with the partners was as low as Elementary School A. The researcher cannot say there is a definite link between internal collaboration and the external partnerships but does suggest this is an area for further investigation. The conceptual framework utilized supports the fact that both schools in the study need to improve the structures and processes in the school that would encourage effective learning partnerships.

The researcher sought to investigate if some schools were less prepared to partner with universities and other outside agencies. The researcher believed that a template must be put in place in all schools to encourage collaboration among teachers and staff. The researcher recognized that developing strong internal partnerships would have a positive effect on improving student learning. Developing a required template for teachers to collaborate with those in their grade-level or subject area as well as vertically collaborating with teachers both

below and above their grade level is essential to the successfulness of the school and its' culture. Having strong internal partnerships would also make it more likely to develop successful long-lasting relationships with external agencies such as local universities, regional in-service centers, local businesses, and community leaders. Further, the researcher believed that the utilization of an Instructional/Resource Coach is critical in meeting the needs of both teachers and students.

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Appendix A

Name_____ School Name

The term "learning partnership" is defined as the level of collaboration between yourself and others both in and outside of your school district. An internal partnership involves those you collaborate with in your school or district. An external partnership involves those you collaborate with outside of your school or district.

	1. Who do you go to within your internal learning partnership to collaborate with on curriculum and instruction? Mark all that apply.
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	Additional Internal Partners:
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2. **Select the frequency of interaction with whom you have an internal learning partnership i.e. collaborate with on curriculum and instruction.**					
	Never	**Yearly**	**Monthly**	**Weekly**	**Daily**
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	○	○	○	○	○
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	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
Additional Internal Partners					
	○	○	○	○	○
	○	○	○	○	○

3. **We would like to know about your internal learning partnerships with your teaching colleagues. Teachers in my building…**					
	Neither Agree or Disagree	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**
Collaborate on lessons that lead to meaningful learning	○	○	○	○	○
Have opportunities to collaborate and observe one another	○	○	○	○	○
Collaborate to provide feedback around instructional strategies	○	○	○	○	○

Collaboratively review student work to improve teaching practices	○	○	○	○	○
Collaborate together to meet the needs of diverse learners	○	○	○	○	○
Collaborate with others to implement new curriculum presented by the District Office	○	○	○	○	○
Collaborate to help me refine and strengthen my teaching practices	○	○	○	○	○
Collaborate to motivate students who show low interest in school work	○	○	○	○	○
Collaborate to develop a variety of assessment strategies for your students	○	○	○	○	○

4. **We would like to know about your internal learning partnerships with your building administrators. Administrators at this site…**					
	Neither Agree/ Disagree	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**
Are continuously collaborating with teachers to learn new ideas	○	○	○	○	○
Are willing to collaborate with teachers to take risks to make their district better	○	○	○	○	○
Disseminate information from the District Office that encourage collaboration	○	○	○	○	○
Collaborate with teachers to shape policies and procedures specific to their school	○	○	○	○	○
Are encourage by the District Office to collaborate	○	○	○	○	○
Are continuously collaborating to develop new instructional approaches to support student	○	○	○	○	○

achievement					

5. **Where do you rate *your school* on the learning partnership continuum?**					
	Not Collaborative	**Low Collaboration**	**Moderately Collaborative**	**Highly Collaborative**	**Very High Collaboration**
Current Level	○	○	○	○	○
Desired Level	○	○	○	○	○

6. **External learning partnerships involve whom you collaborate with outside your school and district. Please select the frequency of interaction with which you have an external learning partnership. Please add any agencies not listed that you feel you have a collaborative relationship with outside your school or district.**					
	Never	**Yearly**	**Monthly**	**Weekly**	**Daily**
AMSTI	○	○	○	○	○
Southeast Alabama Regional In-service Center	○	○	○	○	○
University Curriculum and Teaching Departments	○	○	○	○	○
University of School Leadership Preparation Programs	○	○	○	○	○
University Special Education Departments	○	○	○	○	○
Colleagues in other school districts	○	○	○	○	○
Relatives	○	○	○	○	○
Colleagues in state organizations (ALSDE, CLAS, NEA, AEA, SSA)	○	○	○	○	○
Community Colleagues	○	○	○	○	○
Additional External Partners					

	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○
	○	○	○	○	○

7.Indicate the number of years you have been an educator:

8.Select your position in the school					
Teacher	**Instructional Coach**	**Teacher Aid/ Assistant**	**Special Education**	**Counselor**	**Other**
○	○	○	○	○	○

9.Gender	
Male	○
Female	○

10.Ethnicity	
African-American	○
Asian	○
Latino	○
White	○
Other	○

11.Indicate the number of years you have worked at the school.	
1 – 5	○
6 – 10	○
11 – 15	○
16 – 20	○
21 – 25	○

12.What is your highest level of education?	
Bachelor's Degree	○
Master's Degree	○
EdS	○
PhD	○