ABSTRACT OF CAPSTONE

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The Graduate School
Morehead State University
March 3, 2015
WHAT ARE THE CHARACTERISTICS OF SUSTAINABILITY FOR SCHOOL IMPROVEMENT?

Abstract of capstone

A capstone submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the College of Education at Morehead State University

By

Jason Thomas Radford

Georgetown, Kentucky

Committee Chair: Dr. David Barnett, Professor

Morehead, Kentucky

March 3, 2015

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Sustainability of the improvements made in low performing schools is often the subject of the discussion during a time of change. Stakeholders involved in creating change may not know which characteristics determine sustainability or possess the knowledge to connect theory and practice. Leadership practices should focus on needs of constituents and stakeholders and should be continuously improved upon to add value to the people and the organization.

KEYWORDS: sustainability, continuous improvement, characteristics, change
WHAT ARE THE CHARACTERISTICS OF SUSTAINABILITY FOR SCHOOL IMPROVEMENT?

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DEDICATION

To my wife, Jennifer-

Without you, I would not been able to do this work.

To my children, Luke, Ava Rose, and Aubrey Anne-

Thank you for understanding when I had to study and for being such wonderful children.
This capstone would not have been possible without the help of many people.

I would like to thank my advisor, Dr. David Barnett. He provided clear direction through this entire process and answered all types of questions.

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Chapter 1

Introduction and Background of the Study

Educational leaders and stakeholders can readily identify many problems and various reasons why public education is not successful. In some instances school and district leaders are in denial or may believe that their system is functioning at an acceptable level. At times school and district leaders get caught in the rhetoric and lose focus of the issues that greatly attributes to ineffectiveness. Newly appointed leaders may instantly provide new energy that is needed; however, in some cases, they become overwhelmed with the lack of effectively functioning systems, adult-centered issues, and the past which affects the current culture of the organization. This researcher’s experience as an educational leader has found these factors contribute to new leaders finding excuses about making changes, the speed at which it occurs, or whether any changes are made. Many times school and district leadership do not have focused conversations on improvement priorities for a specific school or district. Moreover, in other cases, leaders conduct meetings and conversations that lack focus, offer solutions that are not effective, and become disenchanted. As a result, leaders tend to retreat to a comfort zone (e.g., office, less of a presence at work) whenever they encounter sizeable issues, or their motivations decrease significantly. If school and community leaders are armed with the knowledge of characteristics that define sustainability, effectiveness would sharply increase and provide a particular focus to help schools and districts overcome any barriers they may face (Sampson, 2011). This type of knowledge would allow for energies to be zeroed in on the right things and lessen the amount of burnout that leaders and teachers often face that is a barrier to improvement (Hargreaves & Fink, 2006).
There are multiple authors who have conducted research on school improvement and how progress can be sustained. Dufour and Fullan (2013) write about how learning impacts culture and how that learning can endure over time. Michael Fullan (2004) writes about sustaining leadership and the key factor it plays in the success of any school striving to improve student learning. Collins and Porras (2002) share their research about how organizations are built to last and that visionary organizations focus on the long term and keep the big picture in front of them at all times. Peter Senge (2006) has done extensive research on systems thinking and the impact it has on organizations that truly want to embrace continuous improvement.

**Statement of the Problem**

The term sustainability is not defined in the same way nor is there common language amongst those stakeholders involved with working in schools. (American Society for Quality, 2003). In various conversations talented educators discuss sustainability and all the details that they know and understand to be true. This researcher has observed that in the same conversation, that even two highly skilled educators define sustainability differently. Many educators and change agents understand sustainability when developing school improvement and strategic plans, but lack the knowledge to understand important characteristics and how to consistently apply that knowledge. Common characteristics that drive improvement and sustain results should be defined and utilized. Therefore, this study seeks to identify characteristics found in schools that demonstrate improved and sustained student improvement.

**Purpose of the Study**

It is anticipated that this study will be used to inform the work of Priority School, Focus Schools, and Focus Districts. The Kentucky Department of Education (KDE) currently identifies schools and districts in each of these categories. Persistently Low-Achieving
(Priority Schools) are identified through three years of data for both Title 1 and Non-Title 1 schools. The criteria include graduation rates below 80% for three or more consecutive years, failure to make Adequate Yearly Progress (AYP)/Annual Measurable Objective (AMO) for three consecutive years, and any identified school must be the bottom overall 5th percentile each year for Title 1 and Non-Title 1 Schools for three years in order to be eligible for Priority (Persistently Low Achieving) status (Kentucky Department of Education, 2011). Student achievement data validates the need for improvement and provides the data to determine what is not working. Assistance is delivered from the state level. Action plans are created to drive change and improve student learning. In the beginning stages of developing action plans, characteristics that will sustain improvement are not presented. Furthermore, Kentucky does not use a framework that addresses these characteristics to sustain improvement.

Focus Schools must have a non-duplicated gap group score in the bottom 10% of non-duplicated gap group scores for all elementary, middle, and high schools, individual student subgroup within assessment grades by level with a score in the third standard deviation below the state average for all students, and graduation rate that has been less than 60% for two consecutive years (Kentucky Department of Education, 2013). Non-Duplicated Gap Group Performance is defined by the percent of students performing at proficient and distinguished in the Non-Duplicated Gap Group is reported annually. The “N” count (number of students reported) is based on total school population, not grade-by-grade enrollment, thus causing almost every school in Kentucky to have a focus on gap groups.

Focus Districts have a non-duplicated student gap group score in the bottom 10% of non-duplicated student gap group scores for all districts (Kentucky Department of Education, 2013).
This study examined and assisted in determining the characteristics required for sustainability of school improvement and will provide guidance on how to implement improvement and sustainability strategies. This research will inform Kentucky educators understanding of the characteristics of improvement and sustainability since the focus of the study was schools within Kentucky. The schools selected for this study were identified as struggling in 2008 and as of 2013-14 are making significant gains in the area of student achievement. None of the schools received state assistance for improvement.

**Research Question**

The research conducted in this study analyzed steps taken by 10 middle and high schools that had not met their No Child Left Behind (NCLB) goals for three consecutive years (2008-2009, 2009-2010, & 2010-2011) and fallen into a tiered system of consequences. The current school leaders and their superintendents were surveyed and interviewed using a survey instrument that was developed by AdvancED and used with written permission. The instrument focuses on four key areas; leadership, culture, deep learning and continuous improvement in order to answer the question of;

What are the characteristics of sustainability for school improvement?

**Definition of Terms**

*Sustainability* is defined as being able to endure. *Sutineo* is the Latin word from which “sustain” is derived. *Sutineo* means to maintain (Fullan, 2004).

*Characteristics* are defined as a feature or quality belonging to something.

*Leadership* orchestrates and ensures that the organization’s mission, vision, values, beliefs, and policies are carried out and implemented with fidelity.

*Culture* deals with collaboration, high expectations for staff and students, evaluation
of staff performance, effective feedback to teachers, involvement of all stakeholders including parents and community, and being mindful about the well-being of staff and students.

Deep Learning for students and adults deals with a challenging and rigorous curriculum, effective use of student achievement data, peer coaching, capacity building through effective professional learning, engagement of families about their children’s learning, and meeting the needs of each student by knowing each student personally.

Continuous Improvement monitors and adjusts curriculum, provides a variety of instructional strategies, uses different technology, provides timely and effective feedback to students on their progress, staff participate in effective collaboration to meet all students’ needs, and multiple types of assessment are used to measure student learning.

School Based Decision Making Councils are designed to ensure that leadership is distributed amongst school stakeholders who work with students on a daily basis. The make-up of each council consists of teachers, parents, and school administrator. Each council is charged with determining school policy and making decisions that will improve student learning as required by state law in Kentucky (Littleton, 2013).

Limitations of the Study

This study is limited to only 10 schools that were identified in this study. There are many other schools that have likely determined what best practices are most appropriate for their students and been able to sustain positive results regarding student learning over time. In addition, this study is limited to collecting data and feedback (quantitative and qualitative) from principals and superintendents.
Significance of the Study

The results of this capstone project will be infused into the monitoring process for Kentucky’s Priority Schools. The implementation will occur at the state level before support or assistance ends at any of the Priority Schools. As a result of this process, effective monitoring of the identified characteristics will happen through planning to ensure student success over time. The Kentucky Department of Education, state legislators, school district leaders, and other organizations in Kentucky will be interested in the outcome of this study. The outcomes could lead to collective dialogue and consistency when used within the state depending on the clear and compelling evidence the study provides.

This study was selected because of the researcher’s many experiences working with school improvement and what it takes to implement needed changes in a school environment. In every instance where change is needed, the subject of sustainability arises. There are many instances where research and practice have been presented on how to address different needs: curriculum alignment, formative assessment, effective reading strategies, developing positive and school culture.

The result of this research is intended to support educators who not only want to be change agents in turning students around, but how to sustain those results. In addition, the research will demonstrate how systematically (regularly and consistently) and systemically (an entire system) these important characteristics should be embedded into an improvement process in the beginning. The implementation of the project will help inform stakeholders in the process for sustaining school improvement.

Through surveying school and district leadership on their improvement efforts, and how they have sustained those efforts (validation from student achievement data and stakeholder
surveys), change agents will be informed. This research is expected to inform educators and other stakeholders about the characteristics of sustainability. Through these characteristics the stakeholders will understand how they can apply them to their strategically identified leverage points of the work. While evidence is shared in a systematic way as to how the schools in this research project were identified, further research could be conducted in order to further contribute to the findings that this study produced.
Chapter 2

Review of Literature

Unsuccessful organizations receive often unnoticed warning signs along the path that leaves the organization in dire straits. Whether out of incompetence, being overwhelmed with other things, or simply choosing to do so, these signs are often ignored by ineffective organizational leaders (Senge, 2006). At other times, the organizations’ leaders may look to other similar, but successful organizations for assistance. Yet, too often the differences between the successful and unsuccessful organization render strategies that worked for the successful organization largely unsuccessful in the other organizations. Similarly, individual schools and districts often differ greatly due to the community in which they serve, local governments, and school district leadership. Additionally, the diversity of the student body socioeconomic status, cultural norms, race, religious beliefs, etc. must be considered. Further, school staff contributes to the school’s culture and provide input to leadership about the history and context of the school and the community (Hargreaves & Fink, 2000). Finally, and unfortunately, too often students are not included in providing feedback when it comes to school policies and procedures. Hence, when leaders in struggling schools and districts attempt to replicate an initiative that has been successful in another district, they find it difficult to implement. These initiatives soon transform into something different and veer sharply from the original idea. The unsuccessful implementation of any program or initiative is largely due to leadership and other stakeholders not making the connections of the initiative being considered and the context of the setting for which it might be implemented (Dawson, 2008).
**High Performing Systems**

Senge (2006) indicates several principles to adhere to when looking at high performing systems. These include:

1) Solutions that are developed today that provide increased growth may in turn provide problems in the future. For example, a rebate program is distributed to customers and product sales increase dramatically for that particular quarter. The following sales quarter shows that sales are down considerably due to the rebate program which was seen as a solution to boost sales (Senge, 2006). Low performing schools typically do not think strategically or think long term when determining next steps that lead to positive results. There is a lack of progression in leadership’s thinking and decision making.

2) Pushing hard against a system often results in the system pushing back harder “when well-intentioned interventions call forth responses from the system that offset the benefits of the intervention” (Senge, 2006, p. 58). As an example, an organization experiences a decline in revenue and decides to boost production of service. In order for this to happen quality is sacrificed and marketing pushes against its core beliefs. As a result, customers are lost in the process. When we push hard for results, we are not able to recognize that we might be part of the problem or recognize barriers created by ourselves. An accurate self-analysis of any system inside of a school is needed before taking action. This self-analysis must also consider readiness of the workers (or the system) when determining what it can handle.

3) Better results occur before a decline in performance appears; feedback loops often demonstrate a lapse in time regarding a decision. In other words, a decision may result in a positive benefit but prove to have a negative impact in the long term. “The circle of dominoes explains why systemic problems are so hard to recognize” (Senge, 2006, p. 60).
4) Organizations that choose the easier path typically take a more difficult approach. This is based on the determination of leadership to seek to resolve familiar problems, at times pursuing a bigger resolution than the problem itself due to a deficit in understanding systems. Some practitioners would refer to this as “bigger hammer syndrome” (Senge, 2006, p. 61).

5) Over time, the intervention and its provider becomes a bigger issue than the original problem itself. The idea of quick wins that lead to ultimate dependency is widely seen in low performing organizations. This type of problem is referenced “shifting the burden to the intervener” (Senge, 2006, p. 61). Any organization or branch inside the organization must be strong enough to deal effectively with its own issues.

6) When an organization or its leaders move too fast the company will compensate (the workers) by slowing down. This process leads to harm or damage to the organization. Low performing schools and their leaders do not pay attention to their culture and the well-being of their staff. When attention is not paid to staff and positive feedback is not given when earned; improvement is hindered and adults will adjust to what is not happening regarding their well-being.

7) Effect refers to indicators that a problem exists; cause refers to the part of the system that is responsible for the indicator (symptom). Unfortunately, in too many low performing schools, leadership too often focus on the effect (e.g., lower test scores) rather than the cause (e.g., educators in the building unable or unwilling to effectively educate). A root cause analysis is never performed and, as a result, the problem persists. As an example and one that will be discussed more fully in Chapter 4, a recurring theme among the principals interviewed for this research noted that there needed to be a sense of urgency, which meant
a laser-like focus. It was reported by leaders that over time improvement started to happen based on the foci of the school.

8) The areas of highest leverage are often the least obvious; small wins or improvements can have a tremendous impact on the organization and be responsible for improvement over time. The application deals with efficiency and culture (way of thinking). As an example, efficiency in work processes saves money and allows for high quality parts equaling a higher quality product.

9) Responding to a problem may cut across an organization or an agency. In this case, different types of leaders are players at the table. Each has their own view of the situation at hand but only views it through their lenses resulting in tunnel vision.

10) “Systems thinking show us that there is no separate other; that you and someone else are part of a single system. The cure lies in your relationship with your enemy” (Senge, 2006, p. 67)

Low performing schools and their leaders lack the ability to see how the important components of a highly effective school fit together in a system. In addition, they are not able to diagnose the problem correctly, implement research based strategies for improvement, monitor effectiveness, or give feedback that is timely and accurate to both students and adults. Chapter four will illustrate how school and district leaders have emerged from these inabilities and what they have done to sustain improvement over time.

**Defining Sustainability**

Characteristics are defined as a feature or quality belonging to something. Sustainability is defined as being able to maintain or endure. The ability for something to endure over time helps to identify sustainability, but it should also address how sustaining a program does not
impede the progress of another (Hargreaves & Fink, 2000). *Sutineo* is the Latin word from which “sustain” is derived. *Sutineo* means to “keep up,” but the definition can be misunderstood (Fullan, 2004). Sustainability is not linear in nature. The cyclical nature of sustainability deals with energy, creativity, and innovation and requires continual growth (Fullan, 2004). Sustainability was introduced in the field of environment by Lester Brown in the 1980’s. Brown defined a sustainable society as one that can “satisfy its needs without diminishing the opportunities of future generations to meet theirs” (Hargreaves & Fink, 2006, p. 16). The definition of sustainability is sometimes confused but centers on what lasts and endures over time; it also addresses how employee connections can assist in developing and not negatively impacting an organization (Hargreaves & Fink, 2006). However, energy is likely to be a more important factor over time regarding a high level of achievement. Fullan (2004) references Loehr and Schwartz’s argument that “energy, not time is the fundamental currency of high performance” (Fullan, 2004, p. 11). A major focus of this research lies in the sustained improvement of the schools in this research project. Given no assistance from the outside, who were these once struggling schools able to not only improve, but also sustain their improvement.

In order for time devoted to working with people in an under-performing or broken system to result in positive change, a couple of items need to be present: a patience and willingness to seek improvement, and employees’ agreement to assist in developing a system that will produce better outcomes. This process can take a long time but can be successful. The desired result in this process is to teach people how to “help themselves” so that further intervention is not needed again (Senge, 2006). Organizational change research (Collins and Porras, 2002) indicate that visionary organizations over time have been selective about what practices they do and experiment with different approaches to obtain results directly tied to their
mission and vision. These highly successful organizations attempt a lot of different things and keep what works. Collins & Porras (2002) report that these companies experience failure and it happens frequently, however they are attempting something great and not just average. These organizations eliminate what does not work and ensure their company does not deal with layers of work or processes that have failed over time. As will be discussed more fully in Chapter 4, this is one of the key elements identified by survey responders and follow-up interviews conducted as a part of this study. As an example, a school leaders stated they created the kind of culture where teachers could make mistakes, learn from it, and work together to improve. Leaders stated there was a relentless pursuit of improving student learning, thus always trying to improve professional practice.

Failing schools often share many commonalities: poor academic performance, a lack of leadership, and teachers who do not know how to ensure students learn at high levels. Each of these factors can be attributed to lack of guidance and leadership. In addition, funds may not be used in an effective way that supports the needs of teachers (Jensen, 2013). These schools lack vision, use of resources is not adequately planned, and the effectiveness of programs and personnel is not properly assessed. School climate and culture often impact attendance of school staff resulting in teachers seeking employment in a more appealing setting (Jensen, 2013). Teacher turnover in low performing schools impacts student learning and becomes a cycle difficult for schools to break. Failing schools are often located in disadvantaged geographic areas and serve students with both academic and non-academic needs. Student attendance also suffers due to the culture of the school. Discipline is often a major concern in low performing schools. Issues that arise as a result are higher levels of violence and truancy among students (Jensen, 2013). This often leads to a decline in student enrollment. When
students and families are not given options regarding the education and safety of students, a
decrease in enrollment is likely to be a result of low performing schools that also has issues with
student discipline and safety (Jensen, 2013). While not the main focus of this research, TELL
Kentucky (Teaching, Empowering, Leading and Learning Survey) data were used to learn more
about the identified schools’ working environments. This survey is made available to all public
schools every other year in Kentucky and each school is highly encouraged by the Kentucky
Department of Education to participate. The results of this examination revealed that 70-74%
agreed or strongly agreed that parents/guardians are influential decision makers in this school.
80-84% agreed or strongly agreed that those teachers are recognized as educational experts. 65-
69% agreed or strongly agreed that there was an atmosphere of trust and mutual respect in this
school. While an exhaustive comparison of these schools survey results and Priority Schools
survey results was not conducted, it is fair to say that schools identified for this project tended to
have TELL survey responses favored an overall positive school environment and an inclusive
learning climate (TELL, 2013).

Jerald (2010) indicates that there are key components to sustaining improvement. The
implementation of improvement must be reviewed carefully beyond implementation.
Observation should occur with staff and students regarding the impact of improvement
(change). It is vital that an understanding is in place that hurdles may negatively impact change,
yet these types of issues are inevitable in the process. Ensuring these components are in place is
a challenge due to the issues low performing schools face.

Jerald (2010) outlines several strategies that can be used in supporting sustainability.
These include gathering data or information on the effectiveness of new initiatives, student
achievement data, maintaining relationships and collaboration with constituents of the school or
district after beginning the turnaround work, developing a working relationship with institutions of higher education, growing potential leaders from within the organization, and delegating the responsibility of turnaround to many and not few (inclusion of others in addition to administrators).

Sustainability occurs when a school adheres to their educationally sound beliefs and vision and has the ability to work together as a team. “When it is all said and done, it turns out that sustaining improvement is just that simple— and just that challenging” (Jerald, 2010, p. 7).

**Impact of Leadership on Sustainability**

The importance of effective leadership consistently surfaced in the findings of the survey and follow-up interviews conducted as a part of this study. Interviews with superintendents clearly indicate that leadership has played a large role in student performance and how well the school is performing. Several examples through surveys and interviews illustrate leadership (both school and district level) leading the process of having a clear mission and vision. In addition the mission and vision for the school or district is re-visited consistently with school staff. Senge (2006) suggests that the truly effective leader must be aware and leverage even the minutest and too often ignored, but critical tasks. He compares the important skills of an effective leader to that of a ship builder.

The neglected leadership role is that of the designer of the ship. No one has more sweeping influence on the ship than the designer. What good does it do for the captain to say, ‘turn starboard thirty degrees,’ when the designer has built a rudder that will turn only to port, or that takes six hours to turn to starboard? It’s fruitless to be the leader in an organization that is poorly designed (Senge, 2006, p. 321).
Leadership must be constant and consistent to meet the organization’s purpose, especially in the midst of tough times (American Society for Quality, 2003). Leadership must have the ability to establish measurable goals, solid direction, and consistency of work by all employees in order to achieve the strategic results that are determined. These strategic results are directly connected to the measurable goals that have been developed.

Poor leadership is a key area that often leads to low performance. Leaders must inspire change and lead people through the change process by providing knowledge and the tools needed to be successful. First, they must focus on the purpose of why the organization exists and identify actions that lead to results based on customer and stakeholder requirements that will lead to continuous improvement (American Society for Quality, 2003). Essentially leaders must lead people and manage processes. These two pieces are crucial for success in school improvement and are connected to established characteristics of sustainability.

“Sustainability is the first and final challenge of leadership” (Hargreaves & Fink, 2006, p. 273). Leaders who seek to make positive changes and sustain performance need to understand the leadership attributes required and act based on research. Jim Collins (2001) conducted research on the different levels of leadership and explained many of these in his book; *Good to Great*. Collins (2001) lists the five levels of leadership as highly capable, contributing team member, competent manager, effective leader and an executive. These five levels are a progression of abilities with executive (level five) at the top. In his research Collins found that every organization that went from good to great had a level five leader, especially when an organization was experiencing turmoil or adversity (Collins, 2001). Level five is clearly defined as a leader who “builds enduring greatness through a paradoxical blend of humility and professional will” (Collins, 2001, p. 20). These executive leaders strive for
excellence. They are driven and focused. These qualities are then used to benefit the organization, not used for a personal gain. These leaders work towards ensuring the organization is on a path to success long after they are gone. The research conducted for this study illustrate there is that commitment to leadership by both the principals and superintendents in the identified schools and districts. A common theme that emerged through conducting interviews was the focus on developing leaders that supported student achievement. This commitment and development of leaders happened over time through consistent leadership meetings that focused on instruction.

Level five leaders are determined and are filled with the desire to produce sustained results. They are committed to doing what is necessary to make the organization successful, regardless of difficult decisions that may be ahead. They demonstrate a diligence of hard work every day and are more about being a “plow horse than a show horse” (Collins, 2001, p. 39). Interviews with superintendents revealed that their principals were diligent and consistent with their work towards improving their schools and student learning.

It must be noted that effective leaders are not content with the status quo, but rather see the need to focus on continuous improvement when the organization may be out-pacing its competitors. This drive for continuous improvement naturally leads to the need for change. Change that happens effectively will not happen if it is not “directed, coordinated, and driven by leadership” (American Society for Quality, 2003, p. 105). When time is taken to work with people in a system that is under performing or broken, positive things can happen. First there must be patience and a willingness by the adults to want to improve. The workers must agree to help and go to work to develop a system that will produce better outcomes than what it has previously produced. This process can take a long period of time, but can be successful. The
bottom line on this process is to teach the people how to help themselves so that an intervention does not need to occur again in the future (Senge, 2006). The study identified leaders who focused on culture to drive continuous improvement. This focus clearly supported students to ensure that high levels of learning took place and supporting staff to meet their needs. In addition there are high expectations for both staff and students in these schools and therefore is attributed to their positive culture.

In order to sustain improvement at the school level, district level leadership must be an active member and intentionally strive to align their systems with student needs. A case study of three districts with high student achievement, diversity and low socio-economic student demographics was conducted by Austin State University (Sampson, 2011). The following common themes emerged: 1) all students were viewed by principals, school staff, and board members in the same manner. “Children first” is the accurate way to demonstrate how each group of stakeholders thought about their students. Students were not viewed simply together as a group but as individuals. 2) Good communication occurred among all stakeholders (principals, school staff, and board members) to ensure individual needs of each student was met, communication took place among different schools, and a strong level of consistent dialogue existed. 3) The board of education placed an emphasis on attracting, hiring, and lending support to an outstanding administration and teaching staff. All three superintendents commented on the great support they received from their boards of education. 4) An overarching concept that revealed itself as a result of the study dealt with the school board collaborating to develop high expectations centered on goals related to student performance. The school board focused their energies on providing structures to empower school leaders to reach those goals. A much larger finding revealed the school board and superintendent
analyzed student achievement data and ensured a high level of accountability with school leaders (Sampson, 2011). These same themes emerged in this research study. There is a clear focus on student achievement, good communication, and clear support from the school district (superintendent). Student achievement data, survey results, and interviews confirm these emerging themes. These themes will be shared in more detail inside chapter 4.

The balance of pressure and support can be a slippery slope for leaders, facilitators and anyone responsible for change. An intentional push towards expecting performance will ensure the turnaround process keeps moving forward. Legislators and educational leaders should recognize that without providing the necessary means to assist in positive change a sense of isolation will be created. The feeling of isolation can lead to bigger obstacles that will impede learning for students. However, support without accountability may lead to the same results attributed to the initial identification of low performing schools (Moffett, 2000). “The Rockefeller Foundation concludes that schools cannot develop and sustain change that positively impacts students without a strong and supportive school district” (Moffett, 2000, p. 36). Each of the 10 schools identified for this study all show an upward or positive trend in student achievement results and they did not show a decline over a five year period. And, through survey results it is clear that leadership (principals and superintendents) have paid attention to these factors.

An examination of the support required may result in a reallocation of resources that support the newly established mission, vision, and goals. Revision of district policies, procedures, operational practices, and communication cycles an essential process when addressing needs for low performing schools (Moffett, 2000). It is vital that districts identify and focus on structures and processes that do not yield desired results. By doing so, abilities
and knowledge, can focus on establishing common goals (Moffett, 2000). District and school leadership must develop a powerful two-way communication structure that is collaborative and supportive. School principals and superintendents for the 10 schools identified demonstrate having open lines of communication. Superintendents also show and understanding and knowledge of work happening at the identified school to drive improvement. Each group of stakeholders must perceive that their input is valued and considered. These areas are essential for any progress made by a turnaround school in order for success to last over time (Moffett, 2000).

Labor unions and master agreements may present roadblocks to leaders who are implementing change (Dawson, 2008). It is important to create an active partnership with unions to support the turnaround process. Personnel decisions are likely to occur when supporting change in a low performing school. Meetings that center on the renewal of contracts or counseling ineffective teachers can create obstacles towards building a committed staff; thus, a collaborative relationship with a labor union is vital to this process.

A school that is low-performing or failing does not have the luxury of time on its side. The school leader must require a commitment by all of their leaders to commit to change in order to improve student achievement. Leaders must be careful not to feel like they have succeeded too early in the process. Early victories may build momentum, and this should be used to tackle tougher issues that a school or organization might be facing (Jerald, 2010). “In other words, sustaining success over the long term requires fierce, very intentional kind of opportunism” (Jerald, 2010, p. 2).

Leaders that focus on the quick wins or outcomes over a short period of time must continue to stay involved to maintain results (Senge, 2006). Leaders often have their personal
visions for the organization; however they never permeate into the culture and become a reality embraced by others (Senge, 2006). One person may have a tremendous vision for an organization; however if it never evolves into a shared vision, the highest level of effectiveness will be that of compliance. A deep commitment will not exist because it is not shared.

**Development of a Shared Vision through Leadership**

School leaders must develop a mission and vision statement in conjunction with staff so that they feel they are a part of the process; it should be centered on the beliefs of the school and a commitment to the future (Dawson, 2008). A shared vision should be one that people connect with:

> A force in people’s hearts, a force of impressive power. It may be inspired by an idea, but once it goes further- it is compelling enough to acquire support of more than one person. Few, if any, forces in human affairs are as powerful as shared vision (Senge, 2006, p. 192).

Visions are exhilarating. They create the spark, the excitement that lifts an organization out of the mundane. In a corporation, a shared vision changes people’s relationship with the company. It is no longer “their company”; it becomes “our company (Senge, 2006, p. 194). It has become clear that an intentional focus was established for creating a vision for the identified schools that involved all stakeholders. It is through student achievement results and interviews that affirm this work and continues to drive sustainability.

The organization and its leaders must ask its workers and stakeholders what they seek to create. (Senge, 2006). A shared vision must focus employees on common goals. People strive to connect to a shared vision to feel they are a part of something powerful and/or important. A shared vision seeks to create an atmosphere of innovation where individuals try new things and
practice risk taking. Companies that make a commitment to developing a shared vision are also asking employees to develop their own. Individual visions will not be particularly important to someone else; inspiration comes from within as employees develop their own vision for their work and organization. Through interviews with principals there was a consistent theme focusing on mission and vision and involving all stakeholders. Operation trust comes into play with teamwork where each member knows one another’s strengths and is mindful of these qualities. They use this type of thinking to build each other up and support the greater good. A talented group of players on any athletic team does not make it a successful one; working and growing together leads to success. In *Fifth Discipline: The Art & Practice of a Learning Organization* (2006), Bill Russell states:

> We were a team of specialists, and like a team of specialists in any field, our performance depended both on individual excellence and on how well we worked together. None of us had to strain to understand that we had to complement each other’s specialties; it was simply a fact, and we all tried to figure out ways to make our combination more effective. (Senge, 2006, p. 216)

It should be noted that these schools clearly focused on four areas, which are very encompassing; culture, curriculum, instruction, and assessment. Through interviews principals practiced distributed leadership that will be discussed further in chapters 4 and 5.

People will not forgo their own interests for the greater good until the vision created is a shared vision and connected to each team member personally. “In fact, alignment is the necessary condition before empowering the individual will empower the whole team” (Senge, p. 218). This type of approach demonstrates that leadership cares about employees. Leaders have an enormous amount of influence which is a valuable tool that can be used for the good of the
organization. Through the process of mentoring, leaders encourage individuals through a sharing of knowledge and skills to become leaders regardless of their position within the organization. Growing other leaders and employee development leads to an organization that is more stable, healthy, and a higher level of performance (Collins, 2001). Personal growth of individual employees should be highly regarded; additional learning and support needs to be provided to in order to train highly skilled workers. Leaders should set an example for those they lead; “Actions speak louder than words” (Senge, 2006, p. 162). Interviews with principals clearly illustrate their actions and their modeling is very important to them. This is further substantiated by superintendent responses.

Improvement is important when it comes to student learning within any school. However, the instructional leader must also address the issue of how many leaders within the school can take improvement further for the betterment of students. In his book *Good to Great*, Collins (2001) states “Ten of eleven good-to-great CEOs came from inside the company, whereas the comparison companies tried outside CEOs six times more often” (p. 10) those comparison companies were unable to maintain the same results over time. One concept leadership should apply to the organizations they lead and to those they mentor within the organization is the difference between telling time and building clocks. Collins and Porras (2002, p. 23) state, “Having a great idea or being a charismatic leader is time telling; building a company that can prosper far beyond the presence of any single leader and through multiple product life cycles is clock building”. This concept is an analogy of succession planning and an avenue for organizations to use when approaching this type of work. The leaders of the schools selected for this study are not first year principals and have been the principal of these schools for at least three years. Some have been principal for as long as 7 to 10 years. This
characteristics of sustainability illustrates the amount of time and intentionality needed to improve student performance. Findings from the study show that time is taken to build the capacity of these identified schools in a systematic way. The system is evident through district leadership that supports the schools.

The concept of clock building should be applied to measuring the overall effectiveness of the organization. Collins & Porras (2002) found a key component of great visionary organizations is that they always measure against their purpose and identified core values. In addition “visionary companies do not rely on any one program, strategy, tactic, mechanism, cultural norm, symbolic gesture, or CEO speech to preserve the core and stimulate progress. It’s the whole ball of wax that counts.” (Collins & Porras, 2002, p. 212).

The development of a vision statement and writing it down is a great first step, however the process cannot stop there. If it does, the stakeholders will not connect to it. The leader is in a better position to ask others to follow when a vision and goals have been developed through a shared process rather than in isolation (Senge, 2006). Senge (2006) defines vision, mission and core values in this way: vision asks what the organization seeks to create for the future; mission asks why the organization was created (its purpose); values ask the organization how it chooses to act. Actions should be based on the mission and put the organization on a path to achieve its vision. As stakeholders discuss a shared vision, understanding by those connected to the organization increases. As understanding grows, awareness increases and excitement builds (Senge, 2006).

It is important to note that leaders must be willing to make necessary adjustments when the data or information calls for it. In addition, the instructional leader should establish a positive culture within the school. The context of the school should always be considered when making a decision, but leaders should not let the context determine what is best for students. In
many turnaround schools, staff have experienced an improvement process in the past and believed that they can outlast a new leader or newly appointed person seeking to implement change (Dawson, 2008).

**Culture**

Senge (2006) identifies seven challenges organizations may face when trying to improve: 1) Employees pay attention only to their position. They do not demonstrate responsibility for results when cross function of offices or positions happens. It is typical for these types of employees to be disappointed with bad results but often wonder who is at fault. 2) The notion that the enemy is out there is not accurate and in fact is often found within. This type of thinking does not provide leverage for improvement. 3) When an organization views the enemy as being outside their approach is reactive. An internal review of issues that deal with problems within is the right approach. 4) Celebrating quick wins is always good for culture. However, becoming focused solely on them does not allow for sustained progress and improvement to happen. 5) Many times an organization or its leaders will need to decrease their pace of work to see the big picture and understand where the real issues reside that negatively impact performance. 6) Experiences teach people, but they typically do not experience the negative impact of those decisions or experiences. 7) It is critical that leaders do not have individuals supporting them who are extremely talented at ensuring that they do not learn or grow within their position. Organizations that fail typically have leaders who sense that something is wrong; however, they revert to how things have been done historically and become defensive. As a result, they do not work on change or improve on their own processes (Senge, 2006). Survey results indicate that all school leaders surveyed have paid attention to the culture within their schools. Principals demonstrate they care about their staff, students, and community. This is referenced multiple times in interviews with principals.
influences behavior, if those structures are not strategically focused on aligned results; then regardless of differences in the workers, it is likely the system will deliver the same outcomes. When employees determine that they cannot hold one another or their customers responsible for issues, they resort blaming the organization (Senge, 2006). Employees may suggest that the system is not fully developed and does not allow for two way communication.

The school principal must ensure that each staff member is committed to the newly created mission and vision. In addition, staff actions should be assessed against the mission and vision and re-visited on a consistent basis (Dawson, 2008). Interviews conducted for this research project found that there is a specific focus placed on mission and vision within the identified schools. An evaluation process should determine who is committed to making positive changes happen for students. One principal noted the importance of assessing teacher performance and making personnel decisions before a teacher reaches tenure against what is best for students and what the school community requires. Tenure in Kentucky for teachers is earned after four years of service and provides stability through a continuing contract instead of a limited contract that is year-to-year prior to them reaching tenured status. Teachers need to have the disposition and skill to support the school in reaching the established vision. In order for principals to properly evaluate their staff, they need to become acquainted with them by spending time in their classrooms. This recommendation is about having the right staff doing the right things for the school’s students.

Employees in learning organizations understand that learning is not about acquiring more knowledge, but a desire to expand on the knowledge needed to reach strategic results. Employees with a desire to learn operate from a high end regarding personal mastery. This type
of learning is not a destination but a journey or a process and requires dedication. These individuals can also readily identify their shortcomings and deficiencies.

Employees who operate from a high level of personal mastery are more uniquely committed, take a more proactive approach, hold their work in high regard (pride), and learn at a rapid pace. Organizations that employ these individuals encourage growth in order for their company to thrive and operate at higher levels. Personal mastery should be fostered; it should not only involve the work that people do every day but also their personal lives. When this occurs people will feel whole, and everybody wins (Senge, 2006).

Personal visions must be intrinsic (Senge, 2006). In general, people do not understand the concept of vision. People have personal goals or aspirations. Often, when people are asked what they desire the response shifts to what they would like to dispose of in their life (Senge, 2006). Organizations who want their employees to pursue personal mastery embrace the notion that they will create a vision for themselves, ask good questions, have integrity, and inquire when they disagree with a proposal or work assignment; all of these pieces are norms and accepted. The concept centers on ensuring the culture of the organization tests effectiveness and does not veer away from tough questions or answers. This was brought to life through principal interviews when one principal stated “You hire the very best teachers and then you listen to them and what they have to say” illustrating that leadership values staff input and advocating for ownership by school staff.

Quick wins that are clearly apparent early in the process of turnaround can propel the work of the school staff and enable a positive flow of energy that will support student achievement amongst all stakeholders and overcome the obstacles of change (Dawson, 2008). Principals should determine which improvements can be made without approval from school
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staff or the community. These improvements may not directly impact student learning but may have a tremendous impact on climate and culture within the building. These changes can lay the foundation for the school to reach its new vision (Dawson, 2008). One example might be to consider effective use of time that supports a professional learning community by providing common planning time for teachers to meet. With proper training and capacity building, this process can ensure students’ learning needs are being met. Teachers must stay focused on the goals that have been developed. School leaders need to be strategic and analyze correctly because an early win that is not viewed as successful will damage the culture and climate. This type of action may be deemed as an action taken by school leaders that did not work (Dawson, 2008). This can create issues for the school leader and with building momentum.

School districts should establish a two-way communication process amongst all stakeholders (school district, community, staff, school board, principals, and teachers) (Moffett, 2000). The culture of open and honest dialogue is necessary to promote student learning. “More than almost any other factor, the sense of a professional community in schools enhances student achievement” (Moffett, 2000, p. 36). As district leaders work to create systems that support reform, they must recognize they are in the business of culture building. Research and practice over time have demonstrated that a positive school and district climate is absolutely essential. Developing processes and structures is necessary; however, more work is needed in order for change to endure over time. Re-tooling the culture about professional practice around teaching and learning is critical (Moffett, 2000). Context matters and has to be taken into consideration when the ultimate goal is to increase student learning. Identifying and understanding the context can greatly impact the systems that are built to support teachers and impact students. Context can be leveraged to connect with staff and their needs. Leaders must
consider the likelihood of creating learning environments for students when the school climate and culture do not promote a positive learning environment for teachers (Moffett, 2000). The level of support that teachers receive during the school turnaround process will be a large factor in determining if successful change happens. Professional learning is essential to support student learning. Identifying and understanding the needs of both students and staff is essential. In addition, school leaders do not recognize or understand how intentional efforts have to be in order to prepare staff about change and what to expect (Moffett, 2000). These processes became clear that they were present inside of the 10 schools identified along with district leadership. Interviews revealed that the superintendents are closely connected to instruction in each of these schools. In addition, both principal and superintendent groups discussed the importance of focusing on instruction; such as, common language about instructional strategies, meeting the needs of school leaders, teacher leaders and supporting professional learning communities through use of data. All of these self-reported topics illustrate a clear two-way communication process.

Day (2007) recommends several steps to turnaround low performing schools and builds capacity. The first step is to improve the learning environment; retool the school environment to make it inviting to all stakeholders. The second step is to ensure safety. There should be assurances and clear evidence that the school is safe from any dangers that would be detrimental to students including safe playgrounds, secure exit doors, and sound physical structures. Establishing a student behavior plan and increasing student attendance is the third step. Practices that support positive behavior should be developed; improving attendance should be a focus in order to increase student achievement. The fourth step is winning the confidence of the community. Leadership must make every effort to meet with parents and the members of the
community to begin to change the reputation of the school. Each school principal interviewed readily admitted it is a continuous challenge to engage more parents and community members into the school; however, each one interviewed stated clearly their efforts are not deterred even though it is a challenge.

Schools that are low performing have attempted the “use of model schools to re-culture, not just restructure the system” (Hargreaves & Fink, 2000, p. 33). In order for rich and powerful learning to occur, the work happening in a low performing school has to be different. Schools will attempt to make this type of change happen with a “shock-and-copy strategy” (Hargreaves & Fink, 2000, p. 33). Stakeholders in a school district often feel that district leadership force practices and policies modeled after a school that has experienced success with change. This type of practice causes stakeholders to become disgruntled and not supportive of new practices. Implementing change by using the strategies and techniques from another school or district without first considering the local context and other factors is not recommended (Hargreaves & Fink, 2000).

Whole systems change involves re-landscaping the entire culture for the workers. Changing the culture is difficult, but possible. DuFour and Fullan (2013) noted the difficulties often encountered with reshaping a culture. Little things matter and so does the environment in which they happen inside a school culture (Fullan, 2004). “If systems need to be changed, you need to increase the purposeful interaction between and among individuals within and across the school system” (Fullan, 2004, p. 4). When leaders are aware of the current culture and climate of their school they are ready to ensure progress towards vertical and horizontal alignment are happening to support the mission and vision of the school (Barth, 2013). School leaders must know the pulse of the building at all times. If sustainability is to occur, a focus needs to be on
energy levels, both high and low use. School culture that emphasizes collaboration in a positive way will see better progress and be able to stay away from the impact of negativity. Great effort and long hours do not have as much of an impact on educators as “negative work.” (Fullan, 2004, p. 11).

Each visionary company faces difficult times and negative experiences (Collins & Porras, 2002). Nevertheless, companies can overcome adversity and show resolve when adversity happens (Collins & Porras, 2002). Improving culture means changing the core beliefs that people have aligned with in order to do their work or be an active member in the organization (DuFour & Fullan, 2013). Core values can vary from one organization to another amongst those who are the most successful or visionary. However, visionary companies do not stray far from their identified core (Collins & Porras, 2002). This was illustrated by interviews with principals indicating they always visit their mission and vision statements in every meeting they have with school stakeholders.

Deep Learning

It is suggested that school reform can become three dimensional by focusing on the “touchstones of change” (Hargreaves & Fink, 2000, p. 33). One of these is a “focus on deep learning, not just on superficial performance results” (Hargreaves & Fink, 2000, p. 33). Families in a low socioeconomic status are at a disadvantage by not having needed resources or having a voice compared to families in a higher socioeconomic status. In communities with low performing schools, families are not part of changes made to the curriculum or consulted in how those changes will be implemented. It is because of this disconnect that schools are not able to deeply impact the learning of their students. There is an absence of two-way communication. Increased student performance may not always indicate that students truly grasp a concept or
master a standard (Hargreaves & Fink, 2000). Learning that is rich and robust needs to happen for students and adults that work within the learning system supporting students. “Deep learning is cultural and emotional” (Hargreaves & Fink, 2000, p. 30). Learning in the classroom must connect to each student’s life. If this connection is not made, the depth of learning will be limited (Hargreaves & Fink, 2000). School staff must develop relationships with their students, and each student should have at least one adult advocate in their school. These relationships demonstrate to students the school has compassion for them and cares about them as an individual (Hargreaves & Fink, 2000). When strong bonds do not exist between teachers and students, emotional understanding and learning will suffer. In school settings where learners are diverse and demanding, all educators must respond to each student’s needs and make the connection to their personal lives. In order for students to reach proficiency, all stakeholders must make connections with each other (Hargreaves & Fink, 2000). It is clear through survey results and interviews that principals worked hard to focus on what is best for students and strive to meet each student’s needs. Survey results indicated work is done for a system to be in place for students to have adult advocates, but interviews suggest that these systems are only in a development stage.

The learning educators experience is determined by the landscape in which the teacher works (e.g., their classroom). School climate, culture, and the community influence the classroom environment. All of these factors have a direct impact on a teacher’s approach to their work and mold their understandings (Temperley, 2008).

The effectiveness of any professional learning for teachers should be measured by the impact on outcomes for students, not whether a teacher has become proficient in a particular skill. Professional development must be connected to the needs of the educator and students.
Teachers must feel supported when trying new strategies that they acquire as a result of professional learning. Without support, its impact will be less and become negative; in turn school culture will suffer.

Educators must possess the ability to assess student knowledge (ability and comprehension). This is a pre-cursor to being able to meet each student’s individual needs. The application of “theory and practice” should be woven into any professional learning. The blend of these two components strongly supports any decision that impacts the work of teachers in the classroom (Temperley, 2008).

“Information about what students need to know and do is used to identify what teachers need to know and do” (Temperley, 2008, p. 13). In order for teacher practice to improve and their knowledge to grow, they need to embrace a deep learning process. This means educators will need not one opportunity, but multiple, in order for a new practice to be carried out in the classroom effectively. “Learning is cyclical rather than linear, so teachers need to be able to revisit partially understood ideas as they try them out in their everyday contexts” (Temperley, 2008, p. 15). Teachers must be committed to the learning process for it to be effective, and it is the responsibility of leadership to ensure that teachers understand their purpose.

Research conducted by Temperley (2008) indicates that learning happens best with activities that are significant to the learner and provided based on the needs of the teacher and student. Activities viewed as important will significantly impact student learning much more than educators registering for professional learning on their own. Educators are likely to disregard new concepts that do not align with their own, however being a member of a collaborative team allows for an exchange of ideas and a discussion of research that has been proven to improve practice. “Existing assumptions about curriculum or about what particular
groups of students are able to learn can prevent teachers from examining how effective their own practice is in promoting student learning” (Temperley, 2008, p. 20). Temperley (2008) continues, “Sustained improvement in student outcomes requires that teachers have sound theoretical knowledge, evidence-informed inquiry skills, and supportive conditions” (p. 24). Additionally, Temperley (2008) notes that “Sustainability depends both on what happens during the professional learning experience and on the organizational conditions that are in place when external support is withdrawn” (p. 24). For improvement to be sustained, educators must develop and enhance their own skills and improving their learning. In order for this to occur, they need to effectively collect evidence of student learning and connect the research with their own practice. “Teachers with these crucial self-regulatory skills are able to answer three vital questions: Where am I going? How am I doing? and Where to next?” (Temperley, 2008, p. 24).

Professional development provided by those outside the school is limited. It is up to school-based decision making council (SBDM) to support teachers’ new learning, facilitate it into practice, and support them in the inquiry process over time. SBDM councils are required by Kentucky law that is comprised of the school principal, teachers, and parents. Their roles include providing oversight to school allocated funds from the school district to provide needed staff positions to support the needs of the school, support professional learning needs, approve school improvement plans, safety plans, hire the principal when a vacancy occurs, and monitoring student learning. These councils are required to meet regularly throughout the school year, but must have a quorum in order for action to be taken on behalf of the council.

Teachers should analyze student data on a consistent basis and this practice should be embedded into the culture. The school principal must be seen as the instructional leader of the school. Professional learning should happen as a result of the analysis of data. It is important
that school leadership recognize that teachers may be afraid of what student achievement data might reveal about their own teaching (Dawson, 2008). Feedback should be given after consideration of the analysis of data to determine how teacher practices should be impacted. Students and teachers must be observed and given feedback in order to improve instruction. Principals should establish high expectations, ensure staff understands what exemplars of student work look like, provide feedback on these items, and praise school staff when it happens. Most principals interviewed indicated the value their schools place on analyzing student data and all staff knows where students are in their learning progression.

The current educational system poses different issues for leaders than those faced just a few decades ago. Schools leaders are responsible for more assessments. There is an emphasis on standards and curriculum, and accountability is at an all-time high. Professional learning for all educators is important and must be connected to a purpose. Without a connection to the purpose, teachers and leaders will fail to be engaged with the content of the professional learning which is a disservice when these activities are centered on improving student learning (Senge, 2006). Learning has readily become known as simply absorbing information; however, this is only part of the process. Deep learning focuses on what it means to be a person. Through deep learning, we can re-image who we are. People are able to do things that they were never able to do before. Educators’ perception about the world around them will change when deep learning occurs (Senge, 2006). The foundation of education is life-long learning and is not a destination but a process. When the majority of people buy into this belief, schools, classrooms and learning itself will be different (Senge, 2006). Leaders, teachers, and all staff must intrinsically want to grow and learn more. When these beliefs are present inside of a school amongst the staff, effective professional learning (professional development) can happen.
At the school level, professional development has traditionally focused on ensuring improvement occurs (Dawson, 2008). In the area of low performance Moffett (2000) suggests that at times professional learning is not determined in a systematic way to meet school or individual teacher needs. Many professional development sessions are not designed strategically and consist of a one-size fits all approach with no follow up to the professional learning opportunity that was initially presented. Ineffective schools and organizations tend to follow this pattern of work when attempting to support learning for school staff. When using the same methodologies and routines that have been used in the past, organizations can only improve to the level that matches their strengths. In low performing schools and districts these strengths are usually minimal. Moffett (2000) also notes that in determining and defining the characteristics of sustainability, a new approach needs to be created to determine how professional learning is designed, delivered, and continuously supported. One principal indicated their school sought out to educate the whole child focusing on five areas. Those areas are; academics, bringing parents closer, stretch their students’ learning, make emotional connections and character education.

“Sustainable education speaks to the development of deep learning for all that spreads and lasts, in ways that do no harm to and indeed create a positive benefit for others around us, now and in the future” (Hargreaves & Fink, 2006, p. 17). Making adjustments to structures, processes, and effective practices requires learning, trial and error, and possibly the need for uncomfortable discussions with educators. People evolve, but students and adults learn together (Fullan, 2004). Educators should connect with students by taking time to know them and who they are. When this happens alongside effective teaching, true learning can occur. Probing
deep into a problem together in a positive collaborative environment further supports deep learning. The avoidance of negativity and dysfunction is essential for effectiveness.

**Continuous Improvement**

The third touchstone deals with making necessary changes for students and turning around a low performing school through policy development and revision. It is critical when dealing with change that “treating the wider policy context as integral to school and district reform efforts” is done (Hargreaves & Fink, 2000, p. 33). Change will not endure without close attention given to the development of policies to support practice (Hargreaves & Fink, 2000). Positive change that is enduring and impacts culture is not attained by demanding it happen or by simply implementing something someone else has done without considering the local context, or just by obtaining some quick wins (Hargreaves & Fink, 2000).

Understanding feedback and how decisions or changes made in an organization strengthens or weakens it captures the essence of systems thinking. The feedback that is collected, analyzed, and acted upon will reveal those actions that occur over and over (positive or negative) (Senge, 2006). Two types of feedback exist: “reinforcing (or amplifying)” that fosters growth (positive or negative) and “balancing (or stabilizing)” that operates whenever there is goal-oriented behavior (Senge, 2006). An example of reinforcing feedback is when an opinion a teacher has of a student affects the behavior of that student. Feedback loops almost certainly will have some type of delay, and if the feedback is not captured after the delay has happened in order to allow for proper response, the result can be negative. Through surveys and interviews it is clear that constant feedback is given to teachers about their professional practice. In addition, resources are always provided to meet teacher and student needs in order to improve student learning.
When change is needed, balance is also a factor. This may mean there are at least one or more processes that need to be addressed. Change is not easy and is threatened when the traditional way of doing work is threatened. This particular ideal is rooted in leadership who has the control to encourage these types of behaviors (Senge, 2006). Principals indicated in their interviews that they first had to build relationships and in some cases re-establish those professional relationships in order for professional practice to improve. Balance is often impacted by people. A staff reduction happens and the organization wonders why costs have increased or production has decreased. The staff experience burnout, culture declines, and costs may have risen due to more man hours required to do the same amount of work with fewer people (Senge, 2006)

“Don’t push growth, remove the factors limiting growth” (Senge, 2006, p. 95). In order to deal with limits that are placed on growth in an organization, the leverage point must be identified. Leverage will typically be found in the balancing loop. “Solutions that address only the symptoms of a problem, not fundamental causes, tend to have short-term benefits at best” (Senge, 2006, p. 103). That is, without dealing with the root cause(s) of a problem, long-term and continuous improvement is stifled or non-existent at all.

Excellent organizations can be defined as building quality into its people through a continuous improvement approach. “That approach includes continuous education and on-the-job training that zeroes in on the organization’s core values and core competencies” (American Society for Quality, 2003). Average or low performing organizations do not typically identify major leverage points of work for any of their workers. These leverage points should be connected to what the customers expect and require. A fundamental element that companies face is a lack of alignment between creating a product and the product itself based on
requirements (American Society for Quality, 2003). The mission and vision is built around those requirements and contains the core values and beliefs developed by the organization’s leadership. Workers can then identify what their core processes should be through this alignment process with the help of leadership. Those core leverage points should be understood and connected to the workforce so that employees are asked work in a new way that is aligned to the strategic plan (Park, 2013). The leverage points should have measures of success identified to ensure there is high quality. It is clear that school and district leaders that were part of the research study place a high value on their teachers and staff. In addition, they continuously build capacity within to grow professionally.

Strategic plans often do not provide intended improvements due to a mismatch between the plan and the real work of the organization. An important factor for school leadership is to drive improvement and to have a well-designed plan that aligns with the critical components over which the school will be assessed. Many improvement plans do not address core leverage points, success measures, or identify what the outcomes and leverage points for continuous improvement should be (Park, 2013). If an organization does not go through change cycles and continuous improvement, it will continue to yield the same outcomes (Isaacson, 1992). Interviews with school and district leaders did not reveal an intentional focus on their strategic plan, other than leaders all noted they had a firm grasp of what their next steps were through analysis of their data. This will be further explained in chapter 4.

Goals should be established, success measures should be identified, and data should be analyzed to determine progress toward goals; this process is used to improve instruction (Dawson, 2008). Goals should be realistic and consistently monitored. It is a continuous process that is focused on student achievement. The plan developed by school leadership must
be understood by all stakeholders including community members. Communities that contain low performing schools already recognize that the school is not a positive place for students or their learning. In this type of setting community members do not believe the school will actually raise student achievement. These founded beliefs strengthen the need for all stakeholders to be involved with improvement planning and clearly outlined goals focused on student learning (Dawson, 2008).

Individual leaders, no matter how charismatic their personalities or how well they see into the future eventually die. Innovative products or services developed by leaders sometimes become less effective. Visionary organizations continue to excel over time and experience many changes to their product or service. Sustained results were accomplished under the direction of different leaders. These types of organizations have achieved excellence; they have earned the respect of their peers and other stakeholders. Their reputation precedes them and it is understood how these companies have left an imprint on the industry which they serve. The reputation, achieved excellence, and sustained performance of these visionary organizations are attributed to the development of leadership from within the organization.

Senge (2013) describes metanoia is a shift of mind. For Greeks, it meant a fundamental shift or change, or more literally transcendence of mind. To understand the meaning of metanoia is to understand the “deeper meaning of learning” (Senge, 2013). Continuous improvement is not a destination; it is a journey and organizations understand this when they make the commitment to this process. When an organization lacks focus on continuously making improvements, the system will not experience sustainability (DuFour & Fullan, 2013). A key component to sustainability rests with continuous improvement. An organization must connect their systems to the mind set of continuous improvement; the organization’s alignment
of work is significantly important. The linkage of systems and continuous improvement must be connected to the people (workers and stakeholders). When systems and continuous improvement is connected together a positive transformation can take place (Fullan, 2004). This constitutes a different way of thinking than the approach has been over a long period of time. It appears through interviews that school and district leaders each embraced the notion that change needed to occur and a shift in their school’s thinking had to happen.

There are lessons of alignment that impact effective continuous improvement. Leaders sometimes assume that employees see the 10,000 foot view and understand the entire landscape; however, this is usually not the case. Paint the entire picture for employees; often they do not see the big picture because they are on the ground doing their work every day (Collins & Porras, 2002). Educators need to understand how work is connected; disorganization should be avoided. Educators are much more effective when they see alignment and make those connections. Disconnection happens when random acts take place in schools or organizations. Leaders must know their reality but be true to their values. Eliminate misalignments that can push a company away from its core beliefs and negatively impact progress towards strategic goals (American Society for Quality, 2003). Adapt the work of “and” and avoid “or” which illustrates working towards having change “and” stability rather than change “or” stability (Collins & Porras, 2002). As previously stated, it is the notion of consistency around preserving the core beliefs and stimulating progress that has guided the most successful visionary companies over time. These principles have to be aligned to the identified core values for continuous improvement to be effective. Schools and districts must identify their core processes after alignment happens and continuously improve and provide the necessary professional learning that supports the attainment of the desired results.
Chapter 3

Methodology

This is an action research project conducted in 10 schools across Kentucky and in 7 different school districts; of which 6 are rural and 1 is suburban. In an education setting action research is commonly used to provide answers to practical issues about which educators and other stakeholders readily seek answers. It is this researcher’s intent to bring to light the findings of this research study and allow the results to be used in a practical way to ensure school improvement happens strategically.

The goal of this research study was to determine the characteristics of sustainability for school improvement. In order to reach this goal; schools that did not meet Adequate Yearly Progress (AYP) for three consecutive years (2008-2009, 2009-2010, and 2010-2011) and demonstrated improvement without state assistance on the Kentucky’s new accountability system identified as being proficient or better in 2011-2012 and 2012-2013. Through analysis of all of the possible schools, 10 were identified, six middle schools and four high schools from different parts of the Kentucky. After receiving permission to use their survey, the school level survey developed for school staff by AdvancEd was used to collect data from principals and superintendents in the identified schools and districts. AdvancEd is a “non-profit, non partisan organization that conducts rigorous, on-site external reviews of P-12 schools and school districts. AdvancEd is an accrediting agency that works around the globe” (AdvancEd, 2014). The survey contained 38 questions that was distributed to 17 school and district leaders (principals and superintendents). It is important to note that one school district contained four schools identified for the study. That superintendent was asked to complete a survey for each school focusing only on an individual school when completing the survey. The collection of
survey responses lasted two months and this researcher was able to obtain a 100% response rate. In addition to collecting survey data, interviews were also conducted. The goal of the researcher was to interview 50 percent of the identified participants (even number of principals and superintendents). The reason for this mixed methods approach was to ensure the study was able to identify the cause for such significant improvement and maintain objectivity as much as possible.

**Statement of the Problem**

The purpose of this study was to determine the characteristics of sustainability for school improvement. It is anticipated that these characteristics could inform educators and change agents alike who are focused on improving student achievement in low-performing schools.

**Local Context**

District 180 resides at the Kentucky Department of Education. It is a specific organizational unit that is designed to provide highly skilled leadership, support, and education assistance for low achieving schools through the use of Education Recovery Directors, Education Recovery Leaders, Education Recovery Specialists, and Intervention Specialists. A primary function of District 180 is to implement regulation about selection of persistently low achieving schools (Priority Schools), monitor progress, and provide support and resources to schools and districts we serve. District 180 personnel often talk about sustainability and require that identified schools and districts have the meetings, conversations, and develop a plan. While doing more of a review of internal documents, District 180 personnel do not have a sustainability plan with identified characteristics that ensure everyone is using the same language that focuses on the work (Quality Tools for Priority Schools).
Research and Design

The Commonwealth Accountability Testing System (CATS) began in 1999. The CATS results were used to select the schools identified for this study. CATS has subsequently been replaced with Kentucky’s Unbridled Learning assessment and accountability system. The CATS system was made up of two types of tests. The two tests were the Kentucky Core Content Tests (KCCT) and the Comprehensive Test of Basic Skills, fifth edition (CTBS/5). KCCT was a criterion referenced test and was given to grade 4, 5, 7, 8, 10, and 12. Students in grades 4, 7, and 12 took part in writing assessment as well as a writing portfolio that was collected over time to be assessed. Student performance was divided into four achievement areas; novice, apprentice, proficient, and distinguished. KCCT divided novice and apprentice into further categories by addressing low, medium, and high levels. KCCT was given in reading, math, science, and social studies. CTBS/5 was a nationally normed-referenced test given to students in grades 3, 6, and 9. These grades were tested in reading, language arts, and math (Kentucky Department of Education, 2011).

Unbridled Learning is the result of a reform on Kentucky’s Accountability system for public schools. Described in Senate Bill 1 that was passed in 2009, Unbridled Learning includes four major components. The four areas consist of; next generation learners, next generation professionals, next generation support systems, and next generation schools and districts. This accountability model also measures graduation rates and student growth. Student learning is measured by assessing; reading, math, science, and social studies in elementary and middle grades. Writing is also assessed in elementary, middle and high school. End-of-course tests for high school students are currently administered to students in reading, math, science, and social studies. Kentucky adopted the Common Core State Standards. Kentucky refers to
these standards as the Kentucky Core Academic Standards (KCAS). The National Governor’s Association (NGA) and the Council of Chief State School Officers (CCSS) both sponsored these standards for reading, writing, and math. The collection of tests to measure KCAS is referred to as Kentucky Performance Rating for Educational Progress (K-PREP). These collection of tests are both criterion and norm referenced tests that measure performance at both the state level and national level (Kentucky Department of Education, 2011).

The design of this study identified schools that were low performing and then made adjustments to their practices and policies and are now performing well based on state summative data (K-PREP). Specifically, the research study identified Title 1 Schools in Kentucky that did not make Adequate Yearly Progress (AYP) under No Child Left Behind (NCLB) for 2008-2009, 2009-2010, and 2010-2011. This is significant as Kentucky was granted an Elementary and Secondary Education Act (ESEA) Waiver starting for the 2011-2012 school year. The waiver allowed Kentucky to waive reporting on Adequate Yearly Progress (AYP) and use the Unbridled Learning Accountability Model outlined in Senate Bill 1. The last three years of reporting on NCLB in Kentucky were; 2008-2009, 2009-2010, 2010-2011. An unduplicated count reveals that there were 1,176 different schools identified as not making AYP in the years listed. That list was narrowed to 136 schools that did not make AYP for each of those three years combined. Then, those schools that did not make AYP for those three years, where reviewed to see they type of overall progress the schools are currently making under the new accountability systems. The list of 136 schools was narrowed to 10 by screening to see which of the schools had subsequently improved and was making high progress, or was labeled as proficient or distinguished. These school leaders were surveyed and asked to respond to a series of questions to determine steps taken to drive improvement and what was
being done to maintain improvement. In addition, interviews were conducted as a follow up to surveys that were distributed. This resulted in a mixed methods process that helps yield a high level of accuracy.

The research for this study used a mixed methods approach (Creswell, 2008). It focused on explanatory design using a three step approach (Maxwell & Mittapalli, 2008). First, quantitative design to collect data was used via a survey instrument of school principals and superintendents. Survey data determine those responses that showed trends or patterns (low and high ratings) and helped identify where patterns surfaced amongst leaders. Second, through analysis of those data questions were developed and subjects identified for the qualitative process via interviews that allowed the subject to expand on their answers. The quantitative portion of the study is centered around the 38 survey questions. Quantitative research collects and presents data in a numerical format rather than a narrative one (Donmoyer, 2008). In chapter 4 the findings will be reported using charts and graphs to illustrate the five themes identified in chapter 2; leadership, culture, collaboration, continuous improvement, and deep learning. The qualitative portion of the study will broaden the analysis of the survey data allowing a comprehensive discussion of the findings or infer limitations to this research study.

Qualitative research is any research that uses data and does not specify ordinal values (Nkwi, Nyanmongo, Ryan, 2001).

**Survey Instrument**

The survey instrument used with permission belongs to AdvancEd. AdvancEd is the parent organization charged with school and district accreditation. Because AdvancEd has validated and tested the survey for reliability to pilot the survey instrument once again was not needed.
Subjects and Settings

School principals and school superintendents of identified schools were the target audience. Those schools were identified using state assessment data when they were not making AYP and were on a level of consequences. Levels of consequences include…and are used to identify struggling schools. The 10 schools identified range from rural to a suburban setting and are located in different regions of Kentucky. There is representation from Eastern Kentucky, Central Kentucky, and Western Kentucky. Six middle schools and four high schools account for the 10 schools in this research study.

The target goal was for 100% of all eligible principals and superintendents to take the survey. In addition obtain at least a 50% participation rate for interviews once the surveys were completed. It should be noted that these schools were not identified as Priority Schools and receiving any type of personnel support that provided coaching or mentoring.

Instrumentation

Instruments include an AdvancEd survey, Microsoft Excel’s statistical functions (e.g., t-test, standard deviation, etc.) and graphs for recording. These instruments would allow for categorizing of research.

Procedure

The primary method of communication was via email with each participant using Survey Monkey. Survey Monkey is an online tool used to create, distribute, and collect survey results. The AdvancEd survey was uploaded into the online tool. The survey was determined to have minimal risk to any participant and the likelihood of any discomfort or harm was not larger than what an individual would encounter on any particular day during any type of required physical test or psychological exam.
Principals of the identified schools and the superintendents in those districts were sent a link allowing them to access the survey. Once opened, the first page of the survey outlined the purpose of the survey, why they were selected, and congratulating them with their most recent successes with student learning. After the analysis of survey results interviews were scheduled with these leaders as a follow up using (Outlook) to conduct a brief 15-20 minute phone interview. The phone interviews used the questions from the survey to dive deeper and meet the requirements of a mixed-methods study. Interviewees were selected based on regional location, rural, suburban, role, and availability. Questions that form the basis of the interviews are identified by an asterisk (*) on the original survey found in Appendix A.

Interviews with participants used the survey questions that had the highest and lowest response rates from across all ten schools. In addition follow up questions were asked where there were discrepancies between the superintendent and principal responses.

Survey Description

The researcher used the AdvancEd survey to gather information from identified school and district leaders. This survey instrument is used with accreditation and progress monitoring reviews with both schools and districts. The goal of this survey was to determine what the identified schools had done well and not done well in order to report findings that would lead to clear conclusions being made to identify characteristics of sustainability. The survey is organized into five areas; leadership, culture, deep learning, continuous improvement for teachers, and continuous improvement for schools. Sample questions from the survey include:

Leadership

1. Our Schools purpose statement is clearly focused on student success.
2. Our school’s governing body or school board complies with all policies, procedures, laws, and regulations.

Culture

1. Our school’s leaders support an innovative and collaborative culture.

2. Our school’s leaders hold all staff members accountable for student learning.

Continuous Improvement- Teaching

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

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

Deep Learning

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

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

Continuous Improvement-School

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

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

These questions were structured around a 5-point Likert format ranging from Strongly Disagree to Strongly Agree. The purpose of the survey was communicated to each participant and assured responses would be kept anonymous. In total the surveys were completed by 17 people; seven superintendents and 10 principals. It is important to note that one school district had four schools identified. Two schools were middle schools and the other two were high schools. The
initial invitation for surveys to all stakeholders was distributed on August 3, 2014 and completed by October 9, 2014.

The results of the initial survey were used to develop questions that were used in the interview process. It is important to note that no one was interviewed until he or she had completed the survey. Interviews were started on September 12, 2014. The responses from the surveys were analyzed looking at questions that had the lowest response rates and those that had the high response rates. Those survey questions were used to probe deeper into what was working or not working inside of the identified school.

**Ethical Considerations**

The study was approved through the IRB process. The research study presents minimal risk to each individual who participated and the participants each volunteered. Each participant was given the purpose of the study and its intended outcome. They were also assured that none of their responses would be shared with others in an identifiable way. The confidentiality of any data or information discovered as a result of this study will be maintained at all times.

Internal validity was addressed through the process that AdvancEd uses with their accreditation process using the survey instrument. It has been validated by other universities and the organization granted permission to use this survey in the research study.

**Summary**

There were no major obstacles in conducting this survey and follow up interviews. There were several follow up communications conducted via email (Outlook) to reach 100% response rate regarding the surveys. There seemed to be an unexpected excitement and pride amongst the principals and superintendents due to them feeling validated for their hard work and the recognition that came from being invited to participate.
Chapter 4

Findings and Review of Methodology

The purpose of this study was to determine the characteristics of sustainability for school improvement and determine how schools that were once low performing under NCLB, but not receiving state assistance, are now performing at a higher level in the area of student achievement. To complete this task, surveys were distributed to the leaders of each institution (principals of identified schools and the district superintendents) to collect data and information concerning their work to improve student performance. Follow up phone interviews were conducted with principals and superintendents after the survey was completed. Ten schools were selected for this study; the researcher’s goal was to interview nine leaders. The data and information were gathered around five constructs: leadership, culture, deep learning, continuous improvement (school and teachers).

Answering the Research Question

The intent of this study was to answer the research question “What are the characteristics of sustainability for school improvement?” Specifically, these identified schools were once low performing and have made significant improvement over time. The purpose of the research was to determine characteristics of sustainability inside these schools that led to significant improvement. The data were disaggregated around five constructs; qualitative and quantitative data were reported under each of them to support a thorough analysis of findings.

Overview of Findings

Ten schools were identified for this research study. One school district had four of the schools identified for this study. Each of the schools is Title I and has an average enrollment of 747 students. The average ethnicity of students for each of the identified schools is as follows:
81.2% White, 9.42% African American, 2.64% Hispanic, and 1% Asian. Table 1 through Table 12 outline the quantitative data around each of the five constructs. In addition, each construct also has a summary of quantitative and qualitative data providing a thorough analysis.

**Leadership Construct**

Table 1
*Responses to Leadership Statements*

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA N %</th>
<th>A N %</th>
<th>U N %</th>
<th>D N %</th>
<th>SD N %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our school’s purpose statement is …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clearly focused on student success</td>
<td>14 (70%)</td>
<td>6 (30%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>formally reviewed and revised with involvement from stakeholders</td>
<td>5 (25%)</td>
<td>10 (50%)</td>
<td>4 (20%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>based on shared values and beliefs that guide decision-making</td>
<td>10 (50%)</td>
<td>10 (50%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>supported by the policies and practices adopted by the school board or</td>
<td>10 (50%)</td>
<td>10 (50%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>governing body</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our school’s governing body or school board …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>complies with all policies, procedures, laws, and regulations</td>
<td>13 (65%)</td>
<td>6 (30%)</td>
<td>0 (0%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>maintains a distinction between its roles and responsibilities and those</td>
<td>10 (50%)</td>
<td>10 (50%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>of school leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2

Descriptive Statistics for Leadership Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our school’s purpose statement is …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clearly focused on student success</td>
<td>4.70</td>
<td>0.470</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>formally reviewed and revised with involvement from stakeholders</td>
<td>3.95</td>
<td>0.826</td>
<td>1-5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>based on shared values and beliefs that guide decision-making</td>
<td>4.50</td>
<td>0.513</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>supported by the policies and practices adopted by the school board or governing body</td>
<td>4.50</td>
<td>0.513</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Our school’s governing body or school board …

| complies with all policies, procedures, laws, and regulations            | 4.55 | 0.759| 1-5   | 2   | 5   |
| maintains a distinction between its roles and responsibilities and those of school leadership | 4.50 | 0.513| 1-5   | 4   | 5   |

Quantitative Analysis

Table 1 illustrates that 75% or more of the participants agree or strongly agree that the leadership construct has been effective. Conclusions can be drawn that leadership either already possessed the skills, dispositions, and knowledge about leadership or added these concepts to their own growth as a professional educator. Furthermore, the governing bodies of schools and districts represented in this study have a clear understanding about the importance of mission, vision, and policy development. Table 2 illustrates a mean of 4.5 or higher with the exception
of one survey response under the leadership construct (the third statement that had a 3.95 mean). This suggests there is a clear focus on student success and that when the mission and vision are formally developed and focused on learning success will happen as indicated in the literature review. Two survey questions had a higher standard deviation (Table 2) than the others which suggests that there is more work to be done in involving all stakeholders with review and revision of the school’s purpose statement. There is also an indication that leadership at the district and school level needs to communicate and monitor more closely the implementation of policies, laws, and regulations after doing a root cause analysis to determine the breadth and depth of these issues.

**Qualitative Analysis**

Interviews with school and district leaders revealed that leaders spend time on their mission and vision monthly at the school level. One school principal noted:

> We simplified this and created a drawing about the whole child. There are six areas where we focus: (1) high school, college, and career; (2) academics; (3) bringing parents closer; (4) stretch learning; (5) emotional connections for teachers and students; and, (6) character education.

Three school leaders revealed their school has reviewed the district’s mission and vision to ensure that school community is aligned to the district. The principals reported that this happens annually. All school principals indicated they receive strong support and leadership from their superintendents by being on a “pursuit towards excellence, holding staff accountable, and not being afraid to address inconsistency” One principal indicated that he recruits and hires quality coaches just as much as teachers by saying, “I go after coaches just as hard as I do
teachers. Extra-curricular people are just as important as teachers. It all relates to the classroom and directly connects to the whole child”

**Culture Construct**

Table 3

*Responses to Culture Statements*

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA N %</th>
<th>A N%</th>
<th>U N%</th>
<th>D N%</th>
<th>SD N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our school’s leaders …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>support an innovative and collaborative culture</td>
<td>16 (80%)</td>
<td>4 (20%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>expect staff members to hold all students to high academic standards</td>
<td>17 (85%)</td>
<td>3 (15%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>hold themselves accountable for student learning</td>
<td>15 (75%)</td>
<td>5 (25%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>hold all staff members accountable for student learning</td>
<td>14 (70%)</td>
<td>6 (30%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>regularly evaluate staff members on criteria designed to improve teaching and learning</td>
<td>15 (75%)</td>
<td>5 (25%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>ensure all staff members use supervisory feedback to improve student learning</td>
<td>8 (40%)</td>
<td>11 (55%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>engage effectively with all stakeholders about the school’s purpose and direction</td>
<td>7 (35%)</td>
<td>12 (60%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>provide opportunities for stakeholders to be involved</td>
<td>9 (45%)</td>
<td>10 (50%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>
in the school

Table 4
*Descriptive Statistics for Culture Statements*

<table>
<thead>
<tr>
<th>Statement</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Our school’s leaders</strong> …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>support an innovative and collaborative culture</td>
<td>4.80</td>
<td>0.410</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>expect staff members to hold all students to high academic standards</td>
<td>4.85</td>
<td>0.366</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>hold themselves accountable for student learning</td>
<td>4.75</td>
<td>0.444</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>hold all staff members accountable for student learning</td>
<td>4.70</td>
<td>0.470</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>regularly evaluate staff members on criteria designed to improve teaching and learning</td>
<td>4.75</td>
<td>0.444</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>ensure all staff members use supervisory feedback to improve student learning</td>
<td>4.35</td>
<td>0.587</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>engage effectively with all stakeholders about the school’s purpose and direction</td>
<td>4.30</td>
<td>0.571</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>provide opportunities for stakeholders to be involved in the school</td>
<td>4.40</td>
<td>0.598</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>
Quantitative Analysis

The mean for culture of 4.61 shown in Table 3 suggests that school and district leaders work to improve or maintain a positive culture. In every instance (Table 1) 90-100% of agree or strongly agree that school leaders have a positive impact on school climate and culture. The responses to three statements (1) ensure all staff members use supervisory feedback to improve student learning; (2) engage effectively with all stakeholders about the school’s purpose and direction; and, (3) provide opportunities for stakeholders to be involved in the school are outliers as compared to other responses. As shown in Table 4, the standard deviations for these questions range from .571 to .598 whereas the standard deviation for the other responses ranged from 0.366 to 0.470. Clearly respondents had varying opinions concerning supervisory feedback, effectively engaging all stakeholders, and stakeholder involvement in the schools.

Qualitative Analysis

Most principals interviewed indicated that there is more consistency and higher expectations currently than under previous leadership within the district. One principal indicated there are “super high expectations” Principals and superintendents indicated a very caring and family oriented staff presence in their schools and staff willing to do whatever it takes to help students learn.

Superintendents responded in interviews about their school principals in summary by saying;

1) Their leaders have a high level of accountability and expectations for their school and for themselves; 2) high academic expectations for students; 3) hold all staff accountable; and, 4) regularly monitor and evaluate teaching and learning in all classrooms
## Continuous Improvement Construct- Teachers

### Table 5

*Responses to Continuous Improvement- Teacher Statements*

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA N%</th>
<th>A N%</th>
<th>U N%</th>
<th>D N%</th>
<th>SD N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>All teachers in our school … monitor and adjust curriculum, instruction,</td>
<td>9 (45)</td>
<td>10 (50)</td>
<td>0 (0)%</td>
<td>1 (5)%</td>
<td>0 (0)%</td>
</tr>
<tr>
<td>and assessment based on data from student assessments and examination of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>professional practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>personalize instruction strategies that require student collaboration,</td>
<td>4 (20)</td>
<td>14 (70)</td>
<td>2 (10)%</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
</tr>
<tr>
<td>self-reflection, and development of critical thinking skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>use a variety of technologies as instructional resources</td>
<td>5 (25)</td>
<td>15 (75)</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
</tr>
<tr>
<td>provide students with specific and timely feedback about their learning</td>
<td>8 (40)</td>
<td>12 (60)</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
</tr>
<tr>
<td>use multiple types of assessments to modify instruction and revise the</td>
<td>9 (45)</td>
<td>11 (55)</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
</tr>
<tr>
<td>curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>use consistent common grading and reporting policies across grade levels</td>
<td>5 (25)</td>
<td>14 (70)</td>
<td>1 (5)%</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
</tr>
<tr>
<td>and courses based on clearly defined criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>participate in collaborative learning communities that</td>
<td>13 (65)</td>
<td>6 (30)</td>
<td>1 (5)%</td>
<td>0 (0)%</td>
<td>0 (0)%</td>
</tr>
</tbody>
</table>
meet both informally and formally across grade levels and content areas

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

11 (55%) 6 (30%) 2 (10%) 1 (5%) 0 (0%)

<table>
<thead>
<tr>
<th>Statement</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>All teacher’s in our school … monitor and adjust curriculum, instruction, and assessment based on data from student assessments and examination of professional practice</td>
<td>4.35</td>
<td>0.745</td>
<td>1-5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>personalize instruction strategies that require student collaboration, self-reflection, and development of critical thinking skills</td>
<td>4.10</td>
<td>0.553</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>use a variety of technologies as instructional resources</td>
<td>4.25</td>
<td>0.444</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>provide students with specific and timely feedback about their learning</td>
<td>4.40</td>
<td>0.503</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>use multiple types of</td>
<td>4.45</td>
<td>0.510</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
assessments to modify instruction and revise the curriculum

use consistent common grading and reporting policies across grade levels and courses based on clearly defined criteria

participate in collaborative learning communities that meet both informally and formally across grade levels and content areas

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

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessments to modify instruction and revise the curriculum</td>
<td>4.20</td>
<td>0.523</td>
<td>1-5</td>
<td>3</td>
</tr>
<tr>
<td>Use consistent common grading and reporting policies across grade levels and courses based on clearly defined criteria</td>
<td>4.60</td>
<td>0.598</td>
<td>1-5</td>
<td>3</td>
</tr>
<tr>
<td>Participate in collaborative learning communities that meet both informally and formally across grade levels and content areas</td>
<td>4.35</td>
<td>0.875</td>
<td>1-5</td>
<td>2</td>
</tr>
</tbody>
</table>

**Quantitative Analysis**

Leaders surveyed indicated at a rate of 85% to 100% that they agree or strongly agree that teachers in their schools used a continuous improvement approach. As illustrated in Table 6 the mean responses ranged from 4.1 (All teachers in our school personalize instruction strategies that require student collaboration, self-reflection, and development of critical thinking skills) to 4.60 (All teachers in our school participate in collaborative learning communities that meet both informally and formally across grade levels and content areas.). The areas of adjusting curriculum based on curriculum, instruction, assessment, student data, and reflection of teacher practice assessment had a standard deviation of .745 and training had a standard deviation of .745 and teachers being trained on how to implement a formal process that
promotes discussion about student learning had a standard deviation of .875. These two questions suggest that there is more work to be done in this area with teachers in order to increase student performance in the classroom.

**Qualitative Analysis**

One principal stated “Teachers are expected to know their students and their data,” illustrating data and information are used by teachers to support continuous improvement. One school principal discussed all teachers using formative assessment data that are analyzed every two weeks. Teachers in this school immediately analyze the data and collaborate, creating constant dialogue and system improvement in the area of student achievement. It should be noted that this particular school’s overall performance has steadily increased each year since the release of 2011-2012 school report card. One superintendent stated that depending on data and information (e.g., TELL Survey), principals and superintendents have focused on culture intentionally during a particular school year while other superintendents interviewed indicated they focus on it continuously.

**Deep Learning Construct**

Table 7

*Responses to Deep Learning Statements*

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA N%</th>
<th>A N%</th>
<th>U N%</th>
<th>D N%</th>
<th>SD N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>In our school …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>challenging curriculum and learning experiences provide equity for all</td>
<td>10 (50%)</td>
<td>9 (45%)</td>
<td>0 (0%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>students in the development of learning, thinking, and life skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>related learning support services are provided for</td>
<td>6 (30%)</td>
<td>13 (65%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>
all students based on their needs

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

<table>
<thead>
<tr>
<th></th>
<th>9 (45%)</th>
<th>8 (40%)</th>
<th>1 (5%)</th>
<th>2 (10%)</th>
<th>0 (0%)</th>
</tr>
</thead>
</table>

all staff members use student data to address the unique learning needs of all students

<table>
<thead>
<tr>
<th></th>
<th>8 (40%)</th>
<th>11 (55%)</th>
<th>1 (5%)</th>
<th>0 (0%)</th>
<th>0 (0%)</th>
</tr>
</thead>
</table>

staff members provide peer coaching to teachers

<table>
<thead>
<tr>
<th></th>
<th>6 (30%)</th>
<th>9 (45%)</th>
<th>3 (15%)</th>
<th>2 (10%)</th>
<th>0 (0%)</th>
</tr>
</thead>
</table>

a formal process is in place to support new staff members in their professional practice

<table>
<thead>
<tr>
<th></th>
<th>6 (30%)</th>
<th>11 (55%)</th>
<th>3 (15%)</th>
<th>0 (0%)</th>
<th>0 (0%)</th>
</tr>
</thead>
</table>

all staff members participate in continuous professional learning based on identified needs of the school

<table>
<thead>
<tr>
<th></th>
<th>13 (65%)</th>
<th>7 (35%)</th>
<th>0 (0%)</th>
<th>0 (0%)</th>
<th>0 (0%)</th>
</tr>
</thead>
</table>

a professional learning program is designed to build capacity among all professional and support staff members

<table>
<thead>
<tr>
<th></th>
<th>9 (45%)</th>
<th>11 (55%)</th>
<th>0 (0%)</th>
<th>0 (0%)</th>
<th>0 (0%)</th>
</tr>
</thead>
</table>

all school personnel regularly engage families in their children's learning progress

<table>
<thead>
<tr>
<th></th>
<th>4 (20%)</th>
<th>11 (55%)</th>
<th>3 (15%)</th>
<th>2 (10%)</th>
<th>0 (0%)</th>
</tr>
</thead>
</table>
Table 8

Descriptive Statistics for Deep Learning Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>In our school …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>challenging curriculum and learning experiences provide equity for all students in the development of learning, thinking, and life skills</td>
<td>4.40</td>
<td>0.754</td>
<td>1-5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>related learning support services are provided for all students based on their needs</td>
<td>4.25</td>
<td>0.550</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>a formal structure exists so that each student is well known by at least one adult advocate in the school who supports that student’s educational experience</td>
<td>4.20</td>
<td>0.951</td>
<td>1-5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>all staff members use student data to address the unique learning needs of all students</td>
<td>4.35</td>
<td>0.587</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>staff members provide peer coaching to teachers</td>
<td>3.95</td>
<td>0.945</td>
<td>1-5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>a formal process is in place to support new staff members in their professional practice</td>
<td>4.15</td>
<td>0.671</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>
CHARACTERISTICS OF SUSTAINABILITY

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>All staff members participate in continuous professional learning based on identified needs of the school</td>
<td>4.65</td>
<td>0.489</td>
<td>1-5</td>
<td>4</td>
</tr>
<tr>
<td>A professional learning program is designed to build capacity among all professional and support staff members</td>
<td>4.45</td>
<td>0.510</td>
<td>1-5</td>
<td>4</td>
</tr>
<tr>
<td>All school personnel regularly engage families in their children’s learning progress</td>
<td>3.85</td>
<td>0.875</td>
<td>1-5</td>
<td>2</td>
</tr>
<tr>
<td>All stakeholders are informed of policies, processes, and procedures related to grading and reporting</td>
<td>4.35</td>
<td>0.587</td>
<td>1-5</td>
<td>3</td>
</tr>
</tbody>
</table>

Quantitative Analysis

Survey data indicate (Table 7) 75 to 100% of stakeholders agree or strongly agree that deep learning is occurring within their schools. All the survey responses have a mean of 4 or above with the exception of two survey statements (1) In our school staff members provide peer coaching to teachers; and (2) In our school all school personnel regularly engage families in their children’s learning progress which have a mean of 3.85 and 3.95 (Table 8). Responses to these questions indicate additional work needs to be done in the areas of peers providing coaching to others and school personnel engaging families.

Qualitative Analysis

Interviews with principals reflect a strong emphasis on the schools’ master schedule that ensures each student’s needs are met and also focusing on Response to Intervention (RtI).
There are clear roles for school staff; they are aware of their role and how it supports students. One superintendent shared his process to mentor new teachers in the school district. The district connects the mentoring process to teacher and school needs by supporting teacher academies that meet every six weeks. Principals also revealed there is an intentional focus on instruction (95%) during faculty meetings and only a 5% focus on management. Interviews with superintendents indicated school district leaders are very involved in providing feedback concerning teaching and learning in their schools. Two superintendents that represent five schools each indicated that this monitoring process is connected to the district improvement plan developed by all stakeholders in the district. Data walls are used to name and claim students to assist students in the deep learning process.

Interviews with principals and superintendents also indicate a significant effort to connect with school communities and families. For example, one such strategy to connect the school community with the community at large centers on Operation Preparation where community members counsel students individually about their path towards graduation and being college or career ready. Other work involved the Prichard Committee for Academic Excellence. The Prichard Committee is a private, non-profit advocacy group that works to support all levels of public education in Kentucky. This advocacy group works in assisting all stakeholders to have a deep understanding of how public education operates in order to ask better questions and support the school community as a whole (Prichard Committee, 2014). Their current goal is to help ensure Kentucky one of the top states in our country in regard to public education to educate parents on the current P-12 educational system in Kentucky (Prichard Committee, 2014).
Continuous Improvement Construct- School

Table 9

*Responses to Continuous Improvement- School Statements*

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA N%</th>
<th>A N%</th>
<th>U N%</th>
<th>D N%</th>
<th>SD N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our school … employs consistent assessment measures across classrooms and courses</td>
<td>10 (50%)</td>
<td>8 (40%)</td>
<td>2 (10%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>has a systematic process for collecting, analyzing, and using data</td>
<td>10 (50%)</td>
<td>8 (40%)</td>
<td>2 (10%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>ensures all staff members are trained in the evaluation, interpretation, and use of data</td>
<td>10 (50%)</td>
<td>9 (45%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>uses data to monitor student readiness and success at the next level</td>
<td>11 (55%)</td>
<td>8 (40%)</td>
<td>1 (5%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>leaders monitor data related to student achievement</td>
<td>15 (75%)</td>
<td>5 (25%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>leaders monitor data related to school continuous improvement goals</td>
<td>13 (65%)</td>
<td>7 (35%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>
Table 10
*Descriptive Statistics for Continuous Improvement - School Statements*

<table>
<thead>
<tr>
<th>Statement</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our school …</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>employs consistent assessment measures across classrooms and courses</td>
<td>4.40</td>
<td>0.681</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>has a systematic process for collecting, analyzing, and using data</td>
<td>4.40</td>
<td>0.681</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>ensures all staff members are trained in the evaluation, interpretation, and use of data</td>
<td>4.45</td>
<td>0.605</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>uses data to monitor student readiness and success at the next level</td>
<td>4.50</td>
<td>0.607</td>
<td>1-5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>leaders monitor data related to student achievement</td>
<td>4.75</td>
<td>0.444</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>leaders monitor data related to school continuous improvement goals</td>
<td>4.65</td>
<td>0.489</td>
<td>1-5</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Quantitative Analysis**

Survey responses from stakeholders reflect that 95-100% agree or strongly agree (Table 9) that the school has a continuous improvement process to support student achievement. The mean score of responses were 4.4 or above (Table 10). Clearly all the leaders participating in this research study indicate that their schools have embraced continuous improvement inside each of their schools as a result of analyzing the responses to each statement. There were four
questions (Table 10) that indicated a higher standard deviation than the others (.605, .607, .681, and .681). These four statements indicate that consistent measures across all classrooms, a consistent process for collecting and analyzing student data, staff training on how to evaluate and interpret data, and use of data to monitor readiness for students at the next level are areas that could be analyzed further.

**Qualitative Analysis**

One principal stated, “Everyone knows if they are going to meet their goals; why, why not, and next steps.” Another principal commented that the school “attacks missing work” to illustrate there is a high level of academic accountability for all students. Principal interviews indicated a strong level of district support, involvement, and a healthy level of accountability. This is illustrated through interviews which revealed that principals are required to make board presentations about student learning and the progress that is happening within schools.

One superintendent revealed that his school district has started academic academies with a common theme once a month. Each meeting within a particular month is connected to that theme and has effective teaching strategies that teachers can use connected to that theme. This process creates common language and also supports the district and its schools in implementing the new evaluation system for teachers, Teacher Professional Growth and Effectiveness System.

Table 11 illustrates a summary of each construct based on the Likert-Scale responses. Each level of response is added to together using the five constructs (excluding the Continuous Improvement Combined) in order to report an overall sustainability index score for each response level. Table 12 reports out the mean, standard deviation, range, minimum, and maximum for each construct. It then reports an overall sustainability score using descriptive statistics illustrating further analysis of the research that has been completed.
## Summary

### Table 11

Responses to Construct Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA N%</th>
<th>A N%</th>
<th>U N%</th>
<th>D N%</th>
<th>SD N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>(51.67%)</td>
<td>(43.33%)</td>
<td>(3.33%)</td>
<td>(1.67%)</td>
<td>(0.00%)</td>
</tr>
<tr>
<td>Culture</td>
<td>(63.13%)</td>
<td>(35.00%)</td>
<td>(1.88%)</td>
<td>(0.00%)</td>
<td>(0.00%)</td>
</tr>
<tr>
<td>Continuous Improvement-Teacher</td>
<td>(40.00%)</td>
<td>(55.00%)</td>
<td>(3.75%)</td>
<td>(1.25%)</td>
<td>(0.00%)</td>
</tr>
<tr>
<td>Deep Learning</td>
<td>(39.50%)</td>
<td>(50.50%)</td>
<td>(6.50%)</td>
<td>(3.50%)</td>
<td>(0.00%)</td>
</tr>
<tr>
<td>Continuous Improvement-School</td>
<td>(57.50%)</td>
<td>(37.50%)</td>
<td>(5.00%)</td>
<td>(0.00%)</td>
<td>(0.00%)</td>
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<tr>
<td>Continuous Improvement-Combined</td>
<td>(47.50%)</td>
<td>(47.50%)</td>
<td>(4.29%)</td>
<td>(0.71%)</td>
<td>(0.00%)</td>
</tr>
<tr>
<td>Overall Sustainability Index Score</td>
<td>(49.34%)</td>
<td>(45.00%)</td>
<td>(4.21%)</td>
<td>(1.45%)</td>
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</tr>
</tbody>
</table>

### Table 12

Construct Score Totals

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>26.70</td>
<td>2.296</td>
<td>6-30</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>Culture</td>
<td>36.90</td>
<td>2.490</td>
<td>8-40</td>
<td>32</td>
<td>40</td>
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<td>Continuous Improvement-Teacher</td>
<td>34.70</td>
<td>3.466</td>
<td>8-40</td>
<td>28</td>
<td>40</td>
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<tr>
<td>Deep Learning</td>
<td>42.60</td>
<td>4.005</td>
<td>10-50</td>
<td>35</td>
<td>50</td>
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</table>
Analyzing the data from all the constructs (Table 11), 90-98% of leaders surveyed agree or strongly agree with each construct assisting them in improving student learning over time. This is significant in that leaders (superintendents and principals) all concur that these constructs have been pivotal in their journey towards school improvement for students. This will be discussed further in chapter 5. The deep learning construct could be interpreted as being the accurate characteristic toward supporting sustainability. If further illustrates that some of the schools identified still have work to do in this area based on responses and a comparison of all the constructs. The overall sustainability index score reveals that 94% (Table 11) of leaders agree or strongly agree supporting the previous statement about all five constructs. Descriptive statistics (Table 12) illustrates the same results from the Likert summaries (Table 11) and provides a further statistical analysis reporting the findings of each construct as it pertains to sustainability in the identified schools. Further findings will be discussed in chapter five.
Chapter 5

Discussion of Results

It is anticipated that this study will be used to inform the work of Priority Schools, Focus Schools, and Focus Districts. The Kentucky Department of Education (KDE) currently identifies schools and districts in each of these categories. Persistently Low-Achieving (Priority Schools) are identified through three years of data for both Title I and non-Title I schools. The criteria include graduation rates below 80% for three or more consecutive years, failure to make Adequate Yearly Progress (AYP)/Annual Measurable Objective (AMO) for three consecutive years, and any identified school must be the bottom overall 5th percentile each year for Title I and Non-Title I Schools for three years in order to be eligible for Priority (Persistently Low Achieving) status (Kentucky Department of Education, 2011). Student achievement data validates the need for improvement and provides the data to determine what is not working. Assistance is delivered from the state level. Action plans are created to drive change and improve student learning. In the beginning stages of developing action plans, characteristics that will sustain improvement are not presented. Furthermore, Kentucky does not use a framework that addresses these characteristics to sustain improvement.

This study examined and assisted in determining the characteristics required for sustainability of school improvement and will provide guidance on how to implement improvement and sustainability strategies. This research will inform educators within the state of Kentucky an understanding of the characteristics of improvement and sustainability since the focus of the study was schools within Kentucky. The schools selected for this study were identified as struggling in 2008 and as of 2013-14 are making significant gains in the area of student achievement. None of the schools received state assistance for improvement.
A variety of data collection methods were used in order to triangulate the data and information. Data obtained from No Child Left Behind (NCLB) reports, current state summative data from the school report card (SRC), survey data from heads of institutions, and interviews with principals and superintendents of those school or districts assisted in triangulating the data and information. This triangulation assured the researcher the study received accurate information about how to determine the characteristics of sustainability.

This research study sought to answer the question “What are the characteristics of sustainability for school improvement?” The resulting data strongly indicates that the five constructs illustrated in the literature review and aligned with the survey instrument clearly indicate common characteristics of sustainability. Principals and superintendents of the selected schools were surveyed beginning in August 2014. These leaders were selected based on availability and demographics of the selected school to ensure a balance from information gained that was fair across the board. The majority of the school and district leaders responded favorably to the five constructs previously outlined. The interviews allowed the researcher to delve deeper into the stories of these schools concerning their past struggles on the road to outstanding performances of student learning. The data from the survey questions and interviews indicate a strong correlation between what leaders should focus on to improve school performance and ultimately improve student learning. Principals and superintendents interviewed consistently validated points of emphasis around each construct;

1) **Leadership:** Four principals each indicated how their school’s mission and vision are reviewed with each group of stakeholders on a regular basis. One principal went on to say, “We adjusted ours to meet the district’s vision.” Three superintendents interviewed indicated the importance of having purposeful goals and monitoring those goals. They
also indicated the importance of working with principals to understand their context and supporting them to meet the needs of their school community (teachers, staff, parents, and community).

2) **Culture:** Four principals each indicated that there were high expectations of the entire school staff. One principal stated, “We have super high expectations” and another principal indicated, “Our staff is willing to do whatever it takes to help students learn!” Superintendents interviewed stated that the identified schools improved as a result of more effective communication, increased collaboration, and a continuous focus on students.

3) **Continuous Improvement-Teachers:** Three principals discussed the emphasis placed on analysis of student data and using that analysis to impact student learning in the classroom. One principal stated, “Teachers are expected to know their students and their data.” Another principal discussed their formative assessment process that teachers use with their students, assessing it in a timely fashion, and providing quick feedback to students after analysis. This principal commented on their formative assessment process as, “creating constant dialogue amongst teachers because we repeat the process every two weeks.” Superintendents indicated the importance of supporting student learning, providing resources, and sharing best practices with their principals.

4) **Deep Learning:** All principals interviewed indicated that their school community has and continues to do a lot to engage parents, along with the school community to improve student learning. The interviews with principals suggest that more work needs to be done to engage in order for deep learning to occur amongst all adults that supports the individual needs of students. All three superintendents interviewed indicated a lot of
work has been done with the school-base decision making councils (SBDM) and work has taken place with the Prichard Committee to improve parent engagement. Again, through interviews with principals and superintendents, more work is needed in this area to connect students and adults to each other that support all needs that students have.

5) **Continuous Improvement - School:** Two principals discussed the use of data and impact that has on the interventions they provide to students. Another principal noted the involvement that district leadership has had in analyzing student data and discussing with principals. One superintendent indicated that the school involved in the study “exceeds what the district expects in regard to ensuring quality work happens to support student learning.” This comment suggests that the floor should not be the minimum, but reach for the ceiling.

The data revealed several positives about each construct:

1) **Leadership:** The results clearly indicated the presence of leadership within each school and a governing body that understands their role. In addition, leadership has a clear focus on student success. Principal interviews revealed a focus on mission and vision at each meeting, recruiting and hiring the best teachers and coaches, and the district having established new energy around a mission and vision for the district. Multiple principals indicated how important this district mission and vision work has been for them at the school level. A superintendent interviewed described a system they have developed to create instructional themes for each month. These themes drive the work that happens over the course of the 4-5 week period. School and district leaders collaborate on what they learn, embed in their professional learning communities, coach teachers; look for implementation through walk-throughs in the classroom.
2) **Culture:** The data illustrated that leaders have a positive impact on school climate and district leadership has high expectations of all students. The mean for culture of 4.61 shown in Table 3 suggests that school and district leaders work to improve or maintain a positive culture. In every instance (Table 1) 90-100% of agree or strongly agree that school leaders have a positive impact on school climate and culture.

3) **Continuous Improvement - Teachers:** Leaders indicated teachers embrace continuous improvement. Survey data indicated teachers consistently work to make improvements in teaching and learning without waiting for a summative assessment to determine next steps. In addition, teachers are working in professional learning communities and they are being implemented with fidelity. It is clear that these schools are beyond the implementation stage and continuing to work on the integration of these practices into their everyday work.

4) **Deep Learning:** The data suggests there is clear evidence of deep learning occurring in the selected schools with responses well above a 4 on a Likert Scale. Interviews indicated an intentional focus on Response to Intervention (RtI), the master schedule, and encouraging parent and community involvement in the school. Each of these components address deep learning for both students and adults.

5) **Continuous Improvement - School:** It is clear the selected schools have embraced continuous improvement within the school community. Monitoring and usage of data occurs throughout the school on a consistent basis. It is suggested that this practice is a direct result of moving from a low performing school to a school making large gains in student performance.
Low response rates for each construct identified the following:

1) **Leadership:** There is a lack of involvement of stakeholders (parents and community) in reviewing and revising the school’s purpose statement. The data suggests some work needs to be done in monitoring the school’s governing body and/or training its members in order to implement or follow adopted policies. Responses revealed this area had a low response rate.

2) **Culture:** Three areas inside this construct were outliers. They are: ensuring all staff members use supervisory feedback to improve student learning, engaging effectively with all stakeholders concerning the school’s purpose and direction, and providing opportunities for stakeholders to be involved in the school community.

3) **Continuous Improvement - Teachers:** The following areas suggested additional work needs to be done within this construct: adjusting teaching to student data, reflection of teacher practice, and teachers receiving training on how to implement a formal process that promotes discussion about student learning.

4) **Deep Learning:** The survey data revealed two areas that needed attention regarding deep learning: staff members providing peer coaching to teachers and all school personnel regularly engaging families in their children’s learning progress.

5) **Continuous Improvement - School:** Four statements indicated consistent measures across all classrooms, a consistent process for collecting and analyzing student data, staff training on how to evaluate and interpret data, and use of data to monitor readiness for students at the next level are areas that could be analyzed further to elevate as strengths for the identified schools.
Recommendations for Future Study

This study was the first step in asking the identified schools to recount their progress and journey of improving student learning. It is important to note that for the ten schools who maintain performance (proficient or better), a follow up interview or survey would be conducted. Participants could be teachers, school staff, parents, school administrators, and district administrators.

Another possible recommendation is to administer the survey on-site and follow up with face-to-face interviews. This would be possible with such a small sample. It would be important to interview the superintendent as well. This would allow for a 100% survey and interview response rate ensuring an even higher reliability of responses.

Recommendations for School and District Leaders

As noted earlier in chapter 2, “Sustainability is the first and final challenge of leadership” (Hargreaves & Fink, 2006, p. 273). Principals and superintendents should utilize the research in this study when identifying next steps in supporting schools that are under performing in the area of student learning. This study is specific to Kentucky and can support the work in all schools across the Commonwealth. As a result of schools using this research, buy-in from school and district leaders would increase and assist in implementing it into action steps.

Recommendations for State Leaders and Policy Makers

This research study is specific to public schools within Kentucky. The information provided offers direction to state leaders and policy makers when writing or revising statutes and regulations around school improvement. The outcome of this research study suggests that at a minimum a deeper look into the results and findings could be commissioned by piloting this
in selected schools. Further analysis could be completed by implementing some of the recommendations from surveys and interviews.

**Conclusion**

This study can provide comprehensive guidance to improving low performance in public schools. It provides common language that all stakeholders can use and understand. Teachers, principals, support staff, parents, community members, and district leaders could use these constructs to drive improvement in a more concise, consistent, and efficient way. In addition, the findings could be critical in the fiscal investment made in schools and redistribution of monies to further support student learning rather than focusing on low performing schools. Therefore, the practices leading to sustainability include; 1) Deep Learning, 2) Culture, 3) Continuous Improvement, and 4) Leadership. Essentially, this research could help re-define some practices and strategies to help eliminate low performance in the public schools of Kentucky and in other states.
References


Appendix A

Survey Questions

Characteristics of Sustainability

Response Options: 1 Strongly Disagree, 2 Disagree, 3 Undecided, 4 Agree, 5 Strongly Agree

Our School's purpose statement is...

1. …clearly focused on student success
2. …formally reviewed and revised with involvement from stakeholders
3. …based on shared values and beliefs that guide decision-making
4. …supported by the policies and practices adopted by the school board or governing body

Our school's governing body or school board...

5. …complies with all policies, procedures, laws, and regulations
6. …maintains a distinction between its roles and responsibilities and those of school leadership

Our school's leaders...

7. …support an innovative and collaborative culture
8. …expect staff members to hold all students to high academic standards
9. …hold themselves accountable for student learning
10. …hold all staff members accountable for student learning
11. …regularly evaluate staff members on criteria designed to improve teaching and learning
12. …ensure all staff members use supervisory feedback to improve student learning
13. …engage effectively with all stakeholders about the school’s purpose and direction
14. …provide opportunities for stakeholders to be involved in the school

All teachers in our school...

15. …monitor and adjust curriculum, instruction, and assessment based on data from student assessments and examination of professional practice
16. …personalize instructional strategies and interventions to address individual learning needs of students
17. …use a variety of technologies as instructional resources
18. …provide students with specific and timely feedback about their learning
19. …use multiple types of assessments to modify instruction and to revise the curriculum
20. …use consistent common grading and reporting policies across grade levels and courses based on clearly defined criteria
21. …participate in collaborative learning communities that meet both informally and formally across grade levels and content areas
22. …have been trained to implement a formal process that promotes discussion about student learning (e.g., action research, examination of student work, reflection, study teams, and peer coaching)

In our school…

23. …challenging curriculum and learning experiences provide equity for all students in the development of learning, thinking, and life skills
24. …related learning support services are provided for all students based on their needs
25. …a formal structure exists so that each student is well known by at least one adult advocate in the school who supports that student's educational experience
26. …all staff members use student data to address the unique learning needs of all students
27. …staff members provide peer coaching to teachers
28. …a formal process is in place to support new staff members in their professional practice
29. …all staff members participate in continuous professional learning based on identified needs of the school
30. …a professional learning program is designed to build capacity among all professional and support staff members
31. …all school personnel regularly engage families in their children's learning progress
32. …all stakeholders are informed of policies, processes, and procedures related to grading and reporting

Our school…

33. …employs consistent assessment measures across classrooms and courses
34. …has a systematic process for collecting, analyzing, and using data
35. …ensures all staff members are trained in the evaluation, interpretation, and use of data
36. …uses data to monitor student readiness and success at the next level
37. …leaders monitor data related to student achievement
38. …leaders monitor data related to school continuous improvement goals

1 All questions were taken from an AdvancED survey and used with permission
Appendix B

Interview Questions- These are intended to start the conversation. More questions will follow as the conversation develops.

1. How long have you been principal or superintendent?
2. What is the mission and vision for the school?
3. How was your current mission and vision developed?
4. How often do you review your mission and vision statement?
5. How have you involved parents, school staff, and community members in order to help them have input and a voice?
6. What steps did you take to improve teaching and learning in the classroom?
7. How have you approached improvement planning within the school community?
8. How have you developed teacher leadership within the school?
9. What approach have you taken with school climate and culture?
VITA
JASON THOMAS RADFORD

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WestEd