

ABSTRACT

THE ASSOCIATION BETWEEN LOCAL PUBLIC SCHOOL BOARD MEMBER BELIEFS AND BEHAVIORS AND STUDENT ACADEMIC ACHIEVEMENT

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Northern Illinois University, 2018

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The primary purpose of this study was to survey Illinois public school board members to examine the association between local public school board member beliefs and behaviors and student academic achievement. Relatively little research exists linking school board member behaviors and beliefs to school district student academic achievement data. Specifically, this study examined self-reported mindset beliefs of school board members and how those beliefs related to several outcomes, including how board members report spending their time during board meetings and the importance placed upon certain board activities. All data were collected via a survey. The final sample was 44 participants from the northern Illinois region. Overwhelmingly, all board members reported growth, rather than fixed, mindsets. Implications for the board room are discussed.

NORTHERN ILLINOIS UNIVERSITY
DE KALB, ILLINOIS

MAY 2018

THE ASSOCIATION BETWEEN LOCAL PUBLIC SCHOOL BOARD MEMBER BELIEFS
AND BEHAVIORS AND STUDENT ACADEMIC ACHIEVEMENT

BY

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A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE

DOCTOR OF EDUCATION

DEPARTMENT OF LEADERSHIP, EDUCATIONAL PSYCHOLOGY
AND FOUNDATIONS

Doctoral Director:
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ACKNOWLEDGEMENTS

I would like to acknowledge several people who supported me on this journey. First, Dr. Kelly Summers, my doctoral director, and Dr. Jon Crawford, Dr. Benjamin Creed, and Dr. Stephen Tonks, members of the committee who provided encouragement and guidance in my research. Thank you to Dr. David Roth for believing I could do this and to Dr. Ed Lemman for offering me encouragement, opportunity, and an example of honorable leadership. Most of all I would like to thank my husband for his belief in me and my three children for their patience, understanding, and encouragement.

DEDICATION

To my husband Bob, for his patience and support of me in my career and for his companionship as we raise our children, serve our community, and follow God's leading in our lives.

To our children, Rebekah, Joshua and Benjamin, I am very proud of you. I hope my perseverance through challenging situations will inspire you and give you hope and strength.

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CHAPTER 1

OVERVIEW OF THE STUDY

Introduction

Over the past half-century, our Nation's public schools have endured intense scrutiny. The *No Child Left Behind Act* (2001) and the related competitive *Race to the Top Fund* (2014) (RTTT) process resulted in continued educational reform. As schools, school districts, and states respond to increased accountability demands, an examination of the local public school board's role has been largely absent from both educational literature and research discussions (Rice, 2014). Historically, our Nation's founding fathers did not provide for federal oversight of schools but rather deferred educational governance to the states. Since the late 1700's, states have delegated control of local schools to community representatives in the form of local school boards (Moody, 2011).

Recently, local school districts have increased efforts to study and monitor local student academic achievement data (Lands, 2002; Hess & Meeks, 2010). NCLB (2001) and RTTT grants (2014) marked an increase in the federal government's participation in compelling local school boards to focus on student academic achievement data. Surprisingly, relatively little research exists linking school board member behaviors and beliefs to a school district's student academic

achievement data (Rhim, 2013). In response to this void, my study examined local public school board member belief systems and behaviors, as they related to student academic achievement.

Theoretical Framework

My study used the Iowa Lighthouse Study (Rice, D., Delagardelle, M., Buckton, M., Jons, C., Lueders, W., Vens, M. J. & Weathersby, J., 2000; Delegardelle, 2007) and Dweck's (2006) mindset theory to examine public school board member beliefs and behaviors and to analyze the relationship between these behaviors and beliefs and student academic achievement. The study posited connections exist between the *Elevating* and *Maintaining* Beliefs in the Iowa Lighthouse Study findings (Rice et al., 2000; Delegardelle, 2007) and Dweck's definition of *growth* and *fixed* mindsets (2006).

The Iowa Lighthouse Study was commissioned by the Iowa Association of School Boards and was the first research study to examine whether school board member beliefs and behaviors influenced student academic achievement (Rice et al., 2000). Central to the Lighthouse Study (Rice et al.) was an examination of whether a relationship existed between specific and identifiable school board behaviors and beliefs and levels of local school district student academic achievement. The Lighthouse Study was conducted in 2000 at a time when U.S. educational policy was increasingly focused upon increasing the accountability of publicly funded school officials (Rice et al.).

Rice et al.'s (2000) Lighthouse Study examined seven areas of public school district leadership and their relationship to local school district student academic achievement. From these seven areas, two discreet school district descriptors; *Moving* and *Stuck* emerged. *Moving*

school districts demonstrated increasing levels of student academic achievement. Conversely, *Stuck* school districts had stagnant or decreasing student achievement over a three year time period.

In addition to the two discrete school district descriptors, two distinct belief patterns emerged among school board members in the *Moving* and *Stuck* school districts; *Elevating* belief patterns were found in the *Moving* school districts while *Maintaining* beliefs were found in *Stuck* school districts. An *Elevating* belief pattern reflects optimism that student academic achievement can improve despite the challenges and obstacles within a school district. *Maintaining* beliefs evince a mindset that student academic achievement cannot improve due to the challenges faced by a school district (Rice et al., 2000; Delegardelle, 2007; M. Delegardelle, personal communication, May 23, 2014). *Elevating* and *Maintaining* beliefs are similar to Dweck's (2006) definition of *growth* and *fixed mindsets*.

Dweck's *Growth Mindset* theory (2006) served as this study's second theoretical framework. Dweck's research, summarized in "Mindset: The New Psychology of Success" (2006), focused on whether talent and intelligence are developed or predetermined. Dweck asserted talent and intelligence could be developed. Dweck defined the *growth mindset* as a person's desire to take on additional challenges, improving and learning from both successes and failures. In contrast, Dweck defined the *fixed mindset* as a person's desire to improve their innate intelligence by seeking out only experiences that further define them as being smart (Dweck, 2006).

Moving beyond one's own mindset and how it influences personal behavior, Dweck's research has linked the mindset of those in leadership roles to the output of others within an organization. Goal setting within a growth mindset school district resulted in raised student

intrinsic motivation and accompanying higher grades and deeper understanding of curricular content (Dweck & Leggett, 1998; Grant & Dweck, 2003). Similarly, employers with a growth mindset who praised employees for hard work generally found employees demonstrate increased engagement, effort and hard work (Keating & Heslin, 2015).

Dweck's growth mindset theory (2006) and the Iowa Lighthouse Study (Rice et al., 2000; Delegardelle, 2007) are theoretically related. Local school board members in *Moving* school districts (Rice et al., 2000; Delegardelle, 2007) demonstrated *elevating* beliefs, similar to *growth mindsets* (Dweck, 2006). These school board members believed students could learn despite existing challenges within the school district and these challenges did not portend student academic failure. School board members with *elevating* beliefs presumed students had not yet reached their potential and the educational staff could affect the learning process in positive ways. These school board members tended to be flexible and viewed setbacks as being temporary and serving as motivation to continue working hard towards a goal. They were confident all students could learn.

On the other hand, local school board members in *Stuck* school districts (Rice et al., 2000; Delegardelle, 2007) held *Maintaining* beliefs, similar to *fixed mindsets* (Dweck, 2006). They viewed challenges as inevitable and believed staff and family challenges constituted insurmountable obstacles to student learning. These school board members were generally either unaware or disinterested in initiatives being used to impact student learning and believed external government mandates were the main reason for the school district's attempts at improvement. School board members with *Maintaining* beliefs did not engage in either professional development or training and largely accepted the superintendent's recommendations without questions or discussion (Rice et al.).

Problem

Existing research on efforts to increase student academic achievement generally focuses on school district personnel responsibility for local school improvement (Rhim et al., 2013). With the exception of the Iowa Lighthouse Study, research examining local school board member beliefs and the relationship of school board member beliefs and behaviors to student academic achievement has been, to date, sparse. In the United States, there are over 14,000 public school boards currently overseeing the education of 53 million students (Rhim et al.). While critics of local school governance exist, American citizens have historically favored this model and this support is likely to continue (Rhim et al.). As such, consideration of local school board member attitudes about and behaviors toward student achievement is warranted (Rhim et al.). Many school board members become discouraged or complacent when challenges exist (Rice et al., 2000). In this era of accountability, the need for research examining the association between school board member beliefs and student academic achievement is compelling.

Purpose

Additional research was needed to examine the association between local school board member beliefs and behaviors and student academic achievement. The results of this research could be used to better train local school board members. Such enlightenment has the potential to influence local school board member behaviors. This enlightenment may ultimately positively impact student academic achievement (Blackwell, Trzesniewski, & Dweck, 2007; Dweck &

Leggett, 1998; Good, Aronson, & Inzlicht, 2003). School board member enlightenment will arguably yield enhanced relevancy and an accompanying awareness that school board member beliefs and behaviors have the potential to produce improved local school district student academic achievement. Greater student achievement levels will enable the United States to remain competitive in the 21st Century global economy (Spring, 2011).

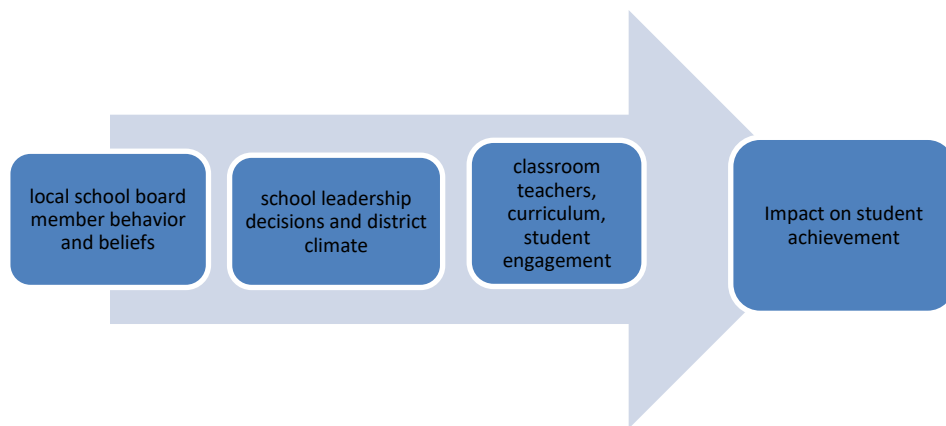


Figure 1. Impact of Local School Boards on Student Achievement

While the local school board does not directly affect student achievement, their decisions, behaviors and beliefs influence school leadership and district climate, which in turn influences the classroom, teachers, curriculum and student engagement. The result of this chain effect is an indirect impact on student achievement (Blackwell, Trzesniewski, & Dweck, 2007; Dweck & Leggett, 1998; Good, Aronson, & Inzlicht, 2003). My study examined the first and last box of the above diagram. Specifically, I examined how the local school board member behavior and beliefs indirectly trickled down through a public school district and affected the result of student achievement.

My study had two categories of independent variables; local school member beliefs and behaviors. The dependent or outcome variable, student academic achievement. First, local school board member beliefs were divided into two categories; *elevating* and *maintaining* beliefs. *Elevating* beliefs describe a local school board member's confidence in his or her own ability to positively impact student academic achievement despite the existence of school district challenges such as lower socio-economic status. *Elevating* beliefs also regard professional development and goal setting to be factors that positively impact student academic achievement. In contrast, *maintaining* beliefs are anchored in a perception that student academic achievement cannot improve in the face of school district challenges. For example, for a maintaining believer low-socio economic status is viewed as an immutable cause of sub-standard student academic achievement. Similarly, for school board members who hold *maintaining* beliefs, professional development and goal setting are viewed as being ineffective in increasing student academic achievement.

Student academic achievement was examined in the current study. Student academic achievement data was obtained from local school district student standardized test results on Partnership for Assessment of Readiness for College and Career (PARCC). School district student academic achievement data was publically available at the Illinois Report Card (IIRC) website, www.illinoisreportcard.com. Student social economic status, a key demographic in many *Stuck* school districts was also collected from the IIRC website.

Significance of the Study

Local school board member beliefs and behaviors are essential components of a local school district leadership team. Positive school board member beliefs (i.e., elevating beliefs) and behaviors are needed to positively impact student academic achievement. This study is significant because little research examining the link between local school board member beliefs and student academic achievement is available (Rice, 2014). Each local school board member in office has the opportunity to reflect and evaluate his or her beliefs about potential student achievement. The belief decisions of local school board members are alterable and changes in school board member beliefs do not require an expenditure of tax dollars. Any local school board member may reevaluate his or her beliefs on student potential. Further research in this area may influence local school board members and superintendents to incorporate belief statements into local school board shared agreements. These belief statements would serve as reminders to local school boards to hold elevated beliefs for student potential.

Research Design

This study employed a quantitative cross sectional design. The study examined the association between two independent variables, i.e., local school board member elevating and maintaining beliefs and local school board member behavior at one point in time and causal links were to be made. Local school district student academic achievement was the dependent variable.

Initial participants in this research study were two subsets of Illinois public school board members from 37 school districts. The first subset of Illinois school board members were in school districts identified from the IIRC website as having a low economic status between 50-80% of students and less than 17% of students meeting or exceeding standards on the PARCC exam. The second subset of board members were in school districts also identified from the IIRC website as having a low economic status between 50-80% of students but in these districts, more than 30% of students were meeting or exceeding standards on the PARCC exam. The number of respondents from these two initial groups was low. As a result, all Illinois public school board members in the Illinois collar counties, DuPage, Kane, Lake McHenry and Will Counties, were invited to participate.

Participating local public school board members self-reported their beliefs via an electronic survey tool. Survey questions included items related to both of the independent variables i.e, elevating and maintaining beliefs. Through this survey, information was collected and analyzed based upon the research questions to determine the relationship between local school board member beliefs and school district student academic achievement.

The outcome variable, school district student achievement, was obtained from a publicly accessible database - the Illinois Report Card (IIRC) website, www.illinoisreportcard.com.

Research Questions

This study examined two categories of local public school board member beliefs i.e., elevating and maintaining beliefs, to determine their association to local school district student academic achievement. As such, the following research questions were examined:

Research Question 1: What is the association between local public school board member beliefs (i.e., elevating or maintaining) and local public school district student academic achievement?

Research Question 2: What is the association between public school board member behaviors and student academic achievement in higher and lower achieving local public school districts?

Research Question 3: What is the association between public school board member beliefs and behaviors in higher achieving and lower achieving public school districts?

Delimitations

This study was guided by several purposeful decisions including the study's objectives, the research questions, the study's variables, theoretical constructs, and study participants. The overarching question; *What is the impact of public school board member beliefs upon student achievement?* was chosen because all local public school board members have the ability to consider and change their beliefs regarding student achievement. Rather than examining how varying factors such as staffing, finance, facilities or curriculum impact student achievement, the researcher selected a leadership component present in all Illinois public school districts.

Finally, the researcher chose to survey the beliefs of local public school board members. This data was self-reported by individual school board members. It is possible these local school board members inaccurately reported on the study survey. This could have occurred either

intentionally or because of an individual school board member's inaccurate understanding of their personal beliefs and behavior. However, this was unlikely as most school board members desired to accurately report in the study for the ultimate good of students.

Definition of Terms

Moving school districts are described as school districts with increasing levels of student achievement.

Stuck school districts are described as school districts with stagnant or decreasing student achievement.

Elevating belief patterns are described as optimism that student achievement can improve despite existing challenges within a public school district (e.g., lower socio-economic conditions).

Maintaining beliefs patterns are described as the belief that student achievement cannot improve because of the challenges faced by a school district (e.g., lower socio-economic conditions).

Growth mindset describes the belief that with additional practice, effort and time, individual student academic achievement can improve.

Fixed mindset describes the belief that failure reflects lower intelligence and incompetence

CHAPTER 2

LITERATURE REVIEW

Introduction

Public school board member beliefs and behaviors, as they relate to student achievement, is the focus of the current study. To set the context, this chapter begins with a brief history of local school boards, the increasing role of the state and federal government in public education, and a discussion of present-day local school board characteristics. Next, the impact of local school board member beliefs and behaviors upon local school governance in today's age of accountability and reform will be addressed. Specifically, the Iowa Lighthouse Study (Rice et al., 2000), to date, the seminal work on local school board member beliefs and behaviors as they relate to student achievement, will be reviewed. Next, Carol Dweck's (2006) mindset theory and related studies will be reviewed and connections from Dweck's work will be made to the Iowa Lighthouse Study findings.

History of local public school boards and their role in American society

To fully comprehend the importance of the national focus upon accountability for student academic achievement, it is necessary to be aware of American public education's history.

Formal public schooling in America began approximately 50 years after colonization. As schooling became more systemized, the one room schoolhouse emerged. With the advent of the one room schoolhouse, responsibility for local school governance shifted away from religious organizations and became vested with community representatives (Moody, 2011; Rhim, 2013; Thomas, 2001). Early school governance committees focused on hiring a teacher, securing and maintaining the schoolhouse facility and approving the curriculum taught to the students (Rhim, 2013).

The Massachusetts Law of 1642¹ was the first public law mandating children be taught to read. In 1647, the Old Deluder Satan Act² required towns to hire teachers for elementary schools and this hiring was done to scale with town population. These two enactments formed a foundation for public schools in the United States (Moody, 2011). The Massachusetts Law of 1789 was the first law to form a school district governed by a community group. The Massachusetts statute was an initiative designed to address local educational needs rather than a plan coordinated by state and federal government (Moody, 2011).

In the late 1800s to early 1900s, the number of students enrolled in public schools increased. As a result, the complexity of educational planning and coordination also increased (Land, 2002; Danzberger & Usdan, 1994; Rhim, 2013). By the early 1900s, the number of local school board members on a board decreased, local school board members were mostly elected at large, and local school board members became independent of political parties and other local government officials. Local school boards also changed from being comprised of mainly business owners and professionals to including professional educators. Board member motives

¹ Massachusetts School Law of 1642, MASS. GEN. LAWS (1642).

² Law of 1647, MASS. GEN. LAWS (1647).

included advancing not just their own views of education but also that of the larger community (Wirt and Kirst, 2001).

As the number of students enrolled in public schools increased and educational planning became more complicated in the early 1900s, the position of a paid local district leader originated. This paid local district leader is known today as the Superintendent of Schools (Land, 2002; Danzberger & Usdan, 1994; Rhim, 2013). No formal evaluation criteria or job description was created for this new district leader role and preparation for this role was primarily religious (Thomas, 2001). Over time, school boards delegated responsibility for day-to-day school district operations to the district leader (Land, 2002; Danzberger & Usdan, 1994; Rhim, 2013). This administrative position was created, in part, to minimize local community political pressures (Moody, 2011; Rhim, 2013). The relationship between the superintendent and school board is less than two hundred years old and during this time period it has undergone much change (Moody, 2011).

Since the early establishment of the school superintendent leadership position, three key local school board characteristics became evident. First, school boards began to influence local decisions through representation on the school board. Second, local school board members assumed a general oversight role rather than micro-managing day-to-day school district operations. Lastly, elections were utilized to determine local school board membership (Land, 2002). Today, local school boards are expected to oversee local school district efforts to prepare students for college and to acquire marketable employment skills (Rhim et al., 2013). School board members serve as local community representatives and, if their leadership is effective, local school boards provide strong symbols of democracy (Hess & Meeks, 2010).

In the democratic blueprint for managing local schools, public school boards reflect their respective community's values and nuances (Hess & Meeks, 2010). Board members must take their citizen's opinions seriously even if the citizenry is not well informed of school district information. The more homogeneous the community, the more exclusive the board may feel in their oversight of the district. As conflict occurs in school districts, local school boards become more attentive to citizens' opinions and more likely to re-evaluate policies involved in the conflict. Community members often feel local school board members are more approachable than those elected officials in higher state and federal office (Wirt and Kirst, 2001).

Since public school boards reflect their respective community's values and nuances, local school boards vary throughout the nation. However, while local school boards tend to differ based upon local preferences, over the past decade, an increasingly common concern with monitoring student academic achievement has emerged (Hess & Meeks, 2010; Land, 2002). Today, school boards are expected to focus on student academic achievement in addition to securing funding and maintaining an excellent teaching staff so the school district's educational goals may be met (Land, 2002). The increased national focus on student academic achievement has brought immediacy and seriousness to the connection between effective school board governance and improved student academic achievement (Hess & Meeks, 2010).

This study focuses on the role of the local school board in raising student achievement. District leadership, teachers, and lawmakers impact student academic achievement but the role of the local school board on district academic achievement is examined far less (Rhim, 2013). School boards spend much of their meetings discussing business items such as budgets, transportation, and facility issues at the expense of a focus on student academic success. This is beginning to shift to a more robust conversation regarding student academic achievement (Hess

& Meeks, 2010; Rhim, 2013). The school board is a recipient of federal, state and local tax dollars and is charged with using those funds wisely. There is growing interest, by various levels of government, in local student academic achievement results (Rhim, 2013). The specific area of increased national focus on improving student academic achievement will be explored next.

The Impact of Federalism Upon School Boards

While numerous political disagreements related to education existed during the first half of the Twentieth Century, average American citizens remained proud of their local schools (Rice et al., 2000). Prior to the 1950s, the public felt racial differences and poverty levels among children affected a school district's potential student academic performance (Rice et al., 2000). During the 1950's, the public began to find these discrepancies less and less tolerable.

In response, the federal government issued mandates designed to address the needs of economically disadvantaged and racially diverse students. During the 1950's federal Title I funding became available to help students living in poverty attain levels of educational achievement commensurate with the performance of students in higher socio-economic levels (Rice et al., 2000). The United States Supreme Court's 1954 *Brown v. Board of Education* decision and the Elementary and Secondary Education Act of 1965 resulted in a greater federal role in meeting the needs of diverse student populations (Rhim, 2013). While these federal programs were implemented to better meet the specific educational needs of economically disadvantaged and racially diverse students, many critics of the American education system doubted the public school system's ability to adequately and fairly educate minority students (Land, 2002).

In response to Russia's launch of Sputnik, the National Defense Education Act was passed. Sputnik's launch created a public perception that other countries were surpassing America's educational quality (Rice et al., 2000). In response to this growing public concern the federal government's role in education expanded with the initiation of special programs and increased federal funding (Land, 2002). This federal influence in public education threatened local control of the Nation's schools. These changes occurred slowly but steadily and while the education scene appeared calm, adversity was just under the surface (Rice, 2014).

The United States Department of Education (DoE) was created in 1980 under President Carter's administration. The DoE's expressly stated intention was to not usurp local control of public schools. However, the DoE's creation communicated a different message and ushered in growing federal oversight and control of local public school districts (Rice, 2014). During the 1980s, skepticism grew over the effectiveness of educational efforts to assist disadvantaged learners (Rice et al., 2000). *A Nation at Risk*, published in 1983, though calling for more rigorous standards in American education, did not result in improved student academic achievement. This was in part due to the fact the report did not establish accountability sought after in educational outcomes.

In the 1980s, states, rather than the federal government, began to respond to a growing public fear of mediocrity by mandating accountability measures. States enhanced teacher-credentialing requirements, increased high school graduation requirements, issued curricular mandates and employed statewide testing initiatives to collect student academic achievement data (Land, 2002; Rice et al., 2000). This increased state influence on education occurred simultaneously as local school districts moved toward site-based management. Site-based management shifted authority from the school district central office to the individual school

level. The increased state influence on education and site-based management movement were different, often opposing, approaches to the improving student learning (Rice et al., 2000). State mandated accountability measures, rather than inputs and resources, had a higher positive correlation to student achievement (Hanushek & Raymond, 2004). However, increased accountability expectations at the state level were not enough to close the academic achievement gap between student racial groups (Hanushek & Raymond, 2004). With expansion of state mandates and educational reform efforts, the Institute for Educational Leadership published a report expressing apprehension regarding the impact of these efforts upon the role of local school boards (Danzberger & Usdan, 1994; Rice et al., 2000).

In 2001, the No Child Left Behind Act amended the Elementary and Secondary Education Act of 1965. NCLB introduced increased nationwide testing and directly threatened local control of school boards (Rhim et al., 2013). Race to the Top Fund (2014), a competitive federal grant application process for states, further disrupted local control by tying funding to student achievement progress and federal mandates. The increased accountability expectations set forth in these federal enactments eroded local school board authority (Land, 2002; Rice et al., 2001).

Local school board ability to respond to local needs and preferences decreased because of increased state and federal initiatives (Land, 2002). In 2010, Hess and Meeks pointed out the lack of local school board control over resources, insufficient federal funding, and ineffective state funding formulas resulted in diminished student academic achievement at the local school district level (Hess & Meeks, 2010). Hess and Meeks noted the irony that most funding for local schools was derived from local dollars yet the local school board had the least amount of control over how funds are spent. For example, Hess and Meeks found 47% of local public school board

members who responded to their quantitative study indicated federal and state mandates created obstacles to removing ineffective teachers and 37.9% of the respondents declared federal and state mandates prevented them from hiring teachers who did not hold traditional state licensure. Hess and Meeks also found 52.7% of school board members reported state collective bargaining laws prevented school boards from removing ineffective teachers. In contrast to school board member perceptions about state and federal mandates, just over 25% of these same board members suggested local school district level policy was a barrier to removing ineffective teachers.

Local school boards enjoy the unique position of overseeing compliance with state and federal mandates while also listening and responding to local needs (Rhim, 2013). Rice (2014) pointed out federal education initiatives funnel funds through the state and, therefore, must obtain the support of state governments. In turn, state reform initiatives, in order to be effective, must obtain buy-in from local school districts. However, buy-in does not always occur, and as a result initiatives are weakened (Rice, 2014). States also generate their own school reform initiatives. Rice (2014) suggested both state and federal reforms are often out of touch with the local school district needs.

In 2013, Rhim et al. advocated for local school board representation at the federal level in order to facilitate discussion of the impact of federal mandates upon local school districts. Rhim and colleagues also recommended federal grants be given directly to local school boards to experiment in areas of educational innovation and entrepreneurship. Rhim argued this would result in local school boards embracing and leading federal initiatives at the local level. Rhim further argued this would thereby lead to improved student academic achievement. As a result, local school boards would more fully understand and support federal mandates (Rice, 2014).

Rice (2014) observed supporters of public education were concerned by Secretary of Education Arne Duncan's reassigning of local governance responsibility to federal government. Rice also pointed out the Department of Education had acknowledged it was not possible for schools to achieve the NCLB (2001) student academic achievement targets by 2014. This was, in part, because NCLB did not allow variances for poverty, second language learners and students with disabilities (Rice, 2014). Rice reported the federal government was allowing local school districts that did not achieve the NCLB's Adequate Yearly Progress goals, to apply for waivers. In exchange for these waivers, local school districts would agree to additional federally mandated professional development and curriculum.

Recently, the National School Board Association (NSBA) has strongly stated their opposition to federal encroachment into local school district governance ("NSBA.org", 2016). The future of federal influence on local school districts is important and therefore, local school boards should remain vigilant on this educational topic (Felton, 2014). As local school districts strive to ensure improved student academic achievement is a viable goal, local school board members must feel they are empowered to make local decisions that are in the best interest of student academic achievement; i.e, decisions rooted in local school board member behaviors and beliefs.

Local School Board Characteristics and the Relevance of those Characteristics

Educating America's youth is necessary for ensuring a healthy democracy (Rice, 2014). American citizens are increasingly demanding improved student academic achievement in return for their tax dollars (Rice, 2014). Land (2002) and Danzberger (1994) identified common

criticisms of local school boards; avoidance of accountability and professional development, a tendency to become too involved in school district day-to-day operations, a resistance to work with other local governmental bodies, and a tendency to be at odds with the superintendent. Rice (2014) also noted poor behavior by one school board member might cause the whole board to lose the community's respect.

Since many state and national educational reform movements began in the 1990s, national attention and discussion has emerged regarding the relevance and capacity of school boards to effectively govern (Danzberger & Usdan, 1994). Critics argue local public school boards are antiquated and no longer serve the needs of the American public educational system (Rhim, 2013). NCLB and Race to the Top initiatives have placed further pressure on local school boards (Moffett, 2011). Standardized testing and national comparisons to foreign educational systems have become the primary way the public evaluates student learning (Moffett, 2011; Rice, 2014). Given the unprecedented accountability and change in governance roles, studies have emerged to examine whether local school board behavior still matters or impacts student learning (Rice et al., 2001) and, if so, what is the best method for assessing local school board leadership capacity (Hess & Meeks, 2010).

In an attempt to garner opportunities to provide services and influence private entrepreneurs, politicians and the media have cast doubt upon the effectiveness and relevance of local public school boards (Rice, 2014). Rice discussed the growing private investment by wealthy entrepreneurs and pointed out the potential danger of this influence upon public education. Rice cited the number of private foundation personnel who are also employed by the federal government and expressed concern over their influence on public education. These private entrepreneurs and foundations often suggest educational reform without considering

educational research or involving educational professionals or local governing bodies. Rice (2014) also cautioned that private entrepreneur appeals to parental needs and preferences could increase the risk of inequity in opportunity for students, especially if some parent groups have access to these appeals and others do not.

Most local school board members are elected to their position with no prior training or understanding of the complexity of the local school district operations. Local school boards highly value their role in evaluating the superintendent and should likewise self-evaluate themselves (Anderson, 1992). Anderson conducted a study in Wisconsin school districts to examine which board behaviors were most closely related to board member effectiveness in governance. Anderson's study examined self-reported behaviors of board members as reported by superintendents, school board members, and principals.

Anderson summarized most effective and least effective board behaviors based on perceptions of participants. Anderson found the most effective behaviors included a distinction between board work and superintendent work and procedures ensuring unbiased and productive board discussions. Anderson also found it important for a board member to consider other board members' opinions and the needs of students as more important than personal opinion. Least effective behaviors of local school board members included getting involved in too many day to day decisions, ineffective hiring and financial practices, and not respecting other board members and board decisions (Anderson, 1992).

Shober and Hartney (2014) contended that local representation results in a large number of individual local school boards. They argue this is preferred by the American people compared to the alternative of a fewer number of boards overseeing multiple communities. Shober and Hartney argued the strength of local representation is the reflection of local community interests

and differences. Shober and Hartney stated that while local school boards are entitled to set their own priorities, they are also obligated to defer to state and federal governmental mandates. Shober and Hartney suggested local school boards with less ambitious goal setting might, in turn, realize lower student academic achievement levels.

Rice (2014) argued local school boards have not given sufficient attention to marketing themselves and have instead been reactive rather than proactive in responding to increasing federal influence and criticism. Rice cited Adamson's (2012) observation of the low qualifications needed to run for a school board position as well as board members not undergoing recommended board training.

Hess and Meeks (2010) found school board members were generally aware of correct information regarding their local school district. For example, school board members were knowledgeable about school funding, teacher salaries, collective bargaining details and school district student classroom enrollments. However, Hess and Meeks (2010) also noted local school board members were less knowledgeable about a fifth category, the difficulty and challenge of the school district's academic curriculum. Carol et al. (1986) as cited in Land (2002) stated there is a possibility school board relevance may be questioned if school boards do not intentionally address their impact upon student academic achievement. The focus on student academic achievement has resulted in some school boards becoming more involved in day-to-day school district operations due to the pressure they feel from their constituents (Danzberger & Usdan, 1994).

Hess and Meeks (2010) found while school boards were interested in student academic achievement, 86.8% of school board members tended to be more interested in overall student wellness and happiness and in students meeting their potential. School board members indicated

the greatest barrier to student academic success was funding. These researchers concluded because school board members do not believe student academic achievement was the highest priority, student academic achievement is impacted. Hess and Meeks found school board members who evidenced a greater academic focus were leading school districts where student academic achievement exceeded expectations. This conclusion was based upon a comparison of school district proficiency ratings, the ratio of students who were meeting academic standards contrasted with students who were not, and the school district's socio-economic challenges.

Criticisms of school boards include; school board members being elected by 10-15% of the electoral population, voted into office by a higher percentage of white rather than minority voters, becoming too involved in the day-to-day administration of the school district, and often not getting along well with fellow board members to allow for effective governance (Lands, 2002; Frankenburg & Diem, 2013). School board members can also be influenced by special interest groups both inside and outside their local communities that may not accurately reflect the needs of the local community (Rhim, 2013). Rhim's study, based upon self-reported data, showed school board members often spend an inadequate amount of time discussing student academic achievement.

Finn and Keegan (2004) argue school boards are obstacles to school reform. School board members are often ineffective because members are hoping to use their school board position as a platform to the move into higher political office, are former district employees with conflicts of interest, or have a single interest they are trying to advance. School board elections often do not occur with national elections when more citizens vote. Finn and Keegan argue that school board members are not effective in overseeing district finances because of the increasing de-centralization of school funding and disparities between communities. Since school district

data is readily available on the internet, citizens are able to review district student achievement rather than relying on school board members to do this. Finn and Keegan also noted decision-making is moving from communities to individual families through charter school and school choice programs. Finn and Keegan argue school funding changes, readily available district student achievement on the internet, and school choice options are causing local school boards to become increasingly irrelevant.

In a 2015 *Education Next* article interview, Reed Hastings, Netflix CEO, argued for more charter schools. Hastings has offered substantial funding for California charter schools. Hastings is also a critic of local school boards, particularly those in more urban areas. Hastings stated urban school board members often have aspirations of moving into higher political office. Hastings' critics argued charter schools are governed by non-profit charter boards and are therefore not democratic. Hastings counter-argued that parents care more about increased student achievement and effective education, more so than governance structure (Jacobs, 2015).

School board member demographics are often different from the communities and families the local school board serves. School board members tend to be well-educated and successful professionals, often representing a very different demographic than their constituencies (Land, 2002). Hess and Meeks' 2010 survey found; 56% of school board members were men and 44% were women, 80.7% were white, 21.8% were African-American and 6% Hispanic. School board members tended to be between the ages of 40 and 59, with 4.6% being below age 40. The authors observed that while 17% of the American population had school- aged children, 38.1% of school board members had school-aged children. The two most common employment fields for school board members were in business and education. Ninety four and one half percent of school board members were elected and 5.5% were appointed. More

than half of school board members surveyed had been in office more than five years and 43% indicated they intended to run for another term.

Hess and Meeks (2010) found politically moderate school board members tended to have more accurate information regarding school district financial conditions and student classroom enrollments. Conservative school board members were less inclined to believe funding was a barrier to improving student academic achievement. Liberal school board members were more likely to believe collective bargaining was not a barrier to improving student academic achievement. School board members with educational backgrounds were less knowledgeable about specific school district information and tended to see financial conditions and low teacher pay as the reasons why student academic achievement was not improving.

Hess and Meeks also observed in school districts where school board elections were held concurrently with other state and national elections, students were more likely to surpass projected academic achievement goals (Hess & Meeks, 2010; Rhim, 2013). Similarly, Allen and Plank (2005) found that consolidated elections, elections occurring with multiple municipalities, offered greater representation of voters and possibly greater teamwork between school board and municipal leaders. Voter turnout in consolidated elections was more than 3 times the amount of the turnout for special school board elections. The advantages of consolidated elections included higher voter turnout, a higher yield of minority voters, more robust candidate information available to voters and more coordination between school board officials and elected city officials. The one clear benefit found in school board only elections was a higher participant rate among low-income voters. Allen and Plank argued consolidated elections were better for school board governance because those running for office would need to provide more information on election issues to a larger number of voters.

Academically high performing school districts are more likely to have accountability systems in place to monitor student progress (Coleman & LaRocque, 1990). In 1999, the National School Board Foundation declared the top priority for local school boards should be student academic achievement. This was a departure from the more traditional focus on finances and community concerns. Being accountable for student academic performance is also very challenging for school board members who do not have extra time to devote to understanding how to positively impact student achievement (Land, 2002; Rhim, 2013). Currently, there is little research supporting a clear distinction between the roles of a superintendent and a school board member, especially as these roles relate to student academic achievement (Land, 2002). School boards and superintendents who craft their own distinct definition of roles find success in working together (Land, 2002).

Shober and Hartney (2014) examined the relevance of school boards using the survey tool created by Hess and Meeks (2010). They compared school board member responses gathered in the Hess and Meeks study with the actual conditions in the school district one year prior to the study. Shober and Hartney (2014) used this data to focus on three key components of local school boards; accurate knowledge about the school district, intentional school board concentration on student academic achievement and the effect of school board member training. They found school boards that ranked high in these areas led school districts with higher student academic achievement.

In the area of accurate school district knowledge, Shober and Hartney (2014) found only half of the school board members had accurate information about their school district's school funding, teacher salaries, student classroom enrollments, and academic achievement targets.

School board members were generally able to accurately recall the details of their school district's collective bargaining agreements.

Shober and Hartney (2014) found school board members seemed to contradict themselves by stating the focus on academic achievement was too constricting (82%) while at the same time stating present student academic achievement levels in their school district were unacceptable (64%). Finally, Shober and Hartney noted while school board member training was common, the effectiveness of this training had not been studied adequately.

Shober and Hartney's (2014) conclusions and recommendations included; hiring an effective superintendent was crucial to student academic achievement, local school boards must hold the district leaders responsible for high student academic achievement, and local school board members must find the right balance between holding district leaders accountable and becoming too involved in school district day-to-day operations. The researchers stated dedicated, knowledgeable school board members who were focused on student academic achievement were necessary for ensuring a strong future for the United States.

Lee and Eadens (2014) examined the relationship between school board member behaviors and student academic achievement. Their study emphasized the growing need for increased superintendent accountability for improved student academic achievement. The researchers compared this need to the lack of local school board accountability. Lee and Eadens (2014) noted the public's opinion of local school board members was largely absent from the literature. Less than 25% of school boards undergo annual self-evaluations and most local school boards need to devote more meeting time to studying and improving student academic achievement. Lee and Eadens suggested school boards should review the superintendent's plans

for improving student academic achievement and require that the school board be given this opportunity if it was not previously initiated by the superintendent.

Grissom (2009) researched decision-making in 222 California local public school boards to determine which internal and external factors contributed to higher levels of school board conflict. Grissom found that urban and rural school boards experienced higher levels of conflict than did suburban school boards. Grissom also found larger school district boards experienced more conflict than did smaller districts. Similarly, district school boards with higher racial diversity experienced higher adversity than those with less diversity. School board elections by ward, as opposed to at-large elections, produced elected officials who had higher levels of conflict. Elected board members who had accepted financial contributions from special interest groups, such as teacher unions, also experienced a higher level of conflict once seated in a governing position (Grissom, 2009).

Grissom (2009) found internal factors such as board member's fiscal ideology and the overall size of the school board contributed to increased board conflict. However, the particular mix of men and women on the school board and racial diversity among board members did not lead to increased levels of conflict. In fact, boards with greater levels of racial diversity actually had fewer disagreements while governing. In addition, boards who took part in on-going training experienced less division. These training practices such as governance self-evaluations, common goal setting, and shared vision workshops led to a higher level of professionalism among the boards.

In the School Board Video Project Survey (SBVPS), Lee and Eadens (2014) used both a ten-question survey with a Likert-type scale with multiple sub-components and open-ended questions. Various tests were used to evaluate live and videotaped school board meetings over a

six month time period. This study examined the content of local school board meetings and the nature of the superintendent and local school board relationship in an effort to better understand their impact upon student academic achievement. School districts with higher student academic achievement were found to have more orderly local school board meetings, i.e., the agenda flowed in a logical and easy to follow format. School districts with higher student academic achievement spent more meeting time focusing on student academic achievement and policy creation or implementation. Also, school districts with higher student academic achievement extended greater attention and respect to fellow board members. These school boards had fewer members who talked for extended time periods to influence and promote their personal agendas. This tendency to talk more than other school board members limited the discussion and influence of other school board members. These local school member behaviors appeared to directly impact student academic achievement.

Meier and England (1984) studied the relationship of black representation on urban public school boards and the impact of their representation on programs and policies for black students. Meier and England found there were moderate correlations between black representation and policies and determined black representation was a necessary variable in policy change. Meier and England found this relationship of black representation and policy impact occurred most often when blacks were elected to the school board, the educational issues mattered to the black community, and these specific education issues were placed on board agendas. Meier and England also found it necessary for the black board members to agree with the policy positions of the black community, be credible and able to influence other board members, and serve in districts where policy was implemented accurately. Absent these conditions in a district, Meier and England found black representation became largely symbolic.

Meier and England also found that black representation on the school board was related to a higher number of black teachers employed by a school district, a higher number of black students in advanced level classes and a higher number of college-bound black students. Black representation on school boards was also related to fewer suspended black students, fewer black high-school dropouts and fewer black students in special education classes.

Gender roles and differences in governing approaches is also important to include in this discussion. Women first began serving on school boards in the early 1900s after being granted the constitutional right to vote. The number of women on school boards was at its highest in the late 1920s and then waned through the rest of the century (Blount, 1998). In 2002, the National School Boards Association (NSBA) stated 38% of local school board members in the US were women (Hess, 2002). To date, local school board member roles are often held more by men than women (Mountford and Brunner, 2010).

Research examining why women seek to serve in political office is scarce (Mountford and Brunner, 2010). Several studies have shown that women tend to run for office to influence specific policy concerns, particularly those that impact women and children. (Fox, 1997; Swers, 2002; Thomas 1998; Witt et al., 1995). Hess and Leal (2005) found that women in political office were more likely to advocate for programs and decisions that benefit the disadvantaged. Deckman (2007) found women were more likely to describe their work on school boards as similar to community service. Women, as compared to men, are more collaborative in decision-making and seek to build relationships with multiple stakeholders (Mullins, 1972, 1974). Donahue (1997) conducted a study on how male and women board members make decisions at the board table and found men spoke more often than women at board meetings.

Mountford and Brunner (2010) conducted a qualitative study to examine how gender influenced local school board member decision making. Mountford and Brunner based their research on a previous study by Mountford (2001) that had examined decision-making styles of board members and aspects of governance such as beliefs about power and motivation for serving on a school board. Mountford and Brunner included a third person in their qualitative interviews to validate self-reports of local school board member participants. Mountford and Brunner (2010) examined several aspects of board member behaviors, motivation, power, decision-making, vocal-influence and change to determine how board members used their board influence.

Mountford and Brunner found women were more likely to get community input and approach decision-making in a collaborative manner. However, women had less influence as compared to men when they spoke during a board meeting. Mountford and Brunner note Korshammer's (1995) research that found women's tendency to build collaborative decisions was often undervalued or dismissed by colleagues. Mountford and Brunner also found male board members were more likely to demonstrate micromanagement behaviors but were more respected for those behaviors. Further, Mountford and Brunner found male board members had greater impact in their board member role when they were more outspoken. Conversely, women had greater impact at the board table when they encouraged collaborative decision-making. Mountford and Brunner made recommendations for increased school board training to raise awareness of gender bias in the school board role and to train school boards to overcome or change these biases. Increased accountability as well as additional training to better understand the school board role, collaborative decision making, and identifying motives for serving on a

school board are needed to ensure all students continue to improve student achievement (Mountford and Brunner, 2010).

Local School Board Reform Ideas Related to Student Academic Achievement

Public school board critics argue the local governance structure is failing in its ability to adequately secure and utilize funding, address economic and racial diversity, and hold high expectations for student academic achievement (Rhim, 2013). Conversely, public school board supporters point out the local election process includes opportunities for community members to remove individual board members who are not properly serving student needs. School board members may be removed from office if citizens become dissatisfied with their performance, particularly with respect to a volatile issue (Alsbury, 2004; Rice 2014). Critics argue such removals do not occur frequently enough (Rice, 2014).

Berry and Howell (2008) studied whether voters hold school board members accountable for local district achievement results. They asserted that a school board member is successful if student academic achievement rises during tenure in office. Because board members govern over a relatively small number of local issues and because most school board elections are bi-partisan, voters are able to make a clearer appraisal of school board member competency. Berry and Howell stated voters make decisions on school board member success in office based on both state standardized test data and by considering the education of their own children or of children they know in the district. Berry and Howell's study took place in South Carolina and, as part of their study; they examined precinct level and district level standardized test scores. They found that while voters considered student achievement data as well as the experiences of children in

the district, voters only occasionally considered these data points when voting for school board members.

Given this sentiment and the unprecedented accountability expectations being imposed by both state and federal governments, reform proposals are beginning to emerge. These reform proposals include increased school board member training as well as alterations to the local school board governance structure (Danzberger & Usdan, 1994).

Requiring training for local school boards remains a strong reform idea. Public support for school boards increases when school board members undergo professional development (Rice, 2014). To date, student achievement research has focused primarily upon the teachers and administrators, not the local school board. Yet, the local school board is critical to increasing student academic achievement (Rhim, 2013). The following school board training topics will be discussed below; effective school board behavior, interpretation of student academic achievement data, school board self-evaluation, local school board representation at the state and federal levels, school district strategic planning, and school board policy adoption.

States vary in their school board member training requirements. Currently twenty-three states require board member training. Texas requires the most training, at least sixteen hours annually. Montana recently assigned training consultants to the state's lowest performing school districts. This has been highly successful in increasing student achievement for these Montana school districts. Although training is often required of school board members, compliance with this requirement is usually not enforced. When school board members are non-compliant in meeting mandated training requirements, states are more likely to prevent a school board member from running again than they are to remove an elected official from office (Rhim, 2013).

State governments, school board associations, private consultants, and other professional organizations usually facilitate board training. The National School Board Association's website cites board member training in the effective use of data as one of their most important current initiatives (2015). School board member training should focus on assisting board members in addressing low student academic achievement. Mandated school board member training and development should be based on board member experience levels. Because school board members often cite financial pressure as a barrier, school boards should create a permanent budget line item for training, pay board members a training stipend, and adopt policies mandating ongoing improvement. School districts should post completed board member training on the school district's website for public transparency (Rhim, 2013).

Through school board evaluation, school districts can set academic achievement goals that hold both board members and school district employees accountable. School board members should spend more time evaluating their own behavior and less time evaluating school district personnel (Land, 2002; Rhim, 2013). The use of an outside facilitator or consultant is advantageous, particularly when school board members evaluate themselves using student academic achievement data as a metric (Lands, 2002). Rhim advocates for a regional, multi-state governance body to oversee school board member evaluation measures. More research is needed to accurately link specific training methods to improved student academic achievement.

Half of the school board members surveyed by Hess and Meeks (2010) stated they would like more training on how to interpret student academic achievement data. Student academic performance is not always included in superintendent evaluations and school boards often do not receive adequate training in how to use this type of data to evaluate the superintendent (Moffett, 2011). Hess and Meeks found only 16.6% of the school board members in their study believed

their assumptions and actions could improve student academic achievement. Most believed increasing student academic achievement should be left to the professional educators. Over 85% of school board members placed a very high value on professional development and 75% indicated the quality of the school district leadership was extremely important. Fifty percent of school board members believed school choice would increase student academic achievement, less than 40% believed year-round schooling would increase student academic achievement and just 7.2% believed charter schools would boost student academic achievement.

Roberts and Sampson (2011) studied the impact of school board member training on student academic achievement. An eight-question survey was sent to all 50 state school board associations. The survey included short-answer and Likert scale questions. Twenty-six directors of state school board associations, 52% of those invited, responded to the survey. Of the respondents, Roberts and Sampson found 88% of responding school board associations required a minimum level of education of board members, the average board tenure was six to eight years, and 31% of the states required professional development. Twenty-seven percent of responding states required professional development after year one of school board service. Every director who responded to the survey indicated a belief that school board training could positively impact student academic achievement. Roberts and Sampson found that state school board associations who underwent school board training also had higher student achievement levels.

Roberts and Sampson (2011) strongly recommended local school board members be required to complete professional development in the area of school governance. Roberts and Sampson argue other professions require on-going professional development and rigorous on-going education is encouraged in the teaching and school administration profession. Roberts and

Sampson recommended on-going school board training be developed according to adult learning best practices.

Korelich and Maxwell (2015) interviewed the school board members and superintendent in a central Texas school district to examine their perceptions of their governance. Korelich and Maxwell found the board members were unclear about their roles and recommended board members undergo board training to further consider the degree personal agendas were influencing their board service. Korelich and Maxwell argued that without effective board development, board members would continue to pursue special interests rather than decisions that would increase student achievement.

In a study of Georgia superintendent and school boards (Vickers, H., Pate, J., Brockmeier, L., Green, R., and Tsemunhu, R., 2014), school board and superintendent satisfaction levels were examined as they related to district student academic achievement. Vickers et al. found school board president satisfaction was heavily influenced by the poverty level in the school district. In turn, higher levels of school board president satisfaction was related to higher district student academic achievement. Vickers et al. also found superintendents and school board members had the lowest level of agreement and satisfaction in the area of governance and ethics. Because of this finding, Vickers et al. recommended increased school board professional development. Vickers et al. argued that increased board training would lead to higher board member satisfaction. This would, in turn, lead to higher student academic achievement.

Walser (2009), as cited by Rhim (2013), argued local school boards have been overlooked in current school reform and if local school boards were invited to join federal and state movements, the positive impact on student academic achievement could be substantial.

School boards were not participants in the most recent federal policy creations aimed at student achievement. School board members often oppose reform efforts imposed on them without their input. As a result, reform efforts have caused some school board members to feel stigmatized because they are governing poorly achieving school districts. If school board members are invited to participate in these initiatives, they might be less resistant (Rhim, 2013).

School boards can also improve student achievement by performing school board duties that directly impact student learning. School board members often feel they are not able to impact teacher behavior and improvement, yet school boards are the only governing body to directly negotiate with teacher unions (Rhim, 2013). School boards can become distracted by their many board tasks and can easily lessen their focus on improving student academic achievement. Superintendents stated school boards cannot improve the “how” of student academic achievement but can be very effective in holding school district leaders accountable for student academic achievement growth. Knowing the current laws regulating programs such as special education and English language learning programs can also influence school board members as they allocate resources to these areas (Rhim).

School boards focus a majority of their time on facilities, operations, and budgeting rather than strategic planning (Rhim, 2013). However, school boards are becoming increasingly concerned with student academic achievement (Hess & Meeks, 2011). School board members must have an accurate understanding of how their decisions impact both school district personnel and students (Rhim, 2013).

School board members should determine the manner and frequency with which they intend to monitor student achievement. Hess and Meeks (2010) found 38.6% of school board members reviewed student academic achievement reports annually while 21.6% of school board

members monitored student achievement more frequently. School boards varied in whether they chose to set broad or more detailed student academic achievement goals. Over 45% of school board members preferred to study student academic achievement directly while 14.7% preferred having school district administrators provide the school board with an interpretation of student academic achievement data (Hess & Meeks, 2010).

School boards can also increase student achievement by undergoing strategic planning. School improvement proposals can influence strategic planning, but administrators, not school board members, often write these proposals. School boards often review these plans at the beginning of the school year but do not do so again during the school year. When school board members are not focused on the strategic plan or school improvement, they may succumb to parental pressure for non-academic programming such as sports and co-curricular activities. Strategic planning efforts that include a higher number of stakeholders are most effective in improving schools (Rhim, 2013). Hess and Meeks (2010) reported almost 50% of school boards in their study annually changed what they felt were the most important goals rather than following a strategic plan. Forty-seven and one half percent saw their role in representative government as directly engaging with the public. However, only 20.4% believed being voted into office meant they had the public's authority to make decisions.

An important school board responsibility is formulating and adopting policy. Many school boards struggle with how to do this, both in terms of budgeting time and reviewing the policies already imposed by government mandates. While various state level school board associations frequently make recommendations for student achievement policies, there is little research supporting the effectiveness of these policy recommendations at the local level (Land, 2002).

School board training remains a viable reform effort for school districts striving to increase student academic achievement. Hess and Meeks (2010) found school boards who set high student academic achievement goals and celebrated accomplishments were more likely to realize higher student growth. In their study, 12.7% of school boards tended to set high goals for the school district and 49.3% intentionally praised and celebrated effort. Interestingly, superintendents tended to be more confident than school board members in the local school board's ability to increase student academic achievement. Superintendents also tended to be more concerned with studying student academic achievement data than board members. Superintendents reported they were evaluated primarily on their financial management, goal completion, and staff relationships and less on student academic achievement. In contrast, local school board members reported placing greater emphasis on student academic achievement (Hess & Meeks, 2010).

Hess and Meeks (2010) found both superintendents and school board members cited the same strategies for improving student academic achievement. These strategies included staff development, ongoing analysis of student academic achievement data, and a focus on enhancing and developing strong school leadership. School board members and superintendents also agreed class size reduction or charter schools were not satisfactory solutions.

Another reform effort is increasing federal financial support to local school districts in exchange for compliance with federal mandates (Rice, 2014). Since many local school districts experience annual financial shortages, they would feel compelled to accept federal financial support (Rice). However, Rice argued this was not a reform effort but rather a forced takeover.

In *National Federation of Independent Businesses v. Sebelius*³ divided United States Supreme Court upheld Congress's power to enact most provisions of the *Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act*. In this decision Justices Scalia, Kennedy, Thomas, and Alito joined an unsigned dissent that argued the individual mandate was unconstitutional because it represented an attempt by Congress to regulate beyond its power under the Commerce Clause.-The dissent further suggested federal funding of schools constituted coercion rather than a choice school boards could make freely.

It is imperative that local school boards be held accountable for student academic achievement. When interviewed, school board members indicated their performance was judged based upon their preparation for meetings and good decision making rather than upon evidence of improved student academic achievement (Rhim, 2013). If local school district governance is

³ *National Federation of Independent Business v. Sebelius*, 567 U.S. ____ , 132 S.Ct. 2566, 2662 (2012) (JJ, Scalia, Kennedy, Thomas and Alito dissenting) (“Acceptance of the Federal Government's interpretation of the anti-coercion rule would permit Congress to dictate policy in ³ *National Federation of Independent Business v. Sebelius*, 567 U.S. ____ , 132 S.Ct. 2566, 2662 (2012) (JJ, Scalia, Kennedy, Thomas and Alito dissenting) (“Acceptance of the Federal Government's interpretation of the anti-coercion rule would permit Congress to dictate policy in areas traditionally governed primarily at the state or local level. Suppose, for example, that Congress enacted legislation offering each State a grant equal to the State's entire annual expenditures for primary and secondary education. Suppose also that this funding came with conditions governing such things as school curriculum, the hiring and tenure of teachers, the ³ drawing of school districts, the length and hours of the school day, the school calendar, a dress code for students, and rules for student discipline. As a matter of law, a State could turn down that offer, but if it did so, its residents would not only be required to pay the federal taxes needed to support this expensive new program, but they would also be forced to pay an equivalent amount in state taxes. And if the State gave in to the federal law, the State and its subdivisions would surrender their traditional authority in the field of education. Asked at oral argument whether such a law would be allowed under the spending power, the Solicitor General responded that it would.”)

to continue, school board member accountability for improved student academic achievement must be included in reform efforts (Rhim, 2013).

Linking School Boards to Educational Reform

In the United States, over 14,000 public school boards currently formulate policies and make decisions impacting the education of 53 million students (Hess & Meeks, 2010). While critics of local school governance exist, American citizens generally favor this model and therefore, it is likely to continue (Rhim, 2013). As such, consideration of local school board effectiveness is warranted (Rhim). Existing research has focused primarily upon teacher and administrator responsibility for improving public schools. Research examining the school board's role in school improvement and student academic achievement is less plentiful (Rhim, 2013; Delegardelle, 2007).

In 1997, Goodman, Fulbright, and Zimmerman conducted a review of state laws. Goodman et al. interviewed 132 school board members and district leaders in ten school districts within five states and found several district-level aspects of school governance that impacted student academic achievement. Goodman et al.'s study was one of the first to link school board member behavior to student academic achievement. The findings resulted included a recommendation for ongoing school board member training. Goodman et al. found school board member focus on policy making while refraining from direct involvement in day-to-day school district operations and supervision resulted in a positive, trusting, synergetic relationship between the local school board and the superintendent. Productive communication with the

superintendent, in turn, led to higher student academic achievement gains. Goodman et al. further recommended several practices that had the highest potential impact upon student academic achievement. These recommendations included monthly agenda and budgeting meetings, effective evaluation of the superintendent and school board self- evaluation. Goodman et al. also suggested school board members run for multiple school board terms to increase continuity of school district initiatives. Goodman et al. identified other aspects of the school board and superintendent relationship that weakened trust and negatively impacted student academic achievement. These factors included conflicting views of the school board and superintendent roles, weak communication, and personal ambitions of school board members that did not benefit the school district.

The Iowa Lighthouse Study, commissioned by The Iowa Association of School Boards in 2000, explored whether school board member behavior impacted student academic achievement (Rice et al., 2000). To date, the Iowa Lighthouse Study (Rice et al., 2000; and M. Delegardelle, personal communication, May 23, 2014) is the primary study providing documented research on this topic. The Iowa Lighthouse Study contained several phases. Phase I occurred from 1998-2000 and explored whether school board behavior impacted student academic achievement (Rice et al., 2000). Both Phase II and Phase II: Extension Study occurred from 2002-2007. Phase II examined school board member behaviors that most positively impacted student learning. The Phase II: Extension Study examined school board member training designed to develop student academic achievement behaviors and beliefs (Delegardelle, 2007). Phase III of the study was a larger multi-state project examining a school board development model for large-scale school board member training. Phase III is currently in the data collection and analysis phase (Delegardelle, 2007; M. Delegardelle, personal communication, May 23, 2014).

Rice et al. (2000) conducted Phase I from 1998-2000 to explore whether school board behaviors impacted student academic achievement. Phase I studied the specific and identifiable school board member behaviors and characteristics that correlated with high student academic achievement. Rice et al. examined whether these behaviors and characteristics could be described, learned, and applied by other school boards.

Rice et al.'s (2000) study included mixed-methods, qualitative and quantitative analyses that included 159 interviews of school board members, superintendents and school district staff in six Georgia public school districts. Rice et al. formulated conclusions based on collected data and interviews of school board members and district leadership in these six school districts. The interviews of school board members, superintendents and school district staff led Rice et al. to identify distinct findings and themes within these school districts.

Georgia public schools were chosen for this study because the Georgia Council for School Performance had a reliable database of student academic test scores. The test scores were based upon the Georgia High School Graduation tests and the Iowa Tests of Basic Skills. The Georgia schools were similar to Iowa schools in terms of the total number of students, economic levels of families, and dollars spent per student. The high performing and low performing school districts included in the study had similar socio-economic levels. The school districts had student enrollments ranging from 1,395 students to 5,163 students. Most school districts represented one or two towns or communities. Each school district had only one middle school.

Three of the six school districts demonstrated high student academic performance and the other three school districts were characterized by lower student academic performance. The high and low performing school districts were selected because of the consistency in test scores over the three year time period preceding the study. All six school districts had similar student socio-

economic characteristics. The range in standardized test scores between the high performing and the low performing school districts was substantial. Test scores were also relatively consistent over the study's three-year time period. The names of the school districts were kept anonymous and the researchers did not know the identity of high and low performing school districts when conducting the interviews. Rice et al. did not specifically conclude local school boards caused success or lack of success in a school district. However, similarities were found among the local school board member behaviors in school districts with high student academic achievement and similarities were found among local school board members in school districts with lower student academic achievement (Rice et al., 2000).

The interviews yielded similarities in school district attributes. All school district personnel and local school board members cared about students and desired to do their best to help students learn. All school districts had friendly and professional relationships between school board members and the superintendent. All school board members thought their superintendent was doing a good job. Site based management, delegation of decision making from the district level to the individual schools, was a popular trend and all school board members described tension between allowing buildings to make their own decisions and the need to provide district-wide equitable initiatives for all students. Approximately 75-80% of the school board members and school district staff had grown up in the school district's geographic area. Lastly, none of the schools involved in the study had successfully closed the academic achievement gap for special education, bilingual and Title I student populations (Rice et al., 2000).

Differences were also discovered among the six school districts. In the high achieving school districts, school board members and superintendents believed student academic

achievement could be improved. School board members and superintendents also believed school district personnel could improve their ability to help students meet their potential. School board members reported feeling responsible for creating the conditions for students to excel and meet their potential. School board members knew what initiatives were in place to create change and could describe school board member, administrator and teacher contributions to these initiatives. School board members could also explain how school district goals were being pursued in specific schools and classrooms and were knowledgeable about the school district's progress toward meeting these goals (Rice et al., 2000).

In the low achieving school districts, the superintendent, school board members and school personnel believed it was inevitable that not all students would learn. It was generally believed existing challenges and limitations (e.g., low socioeconomic conditions) could not be overcome. Local school board members did not know the details of initiatives that were in place to improve student learning and were not aware of initiatives that were aligned with school goals or designed to increase student academic achievement (Rice et al., 2000).

In Phase I of the Iowa Lighthouse Study, Rice et al. (2000) described their findings using Rosenholtz' (1989) terminology from her research on the effect of teacher commitment upon school climate. Rice et al. used the term *Moving* to describe school districts that were consistently seeking ways to improve. In *Moving* school districts, challenges were not perceived as limits to increasing student academic achievement. In contrast, Rice et al. used the term *Stuck* to describe school districts that had abandoned high student expectations because of the student population's socio-economic challenges. Rice et al. found *Moving* school districts exhibited a continuous momentum when seeking new methods for promoting student growth. In contrast, *Stuck* school districts viewed stagnant student academic achievement as inevitable. Teachers

worked alone and did not collaborate with one another on common goals and strategies (Rice et al.).

Before the researchers began interviewing school board members and superintendents for the Iowa Lighthouse Study, they examined research on educational change. This literature review identified seven conditions that accompanied school change (Rice et al., 2000). The researchers categorized these seven conditions as being either in a *Moving* or *Stuck* status. *Moving* conditions were highly correlated with high performing school districts. A high correlation of *Stuck* conditions was found in the lower performing school districts.

The first condition identified was *Emphasis on Building a Human Organizational System*. This condition was used to describe a school district's commitment to continuous growth and collaboration. *Moving* local school district staff exhibited a desire to become better and believed all students could learn. School board members anticipated positive outcomes would be produced by school district initiatives and could cite specific examples of success. On the other hand, the *Stuck* local school board members often cited challenges beyond their control as reasons why students were not learning. They anticipated it would take many years before students began showing improvement. They also cited external mandates, such as required testing, as the impetus for change (Rice et al., 2000).

The second condition was *Ability to Create and Sustain Initiatives*. Within this condition, Rice et al. (2000) observed superintendents and local school board members in *Moving* school districts created goals and worked on school district challenges together. These school districts had effective ways of summarizing local school board meetings to staff and they effectively communicated local school board priorities. School board members could also describe school district level teamwork on initiatives. Finally, the *Moving* districts showed evidence the

superintendent, school district teams, and school board members were learning together through problem solving initiatives. In contrast, *Stuck* local school boards often had a gap between local school board initiatives and staff goals. These *Stuck* local school boards relied heavily on the superintendent's explanation and ideas to solve school district problems. The *Stuck* local school board members could not describe communication between the administration and staff and these local school boards did not generate solutions beyond what the superintendent suggested (Rice et al., 2000).

The third condition, *Supportive Workplace for Staff*, identified a workplace climate that allowed staff to grow and be celebrated. Rice et al. (2000) found *Moving* local school board members were confident in the school district staff's competency and ability to make the changes needed for increased student learning. Further, the *Moving* local school boards regularly recognized the staff for their accomplishments and could articulate how they had recognized staff in the past. In comparison, *Stuck* local school board members complained about staff and felt a change in staff and family demographics were needed before student learning could be improved (Rice et al, 2000).

The fourth condition, *Staff Development*, examined the school district staff's professional development focus on teaching and learning. Rice et al. (2000) found *Moving* local school board members understood the connection between school district staff training and goals for student learning. Additionally, staff training was part of a larger shared plan focused upon student learning needs. In contrast, the *Stuck* local school board members described staff development as being led by one person or based on mandates. The *Stuck* local school board members were not optimistic that staff development initiatives would improve student learning (Rice et al., 2000).

The fifth condition was *Support for School Sites through Data and Information*. Rice et al. (2000) found *Moving* local school boards gathered data from inside the school district and also from best practices in other school districts. These local school boards relied heavily on this data when making decisions about student learning. In contrast, *Stuck* local school board members reported they did not where to find relevant information or did not take the time to study available information. *Stuck* local school board members described making decisions based on personal opinions. While these school board members often had access to district data such as student academic achievement growth, student attendance and district demographics, they did not tie decision making to this data (Rice et al., 2000).

The sixth condition was *Community Involvement*. *Moving* local school board members were proud of their community and could articulate specific ways parents and community members were contributing meaningfully to school district initiatives. *Stuck* local school board members made excuses for why parents were not involved and could not articulate how the school district was encouraging parental input. In fact, *Stuck* local school board members felt the lack of involvement by parents and community members was a sign of unchangeable disinterest (Rice et al., 2000).

The final condition was *Shared Leadership*. Rice et al. (2000) discovered *Moving* local school board members knew the school district staff's priorities. The *Moving* local school board members connected local school board work to these priorities and made these initiatives stronger. *Moving* local school board members were confident all students could learn and were working alongside staff to ensure all students were learning. *Stuck* local school board members were not able to articulate the school board's goals and were not clear on why the goals existed.

They did not have high expectations for student learning and believed meeting all students' learning needs was too big a goal (Rice et al., 2000).

Rice et al. (2000) also examined superintendent behaviors as part of Phase I. In *Moving* school districts, superintendents shared information with various school district stakeholders including parents, staff and school board members. Superintendents in *Moving* school districts collaborated with others, including community members, in decision-making. The researchers also found teachers and school leaders collaborated on initiatives to improve student academic achievement. These initiatives were linked to goals that directly impacted student learning.

In contrast, superintendents in *Stuck* school districts tended to either dictate change decisions or opted to be removed from the decision making process. These superintendents viewed goals as restrictive and instead held building principals responsible for student learning. They shared information very selectively and generally did not seek feedback. These superintendents tended to view community interest in school district affairs pessimistically and blamed community demographics for student learning failures. They were more focused on facility and discipline issues than on student learning initiatives (Rice et al., 2000).

Rice et al. (2000) also examined school staff perspectives as part of Phase I and found similar findings to the interviews with school board members. In *Moving* school districts, staff could articulate school district goals and link them to building level initiatives. Teachers reported board members and school leaders supported them in their work. Staff members also indicated they were able to obtain help from these individuals. School staff articulated a belief that all students could learn. Staff believed they should never give up on a student.

In contrast, in *Stuck* school districts, staff were not able to link initiatives to district goals. They did not feel their efforts in the classroom were supported by board members and school

leaders. They described working on fragmented teams and indicated they often worked by themselves. They were unclear on how to use student-learning data and believed fellow staff members tended to give up on struggling students (Rice et al, 2000).

In summary, Phase I of The Lighthouse Study found local school board member behaviors and beliefs in high achieving school districts differed significantly from local board member behaviors and beliefs in low achieving school districts. Specifically, local school board members in high achieving *Moving* districts held beliefs that student academic achievement would improve. They did not believe challenges should define student achievement outcomes. They believed school board members were responsible for ensuring school district conditions allowed each student to reach his or her potential. Further, they did not believe any student in their school district had already reached his or her potential (Rice et al., 2001; M. Delegardelle, personal communication, May 23, 2014). In contrast, school board members in low achieving *Stuck* school districts believed the challenges of improving student achievement were insurmountable. *Stuck* school board members were focused on maintaining the status quo and believed socio-economic challenges, in particular, were the cause of inevitable low student academic achievement (Rice et al., 2001; M. Delegardelle, personal communication, May 23, 2014).

Phase II of the Iowa Lighthouse Study examined how the differing beliefs and behaviors of local school board members impacted student academic achievement. Phase II focused on the importance of local school board training. Ideas for school board development and training were explored. Local school board members and staff within five Mid-western school districts received training based on Phase I's seven conditions (Delegardelle, 2007).

An action research methodology was used to train school district leadership team members on how to both increase student academic achievement and support local school district initiatives. The research examined efforts to move a local school district from *maintaining* beliefs to *elevating* beliefs. Local school board members were observed to determine the actions that contributed to increased student academic achievement. Researchers identified specific factors that resulted in district leadership teams' ability to more effectively improve student academic achievement (Delegardelle, 2007). These researchers found local school board member knowledge and beliefs impacted the school leadership team's decisions and these decisions, in turn, influenced school district climate. School district climate impacted classroom teachers, curriculum, student engagement, and academic achievement (Delegardelle, 2007).

The Lighthouse Study's goal was to move school districts from a beginning set of behaviors and beliefs toward a set of beliefs that would more positively impact student academic achievement. The first area of training focused upon teaching local school board members and the superintendent how to establish a clear target for student academic achievement. Within this first area, local school board members and superintendents were shown the importance of demonstrating confidence that all students could learn at high levels. The second training area focused local school board members and superintendents on examining their current educational systems and reflecting on the ability of those systems to positively impact student learning. The third area of training focused on developing leadership for initiating and continuing efforts to increase student learning (Delegardelle, 2007).

Phase II of the Iowa Lighthouse Study collected and examined three main data sources. A survey based on Phase I's seven conditions was administered to school district staff, administration and school board members. A second district-wide survey was also used to

identify school district staff, administration and school board member beliefs about student academic achievement potential. The third data source was the actual student achievement data. The research team worked alongside school district staff, administrators and school board members to understand initial beliefs and practices, try new actions and consider new beliefs, and examine the results of the new actions and beliefs. These steps were accomplished within an action research framework to improve student academic achievement, improve district climate, and positively change beliefs of the local school board members (Delegardelle, 2007).

After three years, Phase II's initial results showed positive change in six of Phase I's seven conditions within all five school districts. The most change occurred in the conditions of professional development, overall school district direction, and individual school building autonomy. The condition of community school partnership showed the least amount of change. School district staff and school board member beliefs also changed in 75% of the monitored areas. These areas included beliefs that; teachers can have high impact upon increasing student academic achievement, and school districts could be organized to better impact student academic achievement. Specifically, school district staff and board members increasingly believed school district structures affected student academic achievement. School district staff and board members also realized their behavior positively impacted student academic achievement. By the end of the study three beliefs were found to be particularly important; regular monitoring of student academic achievement data, investing funds in early childhood education and early elementary school learning experiences, and strong community partnerships for student learning (Delegardelle, 2007).

Positive change in student academic achievement at the local school district level was attributed to increased collaboration between administrators and teachers that focused upon

student learning. Both an increase in the amount of leadership delegated to teachers and increased small group collaboration time provided to teachers to improve instruction and monitor data were also observed. School district leaders also demonstrated a growing sense of urgency for progress. In addition, school board members increasingly used multiple data points to assess student learning (Delegardelle, 2007).

During Phase II findings in the area of student achievement were also noted. In one of the school districts, reading scores improved at every grade level. In four of the five school districts, student academic achievement scores in reading or math improved significantly. At the beginning of Phase II, the school board members, administrators, and teachers held different views regarding Phase I's seven conditions. By year three of Phase II, school board members, administrators, and teachers held similar understandings of these seven conditions and agreed these conditions positively impacted student learning. During Phase II, staff and school board member ability to describe student academic achievement goals increased from 48 to 90%. The time school board members spent during board meetings studying student academic achievement doubled. Finally, by third year of Phase II, staff and school board members agreed they could positively affect student academic achievement (Delegardelle, 2007).

By the end of the first three years of Phase II, more questions surfaced in the area of local school board member beliefs. These questions led to a Phase II Extension Study. The Phase II Extension Study consisted of a series of surveys and interviews examining specific aspects of school board governance that influenced local school board member beliefs. Seven hundred and eighteen board members and superintendents from 375 school districts in a mid-western state were interviewed (Delegardelle, 2007).

The Phase II Extension Study examined school board member beliefs that resulted in the greatest potential influence upon student academic achievement. The results supported the need for local school board members to participate in training initiatives. The results also identified differences in local school board member belief systems that were correlated with various levels of student academic achievement gains. Phase II Extension Study participants identified three important local school board responsibilities; spending time in board meetings studying student academic achievement, demonstrating confidence in school district staff and administrators to positively impact student academic achievement, and securing strong administrative leadership in the area of student academic achievement (Delegardelle, 2007).

The Phase II Extension Study examined how demographic differences influenced school board member beliefs. Researchers found local school board members held different beliefs than superintendents about the school board's potential influence upon raising student academic achievement. In addition, several factors not related to local school board member perceptions and beliefs were identified. These factors included local school district size, length of school board member service, whether a school board member had children in the school district, school board member level of education, the school district's financial standing, the community's socio-economic level, and the level of turn-over in school board membership. Researchers found school board training initiatives impacted local school board member beliefs about their role in improving student academic achievement (Delegardelle, 2007).

Researchers found a positive change occurred between year one and year five in the types of goals set by local school boards. These goals pertained to reading scores and other areas of academic achievement. The local school board was important in maintaining both the focus and intensity of these goals. While the local school board members' beliefs were important, district

professional development efforts to increase student academic achievement were found to be more impactful. Specifically, researchers noted professional development changed from motivational messages to specific strategies that impacted student academic achievement (Delegardelle, 2007).

Changes in local school board member beliefs resulted in specific actions that positively impacted student academic achievement. Study participants were able to find middle ground between passively accepting superintendent recommendations and micro managing. Superintendents and local school board members agreed on the local school board's role in monitoring the school district's overall goals and direction. Local school board members also articulated respect and trust in school district personnel's ability to carry out educational initiatives. In school districts demonstrating student academic gains superintendents and local school board members indicated they had stronger trusting relationships with each other. These school board members and superintendents reported working together respectfully and the superintendents reported they sought ideas and questions from the school board members. In turn, local school board members reported they respected and trusted the work of school district teachers and educational leaders. This trust was an important component of the school district governance that positively affected district climate. District climate affected classroom teachers, curriculum, and increased student engagement. Better decisions affecting student academic achievement were realized because of the quality of the questions and the data reviewed by administrators, teachers and local school board members. The relationship between administrators, teachers and local school board members was trusting and interdependent (Delegardelle, 2007).

However, researchers found it was not enough to believe student academic achievement would increase. Student academic achievement gains occurred when planned actions were targeted upon improving the weakest student academic achievement area. School administrators in school districts with the highest student achievement gains reported having professional development models aligned to student academic achievement goals rather than only relying upon motivational messages or training targeting student discipline and behavior to improve student learning (Delegardelle, 2007).

Results of these training interventions were observable by the end of year five. Student academic achievement increased in four of the five school districts and understanding of the seven conditions for improvement was more consistently expressed by all school district stakeholders. In three of the five school districts, more time in school board meetings was focused upon student academic achievement and the creation of student academic achievement policy increased. School districts set clear goals, and four of the five school districts had evidence showing all staff and local school board members increasingly understood these goals. By year three of the study, school district personnel and local school board members agreed training efforts had resulted in school district personnel and local school board member behaviors positively impacting student academic achievement growth (Delegardelle, 2007).

Through the course of the Phase II Extension Study, five distinct school board member roles emerged from the local school board members who believed they could positively impact student academic achievement. First, the local school boards set clear outcome goals for student achievement results and focused on these results in board meetings rather than inviting presentations on the school district staff's teaching strategies. Second, local school board members held themselves and school district staff accountable for student growth and regularly

monitored student academic achievement data. Third, local school boards maintained a supporting climate focused on achieving the school district's student learning goals. Fourth, local school board members found ways to build a shared agreement with school district staff to positively impact student learning. This created urgency within the school district regarding student academic achievement. Finally, local school boards allocated time during board meetings to determine priorities and to develop means for supporting school district leaders in attaining student academic achievement goals (Delegardelle, 2007).

These five key roles led to the identification of seven performance areas. First, local school boards needed to identify and communicate the school district's current academic achievement scores and also highlight areas of both needed improvement and current success. Drawing attention to student academic achievement data was a new behavior for these school board members. In the past these school boards had focused primarily upon successes. Second, local school boards set clear data driven student academic achievement goals. This was particularly challenging for local school boards because board members were concerned school district staff would become discouraged if students were not able to achieve these goals. Third, local school board members had to commit to allocating school district resources to achieving these goals. Fourth, school boards needed to provide specific resources for adequate staffing and professional development so school districts could meet student academic achievement goals (Delegardelle, 2007).

Fifth, local school board members needed to share a strong relationship not only with each other and the superintendent but also with the school district's entire leadership team, including building principals. This relationship allowed the school district's leadership team to make decisions and adjustments. Researchers found when communication and shared decision

making broke down within the group, student academic achievement improvement did not continue to improve. Next, local school board members understood the importance of formulating clear policies, expectations and rationales for student achievement goals so student achievement growth would continue when new local school board members were elected. Finally, local school board members found it was imperative to develop stronger community support for student learning goals (Delegardelle, 2007). These seven performance areas were the Iowa Lighthouse Study's Phase II Extension's key findings (Delegardelle, 2007). These findings further supported the importance of ensuring local school board member and superintendent governance relationships remained effective and productive (Delegardelle, 2007).

Plough (2014) recently examined whether there is a difference in board member perceptions of their beliefs and behaviors in high-achieving and low-achieving school districts. Plough used the seven areas of board performance from the Iowa Lighthouse Study (Rice et al. 2000) as the conceptual framework for the study. Plough conducted this study in California and defined poverty districts as those with 25% or more students identified as qualified for a free or reduced lunch program. Plough then found two groups within these poverty districts, those that met Adequate Yearly Progress under NCLB and those that did not. Twenty-two school districts were identified and a total of 82 board members were invited to participate.

Plough (2014) used a mixed methods approach to this study. School board member emails were available through the California School Boards Association and participants were reminded to complete the survey three times. Following the quantitative portion, Plough conducted a phone interview with one board member from a high-achieving school district and one board member from a low-achieving school district. Plough did not use statistical tests of

significance to analyze the survey results. Rather, the numerical average of participant responses were reported.

The overall results of Plough's study results showed more similarities than differences between high-achieving and low-achieving school boards. There were minimal differences between the two sub groups when asked about school board behaviors such as creating awareness, applying pressure for accountability, supporting professional development and governing well with district wide leadership. However, Plough found some differences in areas of demonstrating commitment, policy development, and connection with the community. Board members in low-achieving districts noted an emphasis on commitment over training while board members in high achieving districts reported attending more state and national conferences. High achieving districts also reported having a greater commitment to equality, democracy, and cooperation in their practices. Secondly, school board members in low-achieving districts reported a higher focus on school reform and a higher amount of time spent on policy development than did high-achieving districts. Finally, school board members in low-achieving districts reported spending considerable more time reporting student achievement progress to their community compared to board members in high-achieving districts. This may be a result of NCLB mandates on these low achieving districts. High-achieving district school board members reported believing that working cooperatively with other local government entities would positively impact student achievement.

Plough's (2014) research is the only published study to date based on the Iowa Lighthouse Study (Rice et al., 2000). The Iowa Lighthouse Study's Phase I and Phase II yielded groundbreaking research because the findings connected local school board member beliefs and behaviors with positive school district student academic achievement. This landmark research

provided a framework for future research in the area of school board member beliefs and behaviors, and formed the foundation of this dissertation. Throughout both phases of the Iowa Lighthouse Study it was imperative for school board members to monitor student data, empower teachers, hold high expectations for student academic achievement, and believe both teachers and students could accomplish established student learning goals.

Believing students can learn at high levels and holding high expectations and goals for students hold similarities to Dweck's *growth mindset* theory (Dweck, 2006). Next Dweck's mindset theory will be explored and connections will be made between Dweck's work and the Iowa Lighthouse Study (Rice et al., 2000, Delegardelle, 2007).

Growth Mindset Theory

Dweck's (2006) research, summarized in *Mindset: The New Psychology of Success*, focused on whether student talent and intelligence could be developed or whether these traits were predetermined. Dweck asserted *both* talent and intelligence could be developed. Dweck defined a *fixed mindset* as the avoidance of challenge because a challenge might result in failure. For persons with a *fixed mindset*, failure is interpreted as an indicator of low intelligence. Dweck found, because of risk avoidance, a person with a *fixed mindset* avoided growth opportunities and instead sought alternate ways to show others how smart he or she was. Dweck described the *fixed mindset* as a person's desire to improve innate intelligence by seeking out only experiences that would further define the person as being smart. Furthermore, Dweck discovered individuals with a *fixed mindset* searched for experiences that allowed them to feel superior or smarter than those around them. *Fixed mindset* was originally labeled entity theory. *Entity* or *fixed mindset*

will be used interchangeably throughout this section depending on the preferred term used by the cited author.

In contrast, Dweck (2006) described *growth mindset* theory as welcoming challenge and an accompanying belief that growth can result from both success and failure. Dweck found persons with a *growth mindset* considered lessons learned from failure to be invaluable. Dweck described the *growth mindset* as a person's desire to take on additional challenges and improving and learning because of both successes and failures.

Dweck asserted *growth mindset* individuals not only embraced and sought out growth-enhancing challenges, they did not become paralyzed when failure occurred. Indeed, *growth mindset* individuals actually sought out potential failure producing experiences so they could learn and improve (Dweck, 2006). Dweck found *growth mindset* students remained resilient when they faced obstacles and discouragement. These students utilized an initial failure as an opportunity to determine how they could learn from the experience. When these individuals tried again, they tended to do better. The *growth mindset* theory was originally labeled *incremental theory*. *Incremental* or *growth mindset* theory will be used interchangeably throughout this section depending on the preferred term used by the cited author.

Dweck (2006) discussed Alfred Binet's intelligence test, a well-respected means of measuring intelligence and tracking student achievement. Binet's intelligence test (Binet & Heisler, 1975) was originally created in 1905 as an assessment tool to identify students in the Paris school system who were not learning well so alternative instructional pedagogies could be developed for them (Dweck). However, today measurement of intelligence is often linked to the *fixed mindset* and limitations in beliefs about potential student achievement. In fact, Dweck pointed out both Binet and Heisler argued against contemporary philosophers who believed

children had permanent, fixed capabilities. Binet and Heisler found children who learned from experiences and exposure to new training became increasingly more intelligent (Dweck).

Dweck (2006) emphasized it was important for teachers to believe student growth was possible. Dweck suggested teachers should not compliment students because of their intelligence or success but instead should either commend or admonish students based upon the degree of growth and effort the student allocated to their work. Dweck suggested when teachers praise intelligence or success rather than effort, students tend to avoid new challenges because they fear failure. This stifles the student's development because the student views mistakes as being insurmountable.

Dweck (2006) noted teacher beliefs alone were not sufficient to produce increased student achievement. Dweck pointed out high standards, resources and incremental teaching were also needed. Dweck observed teachers sometimes considered lowering performance standards so students could experience success at a lower benchmark. When this occurred, Dweck posited teachers were dishonest because students became prematurely satisfied with lower achievement levels. Dweck pointed out simply believing students are capable of growth is not enough. The teacher must provide students with the concrete steps needed to reach learning expectations and motivate learners to seek growth. A *fixed mindset* teacher imparts the same knowledge to all students and expects all students to absorb that knowledge. In contrast, *growth mindset* teachers strive to learn as much as their students. *Growth mindset* teachers also individualize their instruction based upon what each student needs to learn (2006). Dweck (2006) noted teacher beliefs alone were not sufficient to produce increased student achievement. Dweck pointed out high standards, resources and incremental teaching were also needed. Dweck observed teachers sometimes considered lowering performance standards so students could

experience success at a lower benchmark. When this occurred, Dweck posited teachers were dishonest because students became prematurely satisfied with lower achievement levels. Dweck pointed out simply believing students are capable of growth is not enough. The teacher must provide students with the concrete steps needed to reach learning expectations and motivate learners to seek growth. A *fixed mindset* teacher imparts the same knowledge to all students and expects all students to absorb that knowledge. In contrast, *growth mindset* teachers strive to learn as much as their students. *Growth mindset* teachers also individualize their instruction based upon what each student needs to learn (2006).

Dweck (2006) cautioned educators not to celebrate student growth unless it minimally meets national achievement expectations. Dweck explained premature celebration may cause students to become satisfied with lesser achievement. Dweck emphasized students need to understand though they may be making progress, they need to continue working. Dweck emphasized teachers must communicate honestly with students about their growth and must provide students with both encouragement and the resources needed to reach their achievement goals.

Dweck (2006) noted good teachers invest equally in each student. While a teacher should not give up on a poor-performing student, it may be prudent to end a learning session if the student is not willing to continue working. Dweck stressed success can be misleading and may cause students to acquire a fixed mindset. Teachers need to continually set higher goals for students and encourage growth and effort. As a result, Dweck stated students will rise to new challenges (2006).

Many similarities exist between Dweck's research (2006) and the findings from Phase 1 of the Iowa Lighthouse Study (Rice et al., 2000). Local school board members in *Moving* school

districts (Rice et al.) demonstrated characteristics consistent with *growth mindset* theory (Dweck). These school board members believed students could learn despite challenges and challenges did not mean students would fail. These school board members believed students had not yet reached their potential and the educational staff could positively affect the learning process. These *Moving* school board members were flexible, viewed setbacks as being temporary, and believed setbacks served as motivation to continue working hard toward a goal. They were confident all students could learn.

On the other hand, local school board members of *Stuck* school districts (Rice et al., 2000) evidenced *fixed mindsets* (Dweck, 2006). They viewed challenges as inevitable and believed staff and family challenges were insurmountable obstacles to student learning. These school board members were generally unaware or disinterested in initiatives being used to affect student learning and felt external government mandates were the main reason for their school district's attempts at improvement. These local school board members did not engage in professional development or training and largely accepted the superintendent's recommendations without question or discussion (Rice et al.).

While the Iowa Lighthouse Study (Rice et al., 2000) and Dweck's (2006) mindset theory overlap and connect in many ways, one particular difference exists between *Maintaining beliefs* (Rice et al., 2000) and a *fixed mindset* (Dweck, 2006). Dweck defined "*fixed mindset*" as the avoidance of challenge because a challenge might result in failure. However, the local school board members in *Stuck* school districts in the Iowa Lighthouse Study had no choice other than to submit to standardized testing. These local school board members could not avoid this challenge. These *Stuck* local school board members with *Maintaining* beliefs could rationalize the relatively poor results by emphasizing how many challenges existed. These local school

board members in *Stuck* districts often talked about how challenges existed beyond their control and how these challenges would likely continue to negatively impact standardized testing results.

Dweck has been part of many studies on the topic of mindset over the past 30 years. Blackwell, Trzesniewski and Dweck (2007) studied mindset theory with junior high students to determine if students with different mindsets demonstrated different learning trajectories over time. Blackwell et al. stated junior high school students often experience a very turbulent time in social adjustment, maturation and educational changes. It has been noted these junior high school student experiences can impact students long after the junior high years are over (Montemayor, Adams, & Gullota, 2006; Wigfield, Brynes & Eccles, 2006). Blackwell et al. studied why some students were successful learners during the junior high school years and others were not.

Blackwell and colleagues' study (2007) sought to answer three questions. First, whether a student's mindset determined success over a period of time. Secondly, if the answer to the first question was yes, why mindset affected student performance. Lastly, whether an intervention based on mindset theory benefited students more than other interventions and whether this intervention positively impacted student behavior.

Blackwell's study population included 373 seventh-grade mathematics students who attended New York City public schools over four consecutive academic years. The students were followed during both seventh and eighth grades. They were studied as one large group because there were no significant differences in their previous math achievement scores. The 373 students were ethnically diverse and 53% qualified for free and reduced lunch.

Students were initially surveyed to determine whether they held a *fixed* or a *growth mindset*. Thereafter, student mathematics grades were collected at the end of each semester during both the seventh and eighth grade years. All students had the same math teacher and the

same mathematics curriculum during both years. School officials considered these students to be moderately high performing. Baseline achievement data was measured using national percentile test scores on the Citywide Achievement Test (CAT), a standardized achievement test.

Blackwell used mathematics grades for this study because mathematics was believed to be a moderately difficult subject that would cause students to display either a *growth* or *fixed mindset*. Students would learn concepts that built upon previously learned concepts. Blackwell thought mathematical learning would particularly emphasize the student's mindset. Students were surveyed and rated on a six-point Likert-type scale to determine whether each student had a *growth mindset* or a *fixed mindset*. Blackwell surveyed students to study their learning goals and motivation, noting student responses when learning was difficult. Blackwell also examined student effort and responses to failure. To study response to failure, students were asked to imagine they were in a situation where they were confident about class material but nonetheless failed. The students were asked to rate whether they interpreted their failure as reflecting their poor ability or whether this initial setback gave them positive motivation to try harder.

Blackwell found students with a *growth mindset* reported believing positive effort would lead to improvement, demonstrated positive learning goals, displayed low helplessness reporting, and used positive strategies to cope with setbacks. These variables were positively correlated to each other and formed a collection of interrelated variables. Blackwell also found, during the four semesters of junior high school, the learning trajectory of *growth mindset* students was higher than *fixed mindset* students. Students who believed intelligence was a quality that could be positively changed met learning targets more often than students with a *fixed mindset*. Because *growth mindset* students believed they could improve, they also were more resilient

when they experienced failure. Finally, *growth mindset* students earned higher grades over the two- year period when compared to *fixed mindset* peers.

Next, Blackwell conducted Study 2 and examined whether an intervention related to mindset and motivation would change student academic achievement growth. Blackwell studied a group of lower performing students before and after mindset theory was taught to the students. After the mindset theory was taught, Blackwell examined whether students were more motivated, demonstrated higher work effort, and achieved at a higher level because of the mindset theory learning. The study participants included 99 ethnically diverse seventh grade students from the New York City public school system. The students had all scored in the 35th percentile or lower in their sixth grade standardized math testing. The students were separated into two groups. Both groups were taught about both the brain and study skills. However, one group was taught memory strategies. The treatment group was taught about the brain and study skills and also how mindset theory impacted ability and motivation. Student initial mindset theory was surveyed. Students were given the two types of intervention during 25 minute designated re-teaching times once a week for eight weeks.

After the eight-week period, students were given the same survey to assess mindset theory and teachers were asked to comment on students who demonstrated positive changes in motivational behavior over the semester. Students were followed through both the spring semester of seventh grade and both eighth grade semesters. Students who received *growth mindset* theory instruction demonstrated academic improvement during the study. Some students demonstrated academic improvement as early as the first semester of the study. Students who did not receive *growth mindset* instruction initially met achievement expectations. However, after

seventh grade this group of students began to fall behind their *growth mindset* peers (Blackwell et al., 2007).

Blackwell et al.'s (2007) research offers persuasive evidence for incorporating *growth mindset* interventions into the academic curriculum. Blackwell found *growth mindset* theory positively impacted student motivation and increased student academic achievement. As policy makers and overseers of local school districts, school board members should take the lead in ensuring these interventions are included at all levels of school learning, including school board member leadership development activities. Blackwell's research also provides evidence that goal-setting positively impacts learning. By setting high school district learning goals local school board members can positively impact student academic achievement. Blackwell argued while many student factors, such as family environment and school conditions, cannot be controlled, school officials could use mindset theory interventions to effectively increase student academic achievement.

Mindset theory and Goal Setting

Goal setting is a common practice in local school board strategic planning and oversight activities. Throughout the Iowa Lighthouse Study (Rice et al., 2000; Delegardelle, 2007), showed goal setting, consistent monitoring of goals, and consistent effort toward achieving school district goals resulted in increased student academic achievement. Summarized below are the findings from mindset studies (Dweck and Leggett, 1988; Grant and Dweck, 2003) related to goal setting that demonstrated results similar to the Iowa Lighthouse Study's findings.

Dweck and Leggett (1988) researched performance and learning goals to determine if the goals were related to *fixed* and *growth* mindsets. Dweck and Leggett defined performance goals as those focused upon achieving a certain standard. Dweck and Leggett defined learning goals as goals designed to build learning and competence. Often the result of a learning goal was mastery-oriented behavior, where people pressed forward when obstacles were encountered.

Dweck and Leggett (1988) hypothesized a person's mindset would cause him or her to create different types of goals. The researchers predicted people with *fixed mindsets* would create performance goals designed to improve their ability or intelligence. In contrast *growth mindset* people would create learning goals designed to improve their ability.

Dweck and Leggett administered various assessments to the study participants. These assessments showed children focused on learning goals, or goals to improve their ability, accorded minimal value or personal attention to the outcome assessment of their ability. Instead, these children demonstrated a mastery-oriented behavior toward their goals. In contrast, when children were focused on performance goals, or goals designed to prove their competence, they selected performance tasks where it was likely they would be successful. Children made this decision based upon their perceived level of personal competence. Children who believed they could be successful with more difficult tasks selected more difficult tasks while those who thought they had lower ability chose less challenging tasks. Students who focused on performance goals avoided difficult challenges. As a result, these children did not learn at deeper levels. The pretest scores provided to the students before they created their personal goals impacted these students.

In a 2003 study, Grant and Dweck examined academic achievement goals and their impact upon student learning. Similar to Dweck and Leggett's research (1988), Grant and Dweck

identified performance goals as being goals developed to affirm a person's ability or to help a person achieve mastery in his/her performance area. When experiencing either a setback or a failure within a performance goal, people tend to respond with a sense of inadequacy or helplessness because they do not know how to reach the desired goal. In contrast, learning goals are designed to encourage and help a person acquire and develop new skills and abilities. Learning goals encourage growth. Therefore, with learning goals either failure or setbacks usually produce persistence and resilience, even when the performance is below a desired level. The researchers defined the third category, outcome goals, as the desire to do well and excel in a given activity or project.

Grant and Dweck (2003) conducted a series of six studies around these goal types. Study 1 surveyed 450 Columbia University students. Questions on the survey related to the various types of goals. Results showed outcome goals, ability goals, and learning goals were distinct constructs. Two weeks later, Study 2 surveyed 54 of the Study 1 participants using the same survey as Study 1. The results from these 54 participant surveys were examined to determine the reliability of the Study 1 findings. The correlations were high, indicating the study had been consistent over time. In Study 3, Grant and Dweck (2003) surveyed 87 Columbia University students to check for construct validity. Grant and Dweck asked research based questions about the three goal areas and found evidence showing the previous goal item survey had been valid.

In Study 4, Grant and Dweck (2003) studied participant reactions to disappointment or setbacks within the various goal constructs. Grant and Dweck examined how this disappointment affected motivation, coping and achievement. Ninety-two Columbia University students participated in the study. The survey contained scenarios from a previous study by Zhao, Dweck & Mueller (1997) of people who had experienced setbacks while pursuing academic goals. Grant

and Dweck found learning goals motivated and inspired students, even while the students coped with failure. In contrast, ability goals caused participants to lose hope of improving and persevering. Further, outcome goals predicted a future loss of motivation in pursuing a desired outcome. Grant and Dweck found the process of developing learning goals to meet a certain standard was more effective in motivating the study participants than the outcome itself.

Study 5 (Grant & Dweck, 2003) included several research phases, and the participant group sizes ranged from of 78 to 128. Participants were Columbia University freshmen and sophomores who faced significant challenges in a one semester undergraduate General Chemistry class. Grant and Dweck correctly predicted students with learning goals would have higher intrinsic motivation and higher grades even after experiencing setbacks than those students working under ability goals. Grant and Dweck also found learning goals helped students understand class materials better and improve their academic achievement over time. Grant and Dweck noted learning goals were valuable when the goals included a challenging but worthwhile outcome. In contrast, performance goals were normative and focused on achieving a certain level of accomplishment. Achieving this level of accomplishment directly reinforced the participants' perceptions of ability level. When attempting to meet a performance goal, participants compared themselves to others and indicated they were either encouraged or discouraged based upon these comparisons. When a participant did not meet a performance goal, he or she felt hopeless. As a result the participant's personal resolve decreased because they perceived the challenge to be too great (Grant & Dweck).

Both Dweck and Leggett (1988) and Grant and Dweck (2003) found learning goals and performance goals produced different student academic achievement outcomes. Similar to the *Moving* school districts in the Iowa Lighthouse Study Phase I (Rice et al., 2000), learning goals

were designed to be both challenging and to motivate staff and students to collaboratively problem solve to achieve student academic achievement growth. In *Moving* school districts, goals for increasing student academic achievement were a key part of the school district staff development efforts and the school board members, administrators and staff believed every student could improve.

In contrast, the school board members, administrators and staff in *Stuck* school districts believed goal setting was unrealistic. They believed studying student academic achievement data was futile because the obstacles to student achievement were too great. This response was somewhat similar to how participants in Dweck and Leggett's (1988) and Grant and Dweck's (2003)'s studies responded to performance goals. *Stuck* school districts created performance expectations in response to external mandates and did not focus staff development efforts around these goals. In *Stuck* school districts school board members did not have either easy access to or study student achievement data. Similar to Dweck and Leggett's and Grant and Dweck's descriptions of participant reactions to performance goals, school board members in *Stuck* school districts avoided studying student achievement accountability, expected the student achievement data would be discouraging, and believed the reasons for poor student academic achievement was inevitable.

The Iowa Lighthouse Study's Phase 2 (Delegardelle, 2007) set clear targets for increasing student academic achievement. A belief that all students could improve learning was used in the action research training of school board members. These targets and beliefs were similar to learning goals in Dweck and Leggett's (1988) and Grant and Dweck's (2003) studies. These targets and beliefs encouraged local school board members to set goals designed to motivate student learning and increase academic growth. Similarly, the Iowa Lighthouse Phase

2: Extension Study's (Delegardelle), learning goals resulted in *Elevated* beliefs in student potential and specific staff development efforts aimed toward meeting these goals. In contrast, performance goals resulted in *Maintaining* beliefs among local school board members, administrators and staff. Performance goals were normative and focused on achieving a certain level of accomplishment rather than improvement over time. Performance goals had less positive impact upon student academic achievement.

Mindset Theory, Cultural Context and Resource Allocation

Rattan, Savani, Naidu and Dweck (2012) conducted a six-part study with participants from the United States and India. Rattan et al. explored mindsets within a cultural context. Their study identified two distinct pairs of constructs within mindset theory: universal and non-universal belief and incremental and entity condition. Universal belief, similar to the *growth mindset*, was described as a belief that everyone could become highly intelligent. Non-universal beliefs, similar to the *fixed mindset*, was characterized as believing only a limited number of people could become highly intelligent. The second construct pair in Rattan's study was incremental versus entity condition. In this study, incremental and entity conditions were given slightly different meaning than in Dweck's previous work. Incremental condition in Rattan's study was a person's belief that people could become more intelligent over time. Entity condition described a person's belief that intelligence was fixed and would not grow over time.

Rattan et al. (2012) studied how these two sets of constructs impacted university student views of intelligence within the culture context of the United States or India. The study explored how mindset influenced public support for social policies that allocated additional resources to

disadvantaged groups. This study examined student mindsets and how those mindsets impacted student beliefs in the ability of others to achieve high intelligence.

Rattan et al. (2012) conducted a series of six studies. The six studies examined the mindsets of participants from the United States and participants from India. In Study 1, 2 and 3, participants from India demonstrated higher likelihood of believing that anyone could increase intelligence. Rattan et al. found a significant correlation between participants with universal belief, who believed babies could reach high intelligence later in life, and those who held incremental belief, who believed anyone could increase intelligence over time. These findings showed differences in mindset theory between the United States and India populations. The findings also confirmed that universal and non-universal beliefs and entity and incremental conditions, though separate constructs, were correlated with one another.

In Studies 4, 5 and 6, Rattan et al. (2012) focused exclusively on United States participants to examine whether universal or non-universal beliefs of intelligence affected community support for policies that allocated greater resources to under-performing groups. Rattan et al. hypothesized if people held a universal belief that everyone could learn, they would be more willing to support policies that equitably distributed resources. The researchers hypothesized the reverse would also be true. If people held a non-universal belief that not all people could achieve high levels of learning, they would not be in favor of a more equitable distribution of resources.

In Study 4, Rattan et al. (2012) surveyed 53 Americans of European ancestry using an online survey. Participants were compensated for their participation in this survey. They chose Americans of European ancestry because this population represented a large sector of society that typically had access to educational resources. Rattan et al. tracked participant socio-

economic status to determine to what degree participants were willing to decrease their own personal resources if this would produce a more equitable resource distribution. They also tracked participant educational levels. The study asked participants if they would support three sample policies. The first policy proposal included a 25% salary increase for teachers employed in low-income schools. The next was a policy proposal to use a large amount of federal money to increase educational opportunities for incarcerated youth. The last policy proposal was to place all property tax revenues into a common fund that be equally distributed among school districts based upon student enrollment. Participant survey responses indicated either support or opposition for each of the three policy proposals. Rattan et al. found participants who agreed with a universal condition of intelligence were more supportive of policies to redistribute educational resources among all groups than participants who believed in the non-universal condition. Rattan et al. concluded people who believed in a non-universal condition of intelligence were more likely to oppose equal opportunity policies and the redistribution of educational resources.

In Study 5, Rattan et al. (2012) extended Study 4 to examine if people's beliefs in the universal potential for learning would cause them to support more extreme redistributive policies such as affirmative action and quotas for under-represented groups. Rattan et al. hypothesized if a person with a universal belief mindset supported these social policies, perhaps people with an incremental belief would also do so. Rattan et al. found participants who held a universal belief that all people could become increasingly intelligent were more likely to support public policies designed to help the disadvantaged gain access to educational and occupational resources. Participants who held an incremental belief were also more likely to support public policies to help the disadvantaged.

In Study 6, Rattan et al. (2012) explored whether participants with universal and incremental beliefs supported increasing resources for all recipients. The researchers hypothesized that Study 5 participants with an incremental belief condition may have been opposed to increasing resources for the disadvantaged because it resulted in taking resources away from one group and allocating it to another group. An online survey was given to 3 participants. Participants were randomly assigned to either a sub-group supporting equal distribution policies or to a sub-group that preferred redistributive policies that would move resources from one group to help another more disadvantaged group.

Rattan et al. (2012) found participants with an incremental belief condition were supportive of increasing general resources to benefit everyone. However, these participants were opposed to increasing resources for the disadvantaged because it meant taking resources away from one group and allocating resources to another group. Rattan et al. found participants with a universal belief condition were more supportive of both general and redistributive policies. These findings not only confirmed Rattan et al.'s original hypothesis, but also showed universal and non-universal beliefs and incremental and entity beliefs were distinct constructs.

Rattan et al. (2012) suggested people with a non-universal belief were likely to think an underperforming individual was not capable of increased learning rather than believing increased opportunity and resources could change an individual's learning trajectory. Rattan et al. postulated a non-universal belief condition might be harmful to society and could yield prejudiced beliefs. Rattan et al. also emphasized a non-universal belief condition was more difficult to identify and then address. Rattan et al. suggested it is possible for an immigrant community to hear a non-universal belief about their potential and as a result begin to believe it over time.

Rattan et al. (2012) found resource allocation decisions differed for those with different mindsets. In Phase II of the Iowa Lighthouse Study (Delegardelle, 2007), researchers found both local school board member confidence in school district staff and the school board's willingness to allocate resources to increased student academic achievement were essential. Rattan et al.'s findings indicated local school board members with a *fixed mindset* might view resource allocation as less critical to student academic growth. Rattan et al.'s findings also indicated local school board members with a fixed mindset may view the increased allocation of funds as squandering of local resources. School board members with a *growth mindset* tend to view resource allocation as a more important aspect of their governance role because they believe resource allocation leads to improved student academic achievement.

Growth Mindset and the Business World

A school board member's governance role includes overseeing others who carry out day-to-day administrative and teaching duties. Therefore, it is helpful to examine a study of mindset theory within the business world context. Based on Dweck and Leggett's (1988) growth mindset research, Heslin, Vandewalle, and Latham (2006) conducted research to study manager behavior within the workplace. The study examined whether coaching employees changed employee behavior. The researchers hypothesized managers with a growth mindset were more likely to invest in coaching opportunities because they believed coaching would positively impact employee behavior and increase productivity.

Heslin et al. (2006) conducted three connected studies. In Study 1, participants, 45 managers enrolled in a six week MBA elective course, were asked to take an Internet-based

survey to assess whether they held a *growth* or a *fixed mindset*. This survey was based on Dweck and Leggett's findings (1988) and used a 6-point Likert scale to assess the participants' mindset theory. Forty-five managers asked three to ten of their direct supervisees to complete an anonymous survey regarding each manager's ability to lead organizational change. The survey included questions regarding the manager's ability to provide guidance for completing tasks, how the manager helped employees solve problems and improve performance and the degree the manager inspired employees to grow to their potential. Heslin et al. (2006) found managers who held a *growth mindset* more positively impacted their employees' job performance and desire to improve.

Heslin et al.'s (2006) Study 1 results showed it is possible to apply *growth mindset* theory to settings other than the classroom environment. Heslin et al. also found it was possible to study mindset theory in real-life scenarios, not just fictitious scenarios as had been used in previous research. Heslin et al.'s findings could impact future supervisor, employee relationships because supervisors are more likely to invest in coaching when they know it could positively impact performance and change behavior.

Heslin et al. (2006) next conducted a second study that included managers who were not enrolled in graduate study. Heslin et al. also examined whether the same results would be found if managers were not able to select the subordinates who would evaluate them. In Study 2, Heslin et al. surveyed 92 managers and 105 subordinates. The 92 managers' average age was 42.9 years old and the average number of work experience was 20.6 years. The average age of the 105 subordinates was 28.9 years old and the average number of years of work experience was six years. The managers completed a survey to determine their mindset theory. Their subordinates also completed a survey that asked questions about the manager's ability to provide coaching

support. The results of Study 2 reaffirmed the findings of Study 1 by producing evidence indicating a managers' mindset affects the effectiveness of their coaching.

In Study 3, Heslin et al. (2006) provided training to persuade *fixed mindset* managers to adopt a *growth mindset* attribute. Heslin et al. studied whether this persuasion was successful and whether it influenced the quantity and quality of coaching provided by the manager. Heslin et al. conducted their study with 115 managers enrolled in a Canadian University's MBA program. The participants had an average of 5.1 years of managerial experience, were between 23 and 45 years of age, and 47 participants were women and 68 were men.

After giving participants the same mindset survey used in Study 1 and 2, Heslin et al. (2006) continued their study with 62 of the participants who identified themselves as most closely aligned with *fixed mindset* attributes. Half of the 62 participants were given training to persuade them to consider a *growth mindset* while the other half received training without the embedded mindset theory. At the end of each training session, participants were given a survey and were again given the same survey two weeks later.

Six weeks after the training ended, participants were asked to watch a video of an employee performing workplace tasks poorly and a second video of the same employee performing the tasks better. Participants were then asked questions to identify their willingness to offer coaching to this employee in the video. Participants were also asked to list the types of remarks they would include in their coaching. Two raters counted the number of participant responses and evaluated the quality of responses using a Likert-type scale.

Heslin et al. (2006) found managers who experienced the *growth mindset* training were more likely to offer coaching suggestions. The number of suggestions these managers made to the employee were greater than those offered by the managers who did not receive the mindset

training. Also, the managers who received the *growth mindset* training offered higher quality suggestions than those who did not receive the mindset training.

Heslin et al. (2006) noted prior to their study, the impact of managers' mindset on employee performance had not been studied. Heslin et al. further pointed out prior to this study most research had focused on the employee willingness and motivation to accept correction. Heslin et al.'s found mindset theory was a useful intervention for improving manager performance and employee productivity. Heslin et al. suggested more organizational research should be conducted to persuade managers to adopt a *growth mindset*. Heslin et al. further suggested more research be conducted to determine whether managers who held a *growth mindset* did so for all employees or just those they believed would change. Heslin et al. also proposed further study regarding the difference between the possibility and probability an employee improving through coaching.

Heslin et al. based much of their study on Dweck & Leggett's (1988) research. Similarly, research by Dweck & Leggett (1988) and Heslin et al. (2006) provide a basis and foundation for examining the relationship of mindset theory of local school board members to student academic achievement. Although the relationship of local school board member mindset upon student academic achievement is more complex, it merits further study. If the mindset of local school board members impacts policy, educational opportunities, and community involvement, it warrants local school board member attention.

In an article relating *growth* and *fixed mindset* theory to the business world, Keating and Heslin (2015) identified *growth mindset* theory as a key strategy for increasing employee engagement. Keating and Heslin proposed a theoretical framework for organizations to apply when considering mindset theory and its impact upon employee engagement. Keating and Heslin

(2015) cited Kahn's (1990) theory stating employees need to understand expectations, be appropriately challenged, feel emotionally safe, and have trusting relationships with colleagues in order to fully engage in their work. Keating and Heslin described a *fixed mindset* employee as one who avoids both challenges and risks because of the risk of either failing or underperforming. *Fixed mindset* employees were also often critical of their colleagues' work and interpreted colleagues' failure as incompetence. In contrast, Keating and Heslin described a *growth mindset* employee as someone who did not become discouraged by setbacks but instead viewed setbacks as opportunities to improve. The *growth mindset* employee tended to help colleagues improve after an initial setback (Keating & Heslin, 2015; Heslin, et al., 2006).

Keating and Heslin (2015) noted Plaks and Stecher's 2007 study found employees with a *growth mindset*, who put forth great effort but did not improve, lost motivation and also experienced higher anxiety levels than their colleagues who had a more pronounced *fixed mindsets*. Keating and Heslin (2015) also noted *fixed mindset* employees often did better when placed in roles requiring little quality control or specialization, such as work in a factory work assembly line. Keating and Heslin (2015) suggested organizations should use speeches, other company communication, and position- promotion criteria to instill an organizational culture of growth and flexibility.

These articles regarding employee mindset theory and resulting employee productivity are applicable to local school governance. Leading with a *growth mindset* from a local governance role can positively impact both school administrators and teachers. This leadership is similar to the manager and employee relationships described above. These examples from the business world lend additional evidence that beliefs and behaviors of those in local school governance matter.

Research Questions and Hypotheses

Research Question One: My first research question focused on defining the association between local public school board member beliefs (i.e., *elevating* or *maintaining*) and local public school district student academic achievement. The hypothesis predicted *elevating* school board member beliefs would correlate with *moving* school district student achievement and *maintaining* school board member beliefs would correlate with *stuck* school district student achievement.

Believing students can learn at high levels and holding high expectations for students were shown to contribute to higher student achievement growth in numerous Dweck studies (Blackwell et al., 2007; Dweck, 2006; Dweck and Leggett, 1988; Grant and Dweck, 2003). Dweck's *growth mindset* theory has similarities to the *elevating* beliefs from the Iowa Lighthouse study (Rice et al., 2000). Rice et al. found an *elevating* belief existed among school board members in high academically achieving school districts. These local school board members believed students could learn at increasingly high levels and they believed school district personnel could constantly improve their ability to help students meet their learning potential. Similar to Dweck's *growth mindset* theory, these local school board members did not believe any student had reached his or her potential. These local school board members believed goals should be continuously set for increased academic achievement growth. In contrast, Rice et al. found school board members who held *maintaining*, less hopeful, beliefs governed school districts characterized by stagnant student academic achievement. These school board members believed students faced obstacles and challenges that prohibited them from improving their academic achievement.

Research Question Two: My second research question sought to define the association between school board member behavior and student academic achievement in high and low academically achieving local school districts. The hypothesis predicted school board members in high achieving school districts would behave in measurably different ways than school board members in low achieving school districts.

Those who question the relevance of local school boards often argue local school boards do not behave in specific and important ways. These critics believe local school board members do not provide enough oversight of student academic achievement, and allocate too little time during board meetings discussing student academic achievement, and do not set ambitious goals for student academic achievement (Hess and Meeks, 2010; Rhim et al., 2013; Shober and Hartney, 2014). The research indicates school board members in high academically achieving school districts behave in measurably different ways than school board members in low achieving school districts (Rice et al., 2000; Shober and Hartney, 2014). Productive communication with the superintendent, monthly agenda and budgeting meetings, effective evaluation of the superintendent's job performance, school board self-evaluation, and successful consecutive union contracts had a greater impact upon student academic achievement (Goodman et al, 1990). Shober and Hartney found school board members' accurate knowledge of the school district's student academic performance, intentional and frequent school board concentration on academic achievement reports, and school board member participation in board training set school boards in school districts with high student academic achievement apart from school boards in districts with low student academic achievement. In addition, Lee and Eadens (2014) found school districts with higher student academic achievement had more orderly local school

board meetings, spent more meeting time focusing upon student academic achievement, and demonstrated higher levels of attention and respect for fellow board members.

Research Question Three: My study's third research question examined the association between school board member beliefs and behaviors. The hypothesis predicted a local school board member's beliefs would impact the way the board member participated and behaved in the elected school board member role.

In studies of teacher mindset and its effect upon student learning, Dweck (2006) found teacher beliefs about student potential were not enough to produce increased student learning. Teacher behaviors, instructional methods, and actions were also important. In addition, numerous studies found a *growth mindset* and goal setting within a *growth mindset* positively affected student learning (Blackwell et al., 2007; Dweck, 2006; Dweck and Leggett, 1988; Grant and Dweck, 2003; Rice et al., 2000). School board members with a *growth mindset* or *elevating* beliefs were likely to view resource allocation as a more important governance role because these school board members believed increased resources would yield improved student academic achievement (Rattan et al., 2012). Rice et al. (2000) found school districts with local school board members who held *elevating* beliefs were more likely to realize student academic achievement growth. Local school board members with *elevating* beliefs anticipated positive results, communicated well with staff, recognized and supported staff accomplishments, were involved in community initiatives, knew how the school district's professional development activities led to increased student achievement, and made data-driven decisions.

Realizing their managerial role involves a supervision progression that begins with the superintendent, local school board members with a *growth mindset* were more likely to invest in training opportunities. These local school board members believed their training would

positively impact local school board member behavior and increase school district employee productivity throughout the organization (Heslin et al., 2006). Another study found local school member beliefs led to specific school board member behaviors that provided direction to the superintendent and consequently to school district staff. These local school board member beliefs also led to improved district professional development, clearer overall district direction, and school building autonomy to meet goals. (Delegardelle, 2007). The *elevating* beliefs of school board members caused school districts to plan actions targeted toward improving the weakest area of student academic achievement and to provide staff training focused on student academic achievement goals rather than on motivational messages, discipline or student behavior. These efforts resulted in the school board and staff maintaining steady pressure towards student achievement goals and school board and staff creating shared agreements to increase student academic achievement (Delegardelle, 2007).

In contrast, local school board members with *maintaining* beliefs held lower expectations for student academic achievement, exhibited poorer communication between board and staff, did not recognize or seek ways to support school district staff, did not seek community engagement, knew less of professional development activities and how those activities connected to student achievement, and used data less often in decision-making. Local school board members with *maintaining* beliefs focused more on facilities and student discipline than upon student academic achievement. Focusing on these non-academic board topics allowed the local school board members to avoid uncomfortable conversations around declining or stagnant student academic achievement.

My study's examination of school board member beliefs and behaviors and their association to student academic achievement will provide additional information for local school

boards and school district leadership consideration. Understanding these associations will provide additional motivation and tools for local school board members and superintendents as they work to increase student academic achievement.

CHAPTER 3

METHODOLOGY

Introduction

My study employed a quantitative cross-sectional study design to explore the association between local school board member beliefs, behaviors, and student academic achievement. I attempted to replicate and extend the Iowa Lighthouse Study (Rice et al., 2000) and aimed to better understand how local school board member beliefs and behaviors impact student academic achievement. My study also explored the association between local school board member beliefs and how those beliefs shaped or impacted school board member behavior. My study results will add to the current research on local school boards, better informing local school board members of their potential impact on their respective school district's student academic achievement.

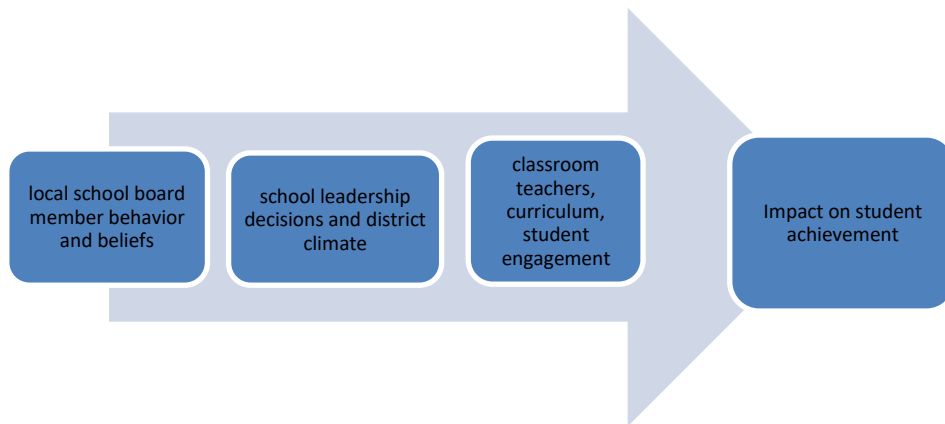


Figure 1. Impact of Local School Boards on Student Achievement

Participants

Local school board members currently serving in Illinois public school districts served as the population. Initially, local school board members of 35 school districts were invited to participate in this study. Lower and higher achieving districts were identified from a scatterplot of all Illinois school districts' 2015 PARCC scores. Initially, only districts that had 50% to 80% low income students were used in my study. PARCC scores from 2015 were used because there were errors in state reporting of 2016 low-income scores. My study examined the association of local school board member beliefs and behaviors and student academic achievement at one point in time rather than student academic achievement growth over several years. The school board members of the 35 Illinois public school districts were invited by email to complete an online survey.

Study Procedure

A survey was sent to the school board members of 19 of the 35 school districts that were identified as lower achieving, that also had less than 17% of students meeting or exceeding standards. A duplicate survey was sent to the school board members in the 16 school districts identified as higher achieving, having 30% or more of students meeting or exceeding standards. Participants were sent an initial e-mail (See Appendix A), and a follow-up email 1 week later (see Appendix B). After both emails, only 28 participants responded. Because the initial response from these two groups was low, local school board members in all Collar County school districts were included in a second round of surveying. .

For the second round of surveying, participants were identified from a list of Collar County school districts in Illinois. Because the Illinois Association of School Boards could not release a list of these email addresses, I recorded the individual email addresses for each school district from the School Board tab of the district website. If school board email addresses were not included on the district website, the school board member address was obtained by calling that district's superintendent's office. Participants were sent an initial e-mail (See Appendix A), and a follow up email 1 week later (See Appendix B). After both emails in the second round of survey, 38 additional participants responded.

A total of 66 participants responded to the combined first and second round of surveying. After completing the survey, the participants were thanked for their responses. The only incentive offered to the participants was the opportunity to receive a report of the study's research findings. Collected information was used to determine the relationship of local school board member beliefs and behaviors to district student achievement. The dependent variable, school district student academic achievement, was obtained from a publicly accessible database, the IIRC, Illinois Interactive Report Card.

School board members with whom the author of this study had established a professional relationship were currently serving in some of these selected school districts.

Research Design

The study's research design was a quantitative cross-sectional study. The online survey (See Appendix C) contained questions asking local school board members to respond to

statements that correlate to *Growth* and *Fixed* mindsets. *Growth* and *Fixed* mindsets were each similar to *Elevating* or *Maintaining* beliefs of local school board members. The local school board members also answered questions regarding their behaviors as they related to being on the board. While local school board members reported their beliefs to be either *Elevating* or *Maintaining*, it was important to also study school board member behaviors. These behaviors were studied by presenting participants with ten vignettes and accompanying response options. Participant responses to these vignettes determined if the responding school board member's behaviors were consistent with their reported beliefs.

Measures

My study's measures were based on three sets of survey questions. Participants self-reported their beliefs and responses in an online format. Questions included items related to both groupings of independent variables, *Elevating* or *Maintaining* beliefs and school board member behaviors.

Dweck et al.'s (1995) Implicit Theory Three-Item Questionnaire (1995) was used. Participants were asked to respond to three statements. Participant responses were analyzed to determine whether the respondent held an *Fixed* mindset versus *Growth* mindset. The three statements were: "You have a certain amount of intelligence and you really can't do much to change it"; "Your intelligence is something about you that you can't change very much"; and "You can learn new things, but you can't really change your basic intelligence" (Dweck et al., 1995). Participants responded by answering within a range of a 6-point scale (*1- strongly agree to 6- strongly disagree*). Responses to these three statements were averaged to determine

participant mindsets. A higher score, 4.0 or above, indicates a *Growth* mindset and a lower score, 3.0 or below, indicates a *Fixed mindset*.

Dweck et al. (1995) used only three items in their questionnaire because it is a relatively simple construct. Dweck et al. conducted six validation studies to ensure reliability and validity. Dweck et al. found the three-item implicit theory questionnaire had an alpha score of .94 to .98. Dweck et al. noted agreement with all three questions endorsed an fixed mindset. Therefore, Dweck et al. tested the questionnaire for validity. Through several studies, Dweck et al. found participants tended to gravitate towards a *growth mindset*, expressing disagreement with the items on the survey. In addition, Dweck et al. found the agreement with the three items in this questionnaire represented an acquiescence set. Dweck et al.'s questionnaire will be referred to as the "mindset survey" in this study.

Study participants were also asked to respond to 28 questions set forth in Delegardelle's doctoral dissertation (2006). Delegardelle originally asked these 28 questions to examine relationships between characteristics of local school board members and the importance school board members placed upon certain governance behaviors. These school governance behaviors were directly linked to findings regarding the *Elevating* and *Maintaining* beliefs of local school board members that emerged in Phase I of the Iowa Lighthouse Study (Rice et al., 2000). Each question had a fully anchored response on a Likert-type scale. Participants chose their most accurate answer. In the first portion of this part of the survey, participants were asked to indicate the amount of time their school board spends on certain topics. An example of this type of question is how much time the school board allocates to discussing student academic achievement. Respondents were asked to select one of the following five responses: A= *Significant time*; B = *Some time*; C = *Minimal time*; D = *None*; or E = *Don't know*. Answers A and

B, *Significant time* or *Some time*, indicate behaviors that correlate to a *Growth mindset* or *Elevating beliefs*. It is hypothesized that answers C and D indicate behaviors correlating to a *Fixed mindset* or *Maintaining beliefs*.

In the second portion of this part of the study, participants were asked a second series of questions focused on their perceived importance of certain governance tasks. An example of this type of question is the importance local school board members accord to the discussion of student academic achievement growth. Respondents were asked to select one of the following five responses: A= *Very important*; B= *Somewhat important*; C= *Not very important*; D= *Not at all important*; E= *Don't know*. Answers A and B, *Very important* or *Somewhat important*, indicate behaviors that correlate to a *Growth mindset* or *Elevating beliefs*. Answers C and D, *Not very important* or *Not at all important*, indicate behaviors correlating to a *Fixed mindset* or *Maintaining beliefs*. Delegardelle's survey (2006) will be referred to as the "Time and Importance survey" in this study.

Finally, participants were asked to read and respond to ten short local school board vignettes. These ten vignettes were written based on this researcher's eight years of local school board experience. These vignettes were reviewed by two veteran school board members to ensure the scenarios were realistic. These vignettes include various elements of school governance considered in the Iowa Lighthouse Study (Rice et al, 2000) such as allocation of resources, goals for student achievement growth, and mindsets of local school board members. Participants chose between two responses to each situation. The local school board member responses indicated either an *Elevating* belief system within a *Growth mindset* or a *Maintaining* belief system within a *Fixed mindset*. The local school board member response also indicated their governance behavior. The entire survey is located in Appendix C.

Table 1. Survey Instruments

Survey instrument	Resulting belief		Resulting Belief
“Mindset survey” (Dweck et al., 1995)	Growth Mindset	Versus	Fixed Mindset
“Time and Importance survey” (Rice et al., 2000, Delegardelle, 2006)	Elevating beliefs and behaviors	Versus	Maintaining beliefs and behaviors
Local school board vignettes	Elevating beliefs	versus	Maintaining beliefs

Demographic Information

In addition to the surveys discussed above, the questionnaire also collected demographic information, such as participant gender, age, education level and number of years serving in the role of school board member. Participants were asked to report the size and type of their school district (e.g., elementary, high school, or community unit). Finally, participants were asked to indicate their education level and whether they have or had children or grandchildren who were enrolled in the school district. This demographic information was used to further identify any connections to the questions in this study. The entire survey including all demographic questions is set forth in Appendix C.

Analysis plan

The data collected in my study includes school district and participant demographic information, participant answers to the Dweck et al. (1995) “mindset survey”, participant responses to the “Time and Importance survey” (Delegardelle, 2006), and participant response to the Ten Vignettes. Pearson correlations will be calculated to examine associations between local school board member beliefs (*elevating* and *maintaining*) and school district student academic achievement. Items in the Pearson correlation table will include the responses to the Dweck mindset survey, low-income percentages and PARCC scores, and participant responses to the Time and Importance survey. Vignettes were not used in this correlation study because all the responses indicated a growth mindset.

School districts will also be split into higher and lower achieving subsets via a median split. In order to measure group differences between higher and lower achieving districts, a series of t-tests will be conducted. In all cases, the IV will be higher vs. lower achieving districts, while the DVs will vary for each analysis. The analyses will examine differences in the age of those serving, the number of years members had served on the board, the differences on the Dweck et al. 2005 “mindset survey”, and differences in the “Time and Importance survey” (Delegardelle, 2006). The median split sets will then be used to calculate two sets of Pearson correlations on the key variables for this study; one set for the lower achieving districts, and one set for the higher achieving districts.

CHAPTER 4

RESULTS

This chapter provides descriptive statistics and a preliminary analysis of the data for each research question. Question 1 examined the association between local school board member beliefs (elevating or maintaining) and school district student academic achievement at one point in time. Question 2 examined whether school board members in school districts with higher student academic achievement consistently described their role towards improving academic achievement differently than school board members in school districts with lower student academic achievement. Finally, Question 3 examined how local school board member beliefs impacted board member's decision-making and actions at the board table.

Preliminary Analyses

Of the 66 respondents that started the survey, 21 dropped out before completion. As a result, these local school board members were excluded in the data set. In addition, any participant who had missing data was deleted from the sample. Therefore, the final sample included 45 participants. See Table 2 for descriptive demographic statistics of the full study sample.

Table 2. Sample Characteristics

	N	Min	Max	Mean (sd)
Percentage Low Income	40	5	95	44.50 (27.06)
PARCC Scores (% proficient)	43	6	80	38.93 (17.86)
Age of Participant	44	38	76	54.61 (10.17)
Years on Board	45	1	29	6.04 (5.17)

Among the 45 participant responses, five participants did not report their district name. Three of these five participants did self-report their PARCC scores. In addition, one participant did not report age.

In addition to the information above, most participants responded to questions about gender, education level, children in the district, and role on the local school board. There were 27 females and 18 males who participated. Most of the participants had an advanced degree ($n = 25$), whereas 11 participants held Bachelor's degrees, 7 reported "some college or post high school training" and one participant did not graduate from high school. As indicated by the information above, respondents were highly educated and mostly female.

The majority of participants ($n = 36$) reported they had children or grandchildren in the school district in which they served. Participants held various roles on their local boards. For example, 23 participants were "at-large" members, 3 held the position of Secretary, 6 were Vice Presidents, and 8 were Presidents.

Of the 45 respondents, 44 responded to questions about the type and size of districts in which they serve. Twenty-nine participants served on elementary school district school boards,

seven served on high school boards and eight served on boards of unit districts. Twelve participants served in districts with less than 1000 students, six served in districts with 1000-2000 students, one served in a school district with 2000-3000 students, six served in districts with 3000-4000 students, six served in districts with 4000-5000 students and 13 participants served in districts with 5000 or more students.

Of the 45 responders, most participants were the single responder from their school district. However, four different boards had two members participate in the study. Three boards had three members participate in the study.

Below are histograms of various sample distributions of each of the demographic items in the survey. Most demographics were evenly distributed. Participant number of years on the board was the only demographic that had significant outliers, at 20 and 30 years of service.

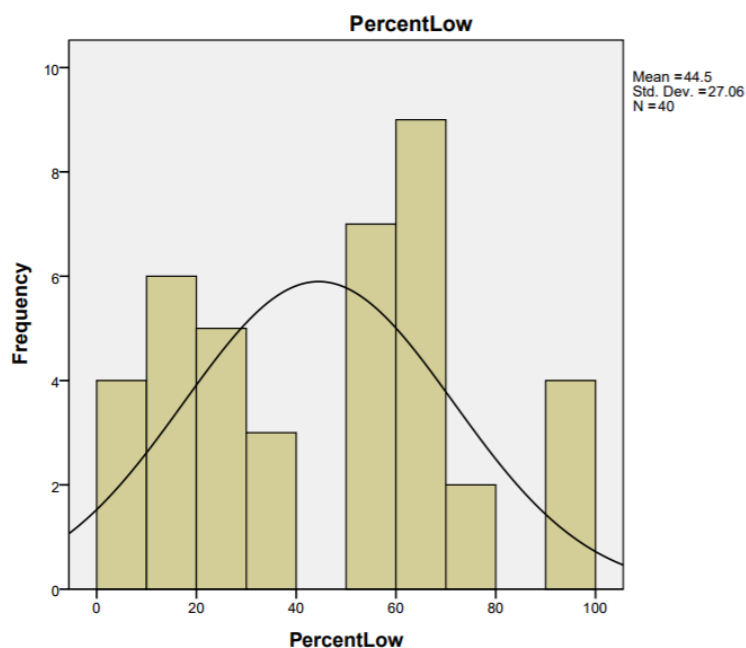


Figure 3. Histogram of Participant's District Low Income Percentage

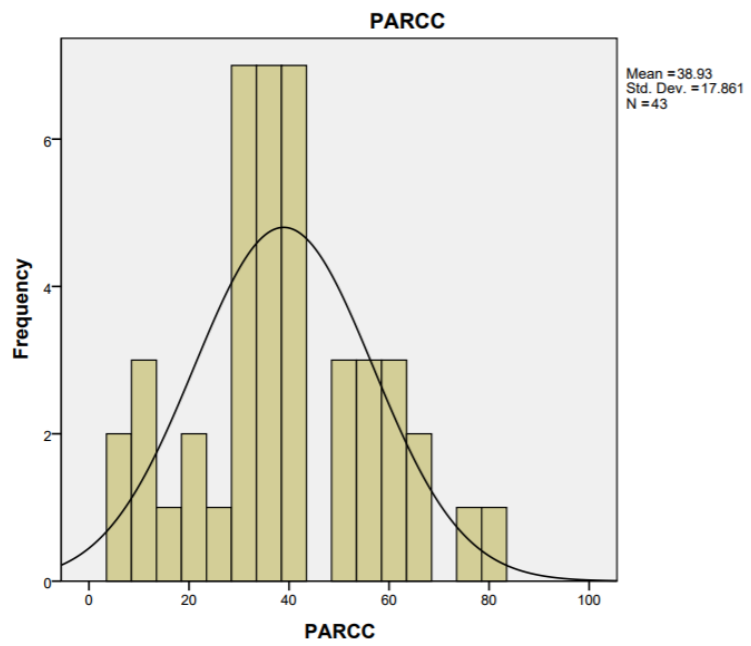


Figure 4. Histogram of Participants' District PARCC Scores

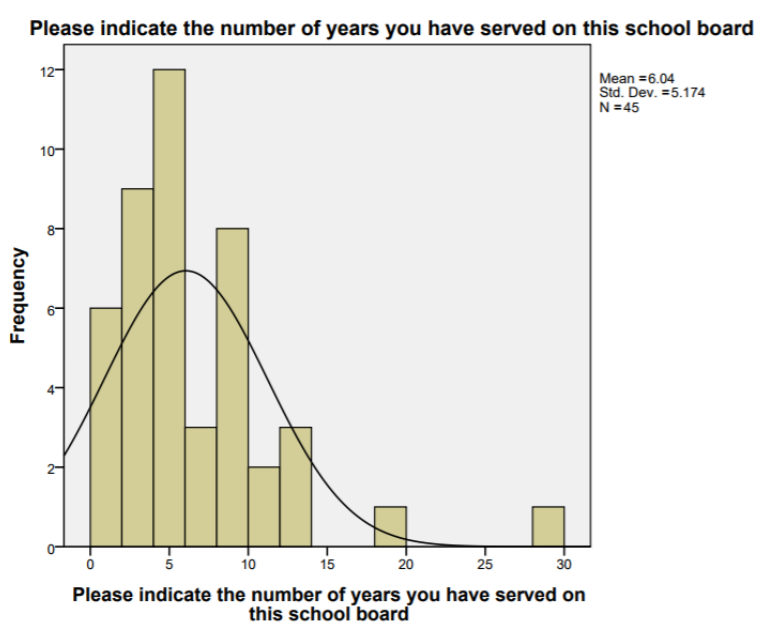


Figure 5. Histogram of Participant Response to Number of Years on School Board

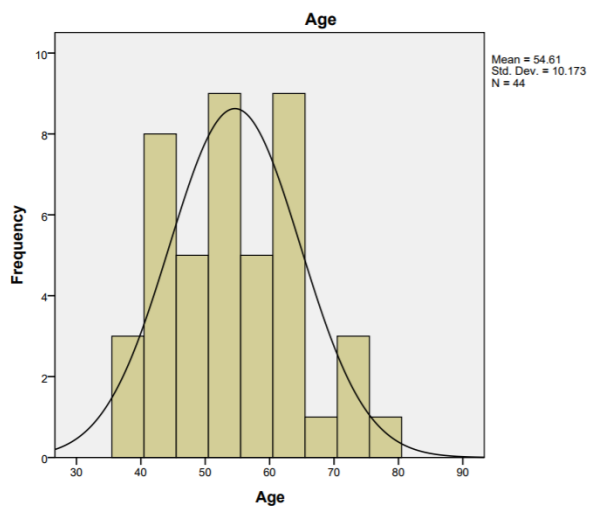


Figure 6. Histogram of Participant Age

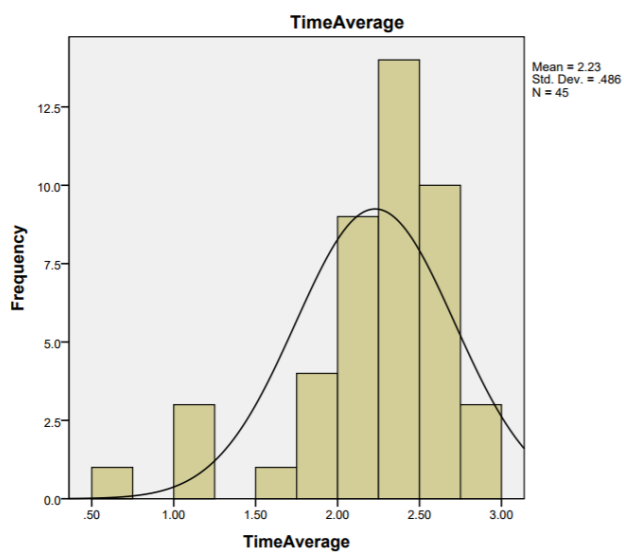


Figure 7. Histogram of Participant Response to Time Spent on Specific School Board Behaviors

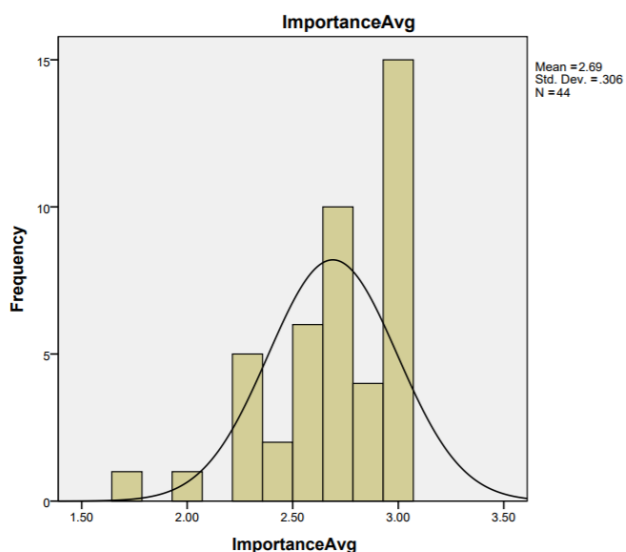


Figure 8. Histogram of Participant Response to Importance of Specific School Board Behaviors

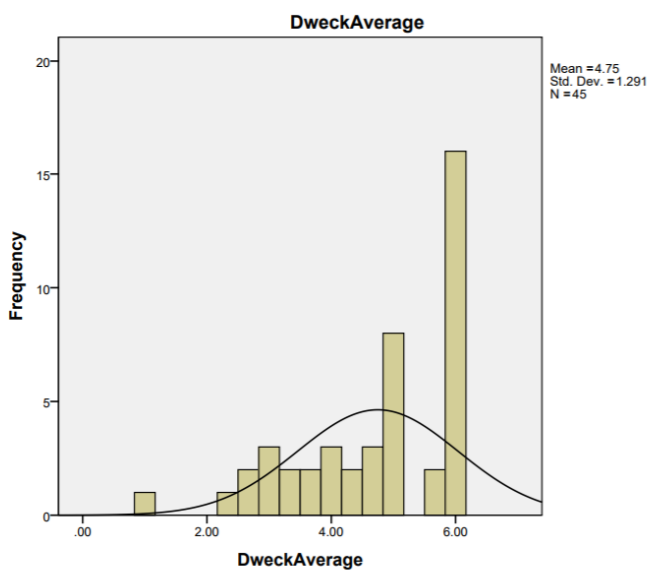


Figure 9. Histogram of Participant Response to Dweck “Mindset Survey”

Instruments

There were three instruments administered for this study: Dweck et al.'s (1995) Implicit Theory Three-Item Questionnaire (1995), Delegardelle's 28 question local school board member time and importance survey (2006), and ten original vignettes examining school board member behavior. Data from these instruments were initially examined utilizing descriptive statistics.

Implicit Theory Three Item Questionnaire.

As previously noted, Dweck et al.'s (1995) "mindset survey" assessed participant responses to determine whether the respondent had an *Entity* or *Fixed* mindset versus *Incremental* or *Growth* mindset. Participants responded by answering questions within a range of a 6-point scale (*1- Strongly Agree to 6- Strongly Disagree*). Responses to these three statements were averaged to determine participant mindsets. A higher score, 4.0 or above, indicates a *Growth* mindset and a lower score, 3.0 or below, indicates a *Fixed mindset*. Please see Table 3 for item-level and average descriptive statistics for the Dweck et al.'s (1995) "mindset survey". The majority of the respondents leaned towards answers that reflect a growth mindset.

Table 3. Mindset Survey Statistics

	N	Min	Max	Mean (sd)
Dweck Item 1	45	1	6	4.77 (1.43)
Dweck Item 2	45	1	6	4.87 (1.27)
Dweck Item 3	45	1	6	4.60 (1.48)
Average of Items	45	1	6	4.75 (1.29)

Twenty-eight question local school board member “Time and Importance survey”.

Delegardelle (2006) originally asked 28 questions to examine relationships between characteristics of local school board members and the importance school board members placed upon certain governance behaviors. These school governance behaviors are directly connected to findings regarding the *Elevating* and *Maintaining* beliefs of local school board members emerging in Phase I of the Iowa Lighthouse Study (Rice et al., 2000). Each question had a fully anchored response on a three point Likert-type scale. In the first portion of the survey, participants were asked to indicate the amount of time they felt their school board spent on certain topics. In the second portion of this part of the study, participants were asked a second series of questions focused on their perceived importance of certain governance tasks. Please see Table 4 and Table 5 for item-level statistics for the Time Spent and Importance items, respectively.

Table 4. Item Statistics for Time Spent Items

	N	Min	Max	Mean (sd)
Discussion of ways to improve student academic achievement.	43	1	3	2.46 (.70)
Ensuring time exists for staff to work together to improve student learning.	43	1	3	2.34 (.78)
Developing and expressing a belief that staff can significantly affect student learning.	45	1	3	2.4 (.65)
Establishing criteria to guide the staff in choosing initiatives to support student learning.	45	0	3	2.02 (.89)
Evaluating the effectiveness of professional development for improving student learning.	45	0	3	1.88 (.96)
Monitoring progress of student learning in relation to improvement goals.	45	0	3	2.44 (.76)
Influencing a community-wide belief that all students can learn the basic skills to succeed in their grade level.	45	1	3	2.16 (.71)
Mobilizing the community to support the goals for improving student learning.	45	0	3	1.91 (.73)
Ensuring there is strong leadership for improving leadership in ways that result in improved student learning.	45	0	3	2.58 (.69)
Establishing and communicating a singular focus for improving student learning.	45	0	3	2.00 (.91)
Adopting and monitoring long-range and annual improvement goals to improve student learning.	45	1	3	2.62 (.58)
Adopting and monitoring plans for improving student learning.	44	1	3	2.55 (.66)
Adopting and monitoring procedures for regularly informing the community about learning progress.	44	0	3	2.00 (.68)
Discussing/ reviewing legal mandates and rules related to improving student learning.	44	0	3	1.77 (.80)
Average of Time Items	41	0.64	2.93	2.23 (.49)

Table 5. Item statistics for Importance Items

	N	Min	Max	Mean (sd)
Discussing improvement in student learning.	44	2	3	2.86 (.35)
Ensuring time exists for staff to work together to improve student learning.	44	2	3	2.80 (.41)
Developing and expressing a belief that the staff can significantly affect student learning.	44	1	3	2.82 (.45)
Establishing criteria to guide the staff in choosing initiatives to improve student learning.	44	0	3	2.48 (.73)
Evaluating the effectiveness of professional development for improving student learning.	42	1	3	2.67 (.61)
Monitoring progress of student learning in relation to improvement goals.	42	2	3	2.86 (.35)
Influencing a community-wide belief that all students can and should be expected to learn the basic skills for their grade level.	42	1	3	2.69 (.56)
Mobilizing the community to support the goals for improving student learning.	42	0	3	2.55 (.74)
Ensuring there is strong leadership for improving instruction in ways that result in improved student learning.	42	1	3	2.90 (.37)
Establishing and communicating a singular focus for improving student learning.	42	0	3	2.40 (.77)
Adopting and monitoring long-range and annual improvement goals to improve student learning.	42	1	3	2.81 (.46)
Adopting and monitoring plans for improving.	42	2	3	2.79 (.42)
Adopting and monitoring procedures for regularly informing the community about student learning progress.	41	2	3	2.77 (.44)
Discussing/ reviewing legal mandates and rules related to improving student learning.	41	1	3	2.34 (.73)
Average of Importance Items	41	1.71	3	2.69 (.31)

Ten vignettes

In addition to the Likert-type survey items above, participants responded to ten vignettes that included various elements of school governance considered in the Iowa Lighthouse Study (Rice et al, 2000), such as allocation of resources, goals for student achievement growth, and mindsets of local school board members. Each vignette presented a situation related to school governance and participants chose between two responses to each situation. The vignettes addressed governance situations such as decisions local school board members made following discouraging student achievement reports, expectations following a decrease in funding, strategic planning, communication within the school district, celebrating accomplishments in the district, school improvement plans and staff professional developments, and consideration of parental involvement. The local school board member responses indicated either an *Elevating* belief system within a *Growth mindset* or a *Maintaining* belief system within a *Fixed mindset*. The local school board member responses also indicated their preferred governance behavior.

Overall, the majority of the participants' responses to each portion of the survey was skewed towards a positive, growth mindset. Participants endorsed a growth mindset, elevating beliefs and behaviors. Especially when responding to the vignettes, participants tended to strongly relate to growth mindset and chose the growth mindset option. The participant responses to the vignettes all showed positive results, did not have much variance, and did not give new information for the analysis.

For research questions 2 and 3, the data was analyzed by the median split and also by examining the higher 33% and lower 33% of data. There were no differences in the inferential statistics. The mean and median tables are shown below in Table 6.

Table 6. Median and Mean Scores of Dependent Variables in Higher vs. Lower Achieving Districts

Split Method		PARCC			
		Higher PARCC		Lower PARCC	
		<i>n</i>	Mean (sd)	<i>n</i>	Mean (sd)
Median					
Split	Time Spent	21	2.30 (.28)	22	2.11 (.61)
	Importance	20	2.68 (.28)	22	2.68 (.33)
	Dweck	21	4.83 (1.17)	22	4.79 (1.19)
Upper					
33%	Time Spent	15	2.29 (.31)	16	2.06 (.65)
Lower	Importance	14	2.68 (.27)	16	2.68 (.38)
33%	Dweck	15	4.82 (1.15)	16	4.75 (1.16)

Research Question 1

Research Question 1: *What is the association between local school board member beliefs (i.e., elevating or maintaining) and local public school district student academic achievement?*

Hypothesis 1: Elevating school board member beliefs will be positively correlated to increased student achievement and Maintaining school board member beliefs will be found in school districts with stagnant or declining district student academic achievement.- Not Supported

Pearson correlations were calculated to examine associations between local school board member beliefs (*elevating* and *maintaining*) and school district student academic achievement. See Table 7 for Pearson correlations among school board member beliefs and school district academic achievement

Table 7. Correlations Among Primary Study Variables

	1	2	3	4	5
1. Dweck Mindset Survey Average	1				
2. Low Income %	-.122	1			
3. PARCC (% Proficient)	-.016	-.592**	1		
4. Time Spent Average	-.113	-.058	.284	1	
5. Importance Average	.105	-.117	.050	.448**	1

**Note. Correlation is significant at the 0.01 level (2-tailed).

No significant correlations were found between local school board member beliefs (as measured by mindset) and school district student academic achievement. Thus the hypothesis for this research question was not supported. Although there were no significant correlations among local board member mindset and school district student academic achievement, there were moderate correlations between low-income percentages and PARCC scores. As low-income percentages went up, PARCC scores went down.

In addition, board members reported spending more time in board meetings on items they also rated as more important. The correlation was .448, and was significant at the $p < .001$ level. Participants rated of highest importance “ensuring strong leadership for improving instruction in ways that result in improved student learning.” Participants rated of lowest importance “establishing and communicating a singular focus for improving student learning and discussing and reviewing legal mandates and rules related to improving student learning.”

Board members reporting of their time spent on various board practices and local school district PARCC scores were positively correlated but not statistically significant. The correlation was .284 and was approaching significant at the $p < .001$ level. If a larger participant sample would have been possible, there may have been a stronger association. There was no association between importance placed on various Board practices, as reported by Board members, and local district PARCC scores. Clearly the relationship of Time Spent on certain issues and local district PARCC scores was much stronger than the relationship between Importance of certain issues and PARCC scores.

How local school board members reported spending their time is more indicative of governance behaviors but this data is also self-reported.

A few answers to questions on time spent in meetings are worth mentioning here. Participant responses were noticeably weaker on questions regarding time given in board meetings to evaluate the effectiveness of professional development and reviewing legal mandates related to improving student learning. Participants rated questions regarding monitoring progress of student learning in relation to improvement goals, ensuring strong leadership for improving instruction in ways that result in improved student learning, and adopting and monitoring long-range and annual improvement goals to improve student learning noticeably higher than other questions.

Research Question 2

Research Question 2: What is the association between public school board member behaviors and student academic achievement in higher and lower achieving local public school districts?

Hypothesis 2: School board members in school districts with higher student academic achievement behave in measurably different ways than school board members in school districts with lower student academic achievement.- Not supported

In order to answer this research question, school districts were split into higher and lower achieving subsets via a median split. The median split was 52% or higher for Meeting or Exceeding on PARCC for districts assigned to the “higher achieving” category and 51% or lower for districts assigned to the “lower achieving” category. Using this split, 18 participants served in the lower achieving category and 22 participants served in the higher achieving category.

In order to measure group differences between higher and lower achieving districts, a series of t-tests were conducted. In all cases, the IV was higher vs. lower achieving districts, while the DVs varied for each analysis. The first analysis examined differences in the age of those serving. Results of the t-test approached significance, the scores for lower achieving districts ($M = 51.39$, $SD = 7.46$) and higher achieving districts ($M = 56.81$, $SD = 10.82$); $t(37) = -1.79$, $p = .08$. Next, the number of years members had served on the board was examined. Results of this t-test were not significant; the number of years board members had served for lower achieving districts ($M = 6.23$, $SD = 6.38$) and higher achieving districts ($M = 5.95$, $SD = 3.87$); $t(41) = .17$, $p = .86$, did not differ significantly.

Results of the t-test examining differences on the Dweck survey were not significant; the scores for lower achieving districts ($M = 4.74$, $SD = 1.22$) and higher achieving districts ($M = 4.79$, $SD = 1.19$); $t(37) = -1.23$, $p = .90$, did not differ significantly. Similarly, results of the t-test examining differences in Time Spent were not significant; the scores for lower achieving

districts ($M = 2.23$, $SD = .37$) and higher achieving districts ($M = 2.16$, $SD = .57$); $t(38) = .447$, $p = .65$, did not differ significantly. The same pattern held for the results of the t-test examining differences in Importance; results were not significant. The scores for lower achieving districts ($M = 2.70$, $SD = .27$) and higher achieving districts ($M = 2.64$, $SD = .34$); $t(37) = .541$, $p = .59$, did not differ significantly.

An additional analysis was done to look at mean and median of study variables. The participant group was broken into sub-sets of PARCC scores. Analysis was considered using the top 25% and lower 25% of PARCC scores. Because there were only 8 districts in the bottom 25% of PARCC scores and just two districts in the upper 25% of PARCC scores, this analysis could not be considered. Next, the t-tests were re-examined according to three equal groups with the middle group excluded. The top group had PARCC scores of 43% or more students meeting and exceeding and the bottom group had PARCC scores of 32% or less students meeting and exceeding. Using these upper and lower groups, individual sample t-tests examined the association between PARCC scores and percentages of low income, years served on the board, and age of the local school board member. The variables of time and importance were also added item by item.

There were no additional findings from the analysis. There were no changes in group differences when cut for mean and median split. Age of local school board member and low income percentages had significant correlations to PARCC scores but no new associations in Time, Importance or Mindset were found. In higher achieving districts, the correlation between Mindset and Time Spent actually decreased. So, this correlation between Dweck items and Time Spent was stronger with the middle 33% included.

Research Question 3

Research Question 3: What is the association between public school board member beliefs and behaviors in higher achieving and lower achieving public school districts?

Hypothesis 3: The local school board member's personal understanding of their role as a local school board member impacts the way the school board member participates and behaves in their role as a school board member-Not Supported

To address Research Question 3, Pearson correlations were calculated to test for relationships between local school board member beliefs and behaviors and district student academic achievement. In order to ascertain differences in correlation patterns between higher and lower achieving districts, the median split used in research question two was retained. Two sets of Pearson correlations were conducted on the key variables for this study; one set for the lower achieving districts, and one set for the higher achieving districts. Those results are presented in tables 8 and 9 below.

Table 8. Correlations for Board Members who Serve in Lower Achieving Districts

	1	2	3	4
1. Years Serving	1			
2. Time Average	-0.015	1		
3. Importance Average	-0.359	.465*	1	
4. Dweck Average	0.057	-0.086	0.074	1

*Note. Correlation is significant at the 0.05 level (2-tailed).

Table 9. Correlations for Board Members who Serve in Higher Achieving Districts

	1	2	3	4
1. Years Serving	1			
2. Time Average	0.147	1		
3. Importance Average	-0.002	0.411	1	
4. Dweck Average	-0.049	0.050	0.335	1

An interesting pattern emerged. A significant correlation was found among outcomes for board members serving in lower achieving districts specifically related to Time Spent on certain activities and the Importance placed upon those activities. The correlation was .465. In Research Question 1, board members reported spending more time in board meetings on items they also rated as more important. This correlation of Importance and Time Spent on certain board behaviors may have been primarily because of the low achieving district responses in this analysis.

In addition, in higher achieving districts, a correlation approaching significance was also found between the Dweck et al.'s (1995) "mindset survey" responses and Importance placed on certain activities in higher achieving districts. The Dweck "mindset survey" and Importance placed on these activities were positively correlated but not statistically significant. The correlation was .335 and was approaching significant at the $p < .001$ level. This suggests context of lower or higher achieving district PARCC scores matters. If a larger participant sample would have been possible, there may have been a stronger association.

CHAPTER 5

DISCUSSION OF RESEARCH QUESTIONS

The purpose of my study was to determine associations among local school board member behaviors and beliefs and local school district student academic achievement. Through this research, several findings emerged. As a reminder, this study used the Iowa Lighthouse Study (Rice et al., 2000; Delegardelle, 2007) and Dweck's (2006) mindset theory to examine public school board member beliefs and behaviors and to analyze the associations among local school board member behaviors and beliefs and student academic achievement. This study posited connections exist between the *Elevating* and *Maintaining* beliefs in the Iowa Lighthouse Study findings (Rice et al., 2000; Delegardelle, 2007) and Dweck's definition of *growth* and *fixed* mindsets (2006).

Table 10. Theoretical framework and associated beliefs

Theoretical framework	Resulting belief		Resulting Belief
Implicit "mindset theory" (Dweck et al., 1995)	Growth Mindset	versus	Fixed Mindset
Local school board member beliefs and behaviors (Rice et al., 2000, Delegardelle 2006)	Elevating beliefs and behaviors	versus	Maintaining beliefs and behaviors

Research question one sought to determine the associations among local school board member beliefs (*elevating* or *maintaining*) and school district academic achievement. While I hypothesized that *elevating* school board member beliefs would be positively correlated to increased student achievement and *maintaining* school board member beliefs would be found in school districts with stagnant or declining district student academic achievement, this hypothesis was not supported by my research. No significant correlations were found among local school board member mindset and school district student academic achievement. While respondents represented districts with both higher and lower student achievement, most board members reported having a *growth mindset*. The *growth mindset* of the board members was not associated with higher student academic achievement growth in all districts.

Although no significant correlations were found, board members reported spending more time in board meetings on a few specific items they also rated as more important. Their belief in the importance of certain governance activities seemed to influence their actions at the board table. For example, board members reported placing importance on ensuring strong leadership in improving instruction. Board members reported believing this leadership and instructional improvement would result in increased student achievement. They similarly reported it important to monitor student learning in relation to improvement goals. The board members reported spending time in board meetings discussing with district administration how the district administration and teachers were leading and ensuring instructional improvement. The board members reported spending time in board meetings tracking student academic progress towards student achievement goals. The board members' response to time and importance in instructional improvement and monitoring of student academic achievement goals may indicate they

repeatedly come back to these topics in board meetings and sought to impart a sense of urgency to district leadership in both areas.

School board members of *Moving* districts in the Iowa Lighthouse Study (Rice et al., 2000) also reported spending time in board meetings on governance areas they believed to be important. School board members and superintendents believed school district personnel could improve their ability to help students meet their potential. These school board members spent time in meetings ensuring there was strong leadership for improving instruction, adopting and monitoring student academic achievement goals. School board members reported feeling responsible for creating the conditions for students to excel and meet their potential (Rice et al., 2000).

So, while my study did not find a correlation between board member beliefs and higher student academic achievement levels, the relationship between importance and time in the areas of instructional improvement and goal monitoring do connect to the same board member beliefs and behaviors of *Moving* districts in the Iowa Lighthouse Study (Rice et al., 2000). This means most board members who participated in my study were correctly valuing instructional improvement and goal monitoring but these practices were not yet associated with higher levels of student academic achievement. This may indicate the board members in my study held the beliefs and values that could result in student academic achievement improvement in the future. Or, this might mean that valuing instructional improvement and goal monitoring alone are not enough to increase student achievement levels.

Research question two examined the association among public school board member behaviors and student academic achievement in higher-achieving and lower-achieving local public school districts. While I hypothesized board members in school districts with higher

student academic achievement behave in measurably different ways than board members in school districts with lower student academic achievement, this hypothesis was not supported. Board members in my study reported similar board behaviors and practices as board members in *Moving* districts in the Iowa Lighthouse Study (Rice et al., 2000). However, these board members served in districts with both higher and lower levels of student achievement. These board behaviors were not associated with just board members in higher performing districts.

While there was not a correlation between school board member behaviors and student achievement in my study, an interesting correlation was noted in the relationship of PARCC scores and school board behaviors. Specifically, as PARCC scores increased, local school board members reported spending more time doing certain behaviors that would lead to increased student achievement. One of these local school board practices was the discussion of student academic achievement improvement at the board table. For example, in districts where board members reported spending more time discussing progress in student learning, student academic achievement tended to be higher. This student academic achievement discussion at the board table most likely provided a sense of urgency and accountability from the school board to the district administration and staff for meeting student improvement goals.

Another board practice that correlated to higher PARCC scores in my study was the practice of school boards asking district leadership to report on staff collaboration time to improve student learning. For example, in districts where board members regularly asked for these reports and ensured staff had adequate time to collaborate, student achievement tended to be higher. This board-driven accountability for teacher collaboration and the importance placed on teacher collaboration and planning likely created these conditions in which student academic achievement was higher.

Although my findings are not causal, a clear relationship exists between time spent on these certain board behaviors and higher student academic achievement scores. This could be because the accountability of district leadership to report student achievement progress to the board created a clear message that the board valued and expected to see this increase. The board's interest in ensuring increased teacher collaboration time also indicated a board value and practice of monitoring the behaviors that had, in other studies, caused an increase in student academic achievement levels.

To this point, similar findings occurred among the local school board members of *Moving* districts in the Iowa Lighthouse Study (Rice et al., 2000). In *Moving* school districts, school boards created goals and worked on school district challenges together. These school districts had effective ways of summarizing local school board meetings to staff and they effectively communicated local school board priorities. School board members could also describe school district level teamwork on initiatives. The *Moving* districts showed evidence the superintendent, school district teams, and school board members were learning together through problem solving initiatives.

Rice et al. (2000) found *Moving* local school board members were confident in the school district staff's competency and ability to make the changes needed for increased student learning. Further, the *Moving* local school boards regularly recognized the staff for their accomplishments and could articulate how they had recognized staff in the past. *Moving* local school board members understood the connection between school district staff training and goals for student learning. Additionally, staff training was part of a larger shared plan focused upon student learning needs. *Moving* local school board members knew the school district staff's priorities. The *Moving* local school board members connected local school board work to these priorities

and made these initiatives stronger. *Moving* local school board members were confident all students could learn and were working alongside staff to ensure all students were learning.

Similarly, Hess and Meeks (2010) found school board members who evidenced a greater academic focus were leading school districts where student academic achievement exceeded expectations. In contrast, Shoher and Hartney (2014) suggested local school boards with less ambitious goal setting would realize lower student academic achievement levels.

These findings in prior research (Rice et al., 2000; Hess & Meeks, 2010; Shoher & Hartney, 2014) and the evidence that similar behaviors are correlated to higher PARCC scores in my study matters because it gives local school boards continued evidence that what they examine, study and talk about at the board table actually can affect student academic achievement. Specifically, school board members who share responsibility with staff in creating goals and working on school district challenges together may see higher student achievement. School board members who understand and connect board level work with the importance of district staff training, setting goals for student learning, and ensuring staff training was part of a larger shared plan focused upon student learning needs will likely realize higher student achievement results.

If a larger participant sample would have been possible in my study, more robust findings may have existed in the correlation of PARCC scores and school board behaviors. A study of a larger sample of participants may have found a stronger correlation between board members behaviors and board practices they reported as important. Adding a qualitative component to my research would also have possibly allowed me to learn more about how school board members understood various school board behaviors.

Research question three examined the association among public school board member beliefs and behaviors in higher-achieving and lower-achieving public school districts. While I hypothesized local school board members' personal understanding of their role would impact the way the school board member participates and behaves, this hypothesis was not supported. There was no difference in local school board member behavior and beliefs in higher-achieving and lower-achieving school districts.

However, while analyzing this research question, an interesting pattern emerged. A significant correlation was found among outcomes for board members serving in lower achieving districts specifically related to Time Spent on certain activities and the Importance placed upon those activities. This was an unexpected finding and may be the result of school board training in districts with lower student academic achievement.

In addition, in higher achieving districts, a correlation approaching significance was found between Dweck et al.'s (1995) "mindset survey" responses and Importance placed on certain local school board activities. This indicates that there may be an emerging connection between board member beliefs and what board members value discussing most in meetings. Both of these findings indicate that context matters.

Overall, the participants in my study held *elevating* beliefs about student academic achievement potential but these board members served in school districts with both higher and lower levels of student achievement. It is possible that school board member beliefs in the manner and frequency with which they intended to monitor student achievement did not accurately reflect how they actually behaved. Hess and Meeks (2010) found 38.6% of school board members reviewed student academic achievement reports annually while 21.6% of school board members monitored student achievement more frequently. In the area of accurate school

district knowledge, Shober and Hartney (2014) found only half of the school board members had accurate information about their school district's school funding, teacher salaries, student classroom enrollments, and academic achievement targets. These findings (Hess & Meeks, 2010; Shober & Hartney, 2014) might explain the findings in my study that while school board members believed student achievement could increase, these board members were not actually monitoring student academic achievement as regularly as they intended.

School board members in my study may also be monitoring student academic achievement in less effective ways than did the board members of *Moving* school districts in the Iowa Lighthouse Study (Rice et al., 2000). In Hess and Meek's study (2010), over 45% of school board members preferred to study student academic achievement directly while 14.7% preferred having school district administrators provide the school board with an interpretation of student academic achievement data. If Hess and Meek's percentages are indicative of the preferences of participants in my study, asking district administration to interpret student achievement data in the future might increase the likelihood this board practice would positively impact achievement scores.

Local school board members self-reported their beliefs and behaviors in this study and overall, the responses on all survey items of this study skewed positively, towards *elevating* beliefs and a *growth mindset*. Regardless of district student academic achievement data being relatively higher or lower, local school board members reported *elevating* beliefs about student potential and behaviors and a *growth mindset*. It is possible that some or all of these local school board members perceived their beliefs and behaviors as being more positively oriented than they actually are. Those who choose to serve in public office usually desire to do well and benefit those they represent. Participants in my study may have answered questions according to what

they perceived as the most socially desirable responses. However, in reality, their behaviors and mindset may not always match their intentions. It is also possible that those who chose to respond to my survey were just really positive people. Those who have a *growth* mindset might have been more apt to respond and believe their participation in this study would lead to findings that would help boards experience higher student achievement.

The finding in my research that there were no differences in local school board member behavior and beliefs in higher-achieving and lower-achieving school districts are similar to findings in a more recent study by Plough (2014). Like in my study, Plough found local school board member behaviors and beliefs were similar in both higher-achieving and lower-achieving school boards. Specifically, Plough found local school board member behavior was similar in both higher-achieving and lower-achieving school boards when school board members reported their behaviors of creating awareness, applying pressure for accountability, supporting professional development and governing well with district wide leadership. Board members in both higher and lower achieving school districts in Plough's study all reported believing these behaviors were important and impacted student academic achievement. But, the relationship with actual student academic achievement levels was inconclusive.

A further consideration of why, in my study, no differences existed in local school board member behavior and beliefs in higher-achieving and lower-achieving school districts may be the low-income percentages of participating districts. Since my study found that most participants reported elevating beliefs, the low-income percentages of the school districts might partially explain my findings. Although there were no significant correlations among local school board member mindset and school district student academic achievement, associations existed between low-income percentages and PARCC scores. As low-income percentages went

up, PARCC scores went down. This is not a new finding. Since the 1950s, Americans have felt district poverty levels unfairly affected student academic performance (Rice et al., 2000). Federal Title I funding, the United States Supreme Court's 1954 *Brown v. Board of Education* decision, and the Elementary and Secondary Education Act of 1965 all aimed to help disadvantaged students attain levels of educational achievement commensurate with the performance of students in higher socio-economic levels (Rice et al., 2000, Rhim, 2013,). More recently, NCLB did not allow for variances in student economic status. The federal government needed to issue a waiver system to compensate for this powerful variable (Rice, 2014). So, it is logical that an association between low-income percentages and PARCC score would exist in my study.

Another possible explanation for the overall positive responses on all survey items of this study is sample bias. Respondents in my study were both highly educated and mostly female. There were 27 females and 18 males who participated. My participant sample is quite different from previous research that found a higher percentage of men served on school board members as compared to women (Glass, Bjork, & Brunner, 2000; Hess, 2010; Hess & Meeks, 2010; Mountford & Brunner, 2010). It may be that female participants in my study answered very differently than male participants had answered in previous studies. Or, perhaps female respondents were more likely to accept the opportunity to participate my study.

Research has shown that women tend to run for office to influence specific policy concerns, particularly those that impact women and children (Fox, 1997; Swers, 2002; Thomas 1998; Witt et al., 1995). Hess and Leal (2005) found that women in political office were more likely to advocate for programs and decisions that benefit the disadvantaged. So, the overwhelming positive responses on my survey items could be explained, in part, by the higher percentage of women respondents. Since women tend to advocate for disadvantaged students,

women may have desired and decided to serve on school boards of districts with more challenging demographics. Their desire to advocate for these students would likely mean they held *elevating* beliefs for these students' futures but their beliefs alone have not yet influenced student academic achievement results, especially since they might be governing over districts with more challenged students.

Most of the participants in my study also had an advanced degree ($n = 25$), whereas 11 participants held Bachelor's degrees. My participant sample is similar to Land's findings (2002). Specifically, Land also reported school board members tend to be well-educated and successful professionals, perhaps representing a very different demographic than their constituencies. Those with more advanced degrees in my study may have held a more optimistic view of the potential for student academic achievement.

A high number of respondents in my study also had children or grandchildren in the district where they served on the school board. My participant sample is similar to Hess and Meeks' (2010) study. Hess and Meeks found while 17% of the American population had school-aged children, a higher percentage, 38.1% of school board members, had school-aged children. Having children or grandchildren in the district may have caused participants in my study to report more *elevating* beliefs in raising student academic achievement. They would be more likely to have *elevating* beliefs because of their close relationship to students in the district and their subjective experience through the eyes of their child. Community members without children in the district would make decisions on intended student achievement outcomes purely based on data presented by the superintendent or hearsay in the community. In contrast, those school board members with children or grandchildren in the district may be more likely to report

elevating beliefs but these beliefs may be more associated with their relationship to their individual child than to the district population as a whole.

A further explanation for the overall positive responses on all survey items could be the impact that school board members believed they had upon local district leadership. Heslin et al. (2006) found managers who held a *growth mindset* more positively impacted their employees' job performance and desire to improve. As school board members in my study lead with a *growth mindset* and this positively impacts both school administrators and teachers, student achievement levels might rise in the future.

The Impact of Training

Yet an additional explanation for the overwhelmingly *elevating* beliefs from respondents in this study is the increase in mandatory and recommended training of local school board members by the Illinois Association of School Boards (IASB). IASB has incorporated findings from the Iowa Lighthouse Study (Rice, 2000, Delegardelle 2006) into their various board trainings for school districts in Illinois. In addition, Dweck's mindset theory (2006) is currently well-known and studied in public schools. While it is difficult to prove that IASB training influenced school board members in this survey, it is very plausible that the increase and improvement in training in recent years has had an overwhelming positive effect on respondents. Since this increased training has occurred more recently, school board members in lower achieving districts may not have yet seen the impact of their training and changing beliefs on student academic achievement.

Goodman et al.'s (1997) study was one of the first to link school board member behavior to student academic achievement and included a recommendation for ongoing school board member training. Goodman et al. found school board member focus on policy making while

refraining from direct involvement in day-to-day school district operations and supervision resulted in a positive, trusting, synergetic relationship between the local school board and the superintendent. Productive communication with the superintendent, in turn, led to higher student academic achievement gains. These areas of policy-making, refraining from day-to-day school district operations, and productive communication with the superintendent are items covered by IASB school board trainings and may have positively impacted school board member governance decisions as reported in my study.

Various other connections between a *growth mindset* and school board training exist in research. In the third year of Phase II of the Iowa Lighthouse Study, staff and school board members, as a result of school board training, agreed they could positively affect student academic achievement (Delegardelle, 2007). Requiring training for local school boards remains a strong reform idea. Public support for school boards increases when school board members undergo professional development (Rice, 2014). Because many of the school board members in my study had likely participated in IASB training, they may have a more *growth mindset* approach to their governance role than if they had not had this training.

Half of the school board members surveyed by Hess and Meeks (2010) stated they would like more training on how to interpret student academic achievement data. This could be a similar interest of school board members in my survey. Since IASB offers training on the importance of interpreting academic achievement data and training on how to improve in student achievement data, the participants in my study may have had a clearer understanding of their potential impact.

Mountford and Brunner (2010) made recommendations for increased school board training to raise awareness of gender bias in the school board role and to train school boards to

overcome or change these biases. Gender bias could be a contributing factor in my study since a higher percentage of respondents were female. Gender bias training could be very effective in allowing boards to act more fairly in their governance role. Had this training occurred in the Illinois districts in my study, my results might have been different. Perhaps the higher percentage of female participants in my study would have responded differently than their more traditional role of advocating for the disadvantaged (Fox, 1997; Swers, 2002; Thomas 1998; Witt et al., 1995; Hess & Leal, 2005).

Shober and Hartney (2014) found school boards that focused on three key components of local school boards; accurate knowledge about the school district, intentional school board concentration on student academic achievement and the positive effect of school board member training led school districts with higher student academic achievement. Realizing their managerial role involves a supervision progression that begins with the superintendent, local school board members with a *growth mindset* were more likely to invest in training opportunities. Since the respondents in my study had access to IASB training that included the importance of accurate knowledge of the school district, the importance of reviewing student achievement data, and the positive effects of training on district academic achievement, this training most likely positively influenced participants in my study.

The local school board members in Heslin et al.'s study (2006) believed their training would positively impact local school board member behavior and increase school district employee productivity throughout the organization. In another study (Plough, 2014), lower-achieving board members noted a stronger emphasis on commitment to board work than to training to get better in the board member role. Higher-achieving board members reported attending more state and national conferences (Plough, 2014). Roberts and Sampson (2011)

found that state level school board associations overwhelmingly believed training positively impacts school governance and that those states that required mandatory training realized a higher level of student academic achievement. Grissom (2009) found local school boards who took part in on-going training experienced less divisiveness. Training practices such as governance self-evaluations, common goal setting, and shared vision workshops led to a higher level of professionalism among the boards.

All of these studies point to the importance and the probable positive effect that required and recommended IASB training has had on the school board members who took part in my study.

In reflecting on other reasons why the responses on all survey items of this study skewed towards the positive, towards *elevating* beliefs and a *growth mindset*, it is necessary to consider how much student achievement can be expected to improve based upon school board beliefs and behaviors alone. Researchers have found local school board member knowledge and beliefs are only one variable needed to improve student achievement (Delegardelle, 2007; Land, 2002; Hess & Meeks, 2010). The local board member's knowledge and beliefs impact the school leadership team's decisions and these decisions, in turn, influenced school district climate (Delegardelle, 2007). School district climate impacted classroom teachers, curriculum, student engagement, and academic achievement (Delegardelle, 2007). It is possible that board member beliefs in this study have not yet caused this chain reaction to positively influence student achievement and that with more time, student achievement will improve.

School board members in this study might be just beginning to perform the behaviors required to positively impact student achievement. The results of these behaviors on local district student achievement might emerge in coming years. In Phase II of the Iowa Lighthouse Study,

positive change in student academic achievement at the local school district level was attributed to increased collaboration between administrators and teachers that focused upon student learning. Both an increase in the amount of leadership delegated to teachers and increased small group collaboration time provided to teachers to improve instruction and monitor data were also observed. School district leaders also demonstrated a growing sense of urgency for progress. In addition, school board members increasingly used multiple data points to assess student learning (Delegardelle, 2007).

Researchers found it was not enough to believe student academic achievement would increase (Delegardelle, 2007). Student academic achievement gains occurred when planned actions targeted improving the weakest student academic achievement area. School administrators in school districts with the highest student achievement gains reported having professional development models aligned to student academic achievement goals rather than only relying upon motivational messages or training targeting student discipline and behavior to improve student learning (Delegardelle, 2007). School board members in districts in my study could have recently changed beliefs that will soon begin to have this positive impact on district student academic achievement scores.

It could also be that, in my study, teacher beliefs, potentially impacted first by the governing school board's beliefs, may not have yet changed teacher behaviors. Dweck (2006) noted teacher beliefs alone were not sufficient to produce increased student achievement. Dweck noted high standards, resources and incremental teaching were also needed. A *fixed mindset* teacher imparts the same knowledge to all students and expects all students to absorb that knowledge. In contrast, *growth mindset* teachers strive to learn as much as their students. *Growth mindset* teachers also individualize their instruction based upon what each student needs to learn

(2006). In my study, the teacher mindset and behaviors may not yet be positively impacted by their school board members' beliefs and behaviors.

Finally, individual student beliefs and student achievement in my study may still be changing. Blackwell et al. (2007) found students who believed intelligence was a quality that could be positively changed met learning targets more often than students with a *fixed mindset*. Because *growth mindset* students believed they could improve, they also were more resilient when they experienced failure. Finally, *growth mindset* students earned higher grades over the two- year period when compared to *fixed mindset* peers. In my study, individual student mindset and behaviors may not yet be positively impacted by their school board members' beliefs and behaviors.

So, how do these findings affect local school board behavior? The data from my study indicates that most respondents leaned towards a *growth* mindset, with *elevating* beliefs regarding student academic achievement potential. While this positive finding did not lead to information regarding local school district student academic achievement differences, it is encouraging that those who serve in this local office are holding so many of the beliefs and behaviors that research shows should positively impact student academic growth in the future.

Local school board members can best invest their time in board table discussions on how to improve student achievement. These board level discussions should include the importance of ensuring staff collaboration exists to improve student learning, monitoring student achievement growth over time, determining the effectiveness of professional development focused on student achievement, encouraging the community to support student learning, and adopting and monitoring goals and plans that are intended to improve student learning (Rice et al., 2000). In addition, developing a shared agreement that adheres to belief in students' academic

achievement potential is recommended for local school boards serious about realizing increased student academic achievement.

Strengths

A strength of this study was the connection of the Iowa Lighthouse Study (Rice et al., 2000, Delegardelle 2006) and Dweck's mindset theory (2006). This design could be replicated in the future with a larger set of participants. This study included districts with both higher and lower socio-economic status whereas the Iowa Lighthouse Study and Plough (2014) looked solely at local school districts with lower socio-economic status. This study was also unique in asking local school board members to evaluate their belief system according to Dweck's three-question mindset survey. In addition, this study is unique in its use of vignettes to identify *elevating* or *maintaining* beliefs of local school board members.

Limitations

Several limitations existed in this study. The biggest limitation was the low number of respondents to complete the survey, in spite of many attempts to increase my sample size. Although the survey was sent twice in both phases, only 66 local school board members began the survey and 21 dropped out before completion. As a result the final number of respondents was only 45 participants.

Initially, the research planned to invite all Illinois school board members to participate in the study. However, the Illinois Association of School Boards was not able to release a list of

Illinois school board member email addresses for this study. As a result, individual board member email addresses needed to be recorded one by one from individual school district websites. Had the email addresses of all Illinois school board members been available, all Illinois school board members would have been included in the survey and the resulting total number of participants may have been much higher. This larger number of participants may have led to stronger findings.

Local school board members self-reported their beliefs and behaviors in this study. It is possible that some or all of these local school board members perceived their beliefs and behaviors as being more positively oriented than they actually are. Those who choose to serve in public office usually desire to do well and benefit those they represent. However, in reality, their behaviors and mindset may not always match their intentions.

Because I only used one year of student academic achievement scores in my study rather than growth over time, I may have missed or not yet been able to determine the benefits of these board member beliefs.

Future Directions for Researchers

Existing research on efforts to increase student academic achievement has generally focused on school district personnel responsibility for local school improvement (Rhim et al., 2013). With the exception of the Iowa Lighthouse Study, research examining local school board member beliefs and the relationship of school board member beliefs and behaviors to student academic achievement has been, to date, sparse. Many school board members become discouraged or complacent when challenges exist (Rice et al., 2000). In this era of accountability,

the need for research examining the relationship between school board member beliefs and student academic achievement is compelling.

Therefore, while there is much research on the impact of school district personnel on student academic achievement growth, there is a need to continue to study this important relationship between school board member beliefs and behaviors and student academic achievement. This study should be repeated in other groupings of local school board members. My study examined the association of local school board member beliefs and behaviors and student academic achievement data at one point in time. A future study could examine student academic achievement change over time. Hopefully, these future repetitions of the study would yield larger respondent numbers. If this study were repeated, a future researcher should consider altering the word *intelligence* in Dweck et al.'s () Implicit Theory Three-Item Questionnaire to *achievement*. Local school board members may understand the word *achievement* better since they are often reviewing academic *achievement* data at the board table, not student *intelligence* data.

Future researchers might also consider using the questions in this study as a basis for a qualitative study with a higher achieving and lower achieving school district with similar low-income percentages. The ten vignettes in the survey tool could be used as a basis for this qualitative component to encourage discussion of board beliefs and behaviors with the board as a whole. This would reflect on particular situations as they answer research questions. A qualitative or mixed methods study would allow the researcher to ask follow-up questions and ask for examples to support their initial findings and would allow the researcher to examine the beliefs and behaviors of local school boards as a whole rather than from individual responses. In my study, most participants were the single responder from their school district. Only four

different boards had two members participate in the study and three boards had three members participate in the study. A qualitative study of the full school board would examine the way a board collectively believes and behaves in their shared governance role.

The information gleaned from this study can also further support the mandatory and recommended IASB training for local school board members currently serving their local communities. This comparison and reflection of self-mindset versus collective board behaviors and beliefs could be a specific intervention for future board training and research. The movement from reflecting on one's own mindset versus the mindset of the collective board could incorporate growth mindset theory into board training and move the collective group of board members to more elevating beliefs.

Intended Audience

The intended audience for the results of my study is local school district board members, superintendents and district-level leadership teams, and community members who desire to hold their local school board officials accountable. Local school board members will find the research tools and questions helpful as a self-evaluation and reflection tool. Local school board members will find the results of my study and the discussion of those results helpful in determining priorities for their board meetings and in considering the opportunity of school board training. Local school board members can examine whether they hold *Elevating* or *Maintaining* beliefs and read the implications of their personal belief system in their school board role.

Superintendents and district leadership will also benefit from reading this study. This study will give them important information and findings that may encourage their school board to pursue on-going school board training. Since the school board employs the superintendent and communicates most often with the district leadership team, the effectiveness and communication patterns of the school board can greatly impact a district leadership team's focus and efficiency of work on student learning. Undesirable and poor school board member behavior can negatively impact student academic achievement (Shober & Hartney, 2014; Lee & Eadens, 2014). A superintendent is in a unique role managing input from multiple bosses that hold equal weight in questions, requests and opinions. The findings and discussion in my study may help the superintendent to respectfully suggest shared agreements and board practices that allow the district governance team to be most effective in raising student achievement.

Finally, the findings and discussion in this study will be helpful to community members who desire to hold their local school board member representatives accountable to good governance practices. Berry and Howell (2007) asserted that a school board member is successful if student academic achievement rises during tenure in office. Berry and Howell stated voters should make decisions on school board member success in office based on both state standardized test data and by considering the education of their own children or of children they knew in the district. They found that while voters considered student achievement data and the experiences of children in the district, voters only occasionally consider these data points when voting for school board members. My study presents research and findings that discuss how to hold school board members accountable for student achievement and good governance practices.

Closing Remarks

A review of the findings from this study determined that local school board members in this study had an overwhelmingly growth mindset. While this did not yield a set of interesting findings for this researcher, it is, overall, very encouraging nonetheless. A local school board member's intentions in public service should be for the good of students and families in the community. The findings in this study lend evidence that this is true in many different types of school districts in Illinois.

This study attempted to analyze the relationship between local public school board member beliefs and behaviors and student academic achievement. When I began this research, I realized that previous studies on this topic were sparse. While the respondents of this study had overwhelmingly *elevating* beliefs regardless of school district student achievement levels, the evidence gleaned from this study may encourage other researchers to continue looking into this relationship in larger scale in the future.

Each local school board member in office has the opportunity to reflect and evaluate his or her beliefs about potential student achievement. The belief decisions of local school board members are alterable and changes in school board member beliefs do not require an expenditure of tax dollars. Any local school board member may re-evaluate his or her beliefs on student potential. Further research in this area could serve to inform local school boards of the benefits of holding *elevated* beliefs for student potential. These *elevated, growth-mindset* beliefs could further influence local school board member decisions and behaviors at the board table. These behaviors would have the potential to affect student academic achievement positively, the goal for many serving in this important public office.

REFERENCES

- Adamson, M. (2012). Fulfilling its purpose: Why board governance? *IASB Journal* March/April, 11-13.
- Allen, A. and Plank, D. (2005). School board election structure and democratic representation. *Educational Policy*. 19(3): 510-527.
- Alsbury, T. (2004). Does school board turnover matter? Revisiting Critical Variables in the Dissatisfaction Theory of American Democracy. *International Journal of Leadership in Education: Theory and Practice*, 7:4, 357-377. Retrieved from <http://dx.doi.org/10.1080/1360312042000189299>
- Anderson, C. G. (1992). Behaviors of Most Effective and Least Effective School Board Members. *ERS Spectrum*, 10(3), 15-18.
- Berry, C. and Howell, W. (2008). Accountability and local elections: Rethinking retrospective voting. *The Journal of Politics*. 69(3): 844-858.
- Binet, A., & Heisler, S. T. (1975). Modern ideas about children.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development*, 78(1), 246-263.
- Carol, L.N., Cunningham, L., Danzberger, J., Kirst, M., McCloud, B. & Usdan, M. (1986). *School Boards: Strengthening Grass Roots Leadership*. Washington, DC: The Institute for Educational Leadership.
- Coleman, P. & LaRocque, L. (1990). *Struggling to be Good Enough: Administrative Practices and School District Ethos*. Bristol, PA: Falmer Press.
- Danzberger, J. P., & Usdan, M. D. (1994). Local Education Governance; Perspectives on Problems and Strategies for Change. *Phi delta kappan*, 75(5), 366.
- Delegardelle, M. L. (2006). *Roles and responsibilities of local school board members in relation to student achievement* (Unpublished doctoral dissertation). Iowa State University, DesMoines Iowa.
- Delegardelle, M. (2007). Proceedings from Iowa School Boards Foundation Symposium: *The Lighthouse Inquiry: Examining the Role of School Board Leadership in the Improvement of Student Achievement*. Des Moines, Iowa.

- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
- Dweck, C. S., & Leggett, E. L. (1988). A Social- Cognitive Approach to Motivation and Personality. *Psychological Review*, 95(2), 256-73.
- Education for All Handicapped Children Act of 1975*. U.S. Public Law 94-142. *U.S. Code*. Vol. 20,secs. 1401 et seq.
- Felton, R. M. (2014, July) Say “No” to federal Intrusion on local School Board Authority. Retrieved from <https://nsba.org/advocacy/federal-legislative-priorities/local-school-board-governance-and-flexibility-nsba-bill>.
- Finn, C. and Keegan, L. G. (2004). Lost at sea: Time to jettison one of the chief obstacles to reform: the local school board. *Education Next*, 4(3), 14-18.
- Frankenberg, E., & Diem, S. (2013). School board leadership and policymaking in changing political environments. *The Urban Review*, 45(2), 117-142.
- Good, C., Aronson, J., & Inzlicht, M. (2003). Improving adolescents’ standardized test performance: An Intervention to reduce the effects of stereotype threat. *Journal of Applied Developmental Psychology*, 24, 645-662.
- Goodman, R. H., Fulbright, L., & Zimmerman Jr, W. G. (1997). Getting There from Here. School Board-Superintendent Collaboration: Creating a School Governance Team Capable of Raising Student Achievement.
- Grant, H. & Dweck, C. S. (2003). Clarifying achievement goals and their impact. *Journal of Personality and Social Psychology*, 85, 541-553.
- Grissom, J. (2009). The determinants of conflict on governing boards in public organizations: The case of California school boards. *Journal of Public Administration Research and Theory*, 20(3), 601-627.
- Hanushek, E. A., & Raymond, M. E. (2005). Does school accountability lead to improved student performance?. *Journal of policy analysis and management*, 24(2), 297-327.
- Heslin, P. A., Vandewalle, D., & Latham, G. P. (2006). Keen to Help? Managers’ Implicit Person Theories and Their Subsequent Employee Coaching. *Personnel Psychology*, 59(4), 871-902.
- Hess, F. M. & Meeks, O. (2010). School Boards Circa 2010: Governance in the Accountability Era. *Thomas B. Fordham Institute*.

- Illinois Interactive Report Card. (2016). Data retrieved from <https://www.illinoisreportcard.com>.
- Individuals With Disabilities Education Act, 20 U.S.C. §1400 (2004).
- Jacobs, J. (2015). Disrupting the Education Monopoly. *Education Next*, 15(1).
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33,692–724. <http://dx.doi.org/10.2307/256287>.
- Keating, L. A., & Heslin, P. A. (2015) The potential role of mindsets in unleashing employee engagement, *Human Resource Management Review*, <http://dx.doi.org/10.1016/j.hrmr.2015.01.008>
- Korelich, K., & Maxwell, G. (2015). The Board of Trustees' Professional Development and Effects on Student Achievement. *Research in Higher Education Journal*, 27.
- Land, D. (2002). Local school boards under review: Their role and effectiveness in relation to students' academic achievement. *Review of Educational Research*, 72(2), 229-278.
- Lee, D. E., & Eadens, D. W. (2014). The Problem: Low Achieving Districts and Low Performing Boards. *International Journal of Education Policy and Leadership*, 9(3).
- Local School Board Governance and Flexibility. Retrieved May 12, 2016, from <https://www.nsba.org/advocacy/federal-legislative-priorities/local-school-board-governance-and-flexibility>.
- Meier, K. and England, R. (1984). Black representation and educational policy: Are they related? *The American Political Science Review*. 78(2):392-403.
- Moffett, J. (2011). Perceptions of School Superintendents and Board Presidents on improved Pupil Performance and Superintendent Evaluation. Retrieved from <http://cnx.org/content/m36746/1.2>
- Montemayor, R., Adams, G. R. & Gullotta, T. P. (Eds.) (1990). From childhood to adolescence: A transitional period. Newbury Park, CA: Sage.
- Moody, M. (2011). Superintendent- Board Relations: Understanding the Past to promote the Future. Retrieved from <http://cnx.org/content/m41035/1.3/>
- Mountford, M., & Brunner, C. C. (2010). Gendered Behavior Patterns in School Board Governance. *Teachers college record*, 112(8), 2067-2117.
- National Fed'n of Indep. Bus. v. Sebelius*, 132 S. Ct. 2601-60 (June 28, 2012).

National School Boards Association. (n.d.). Retrieved July 10, 2015 from <http://www.nsba.org/>

No Child Left Behind (NCLB) Act of 2001, 20 U.S.C.A.

Plough, B. L. (2012). *School board governance and student achievement: school board members' perceptions of their behaviors and beliefs* (Doctoral dissertation, San Diego State University).

"Race to the Top Fund." *U.S. Department of Education*. N.p., n.d. Web. 6 Aug. 2014.

Rattan, A., Savani, K., Naidu, N. V. R., & Dweck, C. S. (2012). Can everyone become highly intelligent? Cultural differences in and societal consequences of beliefs about the universal potential for intelligence. *Journal of personality and social psychology*, 103(5), 787.

Rhim, L. M. (2013). Moving beyond the Killer B's: The Role of School Boards in School Accountability and Transformation. *Academic Development Institute*.

Rice, D., Delagardelle, M., Buckton, M., Jons, C., Lueders, W., Vens, M. J. & Weathersby, J. (2000). The Lighthouse Inquiry: School Board/Superintendent Team Behaviors in School Districts with Extreme Differences in Student Achievement.

Rice, P. (2014). *Vanishing School Boards: Where School Boards Have Gone, Why We Need Them, and How We Can Bring Them Back*. Lanham, MD: Rowman and Littlefield Foundation.

Roberts, K. L., & Sampson, P. M. (2011). School board member professional development and effects on student achievement. *International Journal of Educational Management*, 25(7), 701-713.

Shober, A. F., & Hartney, M. T. (2014). Does school board leadership matter? *Thomas B. Fordham Institute*.

Spring, J. (2011). *The politics of American education*. New York: Routledge.

Thomas, J. (2001). The Public School Superintendency in the Twenty-First Century: The Quest to Define Effective Leadership. *Center for Research on the Education of Students Placed At Risk*. Baltimore, MD.

Vickers, H., Pate, J. L., Brockmeier, L. L., Green, R. B., & Tsemunhu, R. (2014). No Board Left Behind: Perceptions of Local Board Governance Standards by Superintendents and Chairpersons. *International Journal of Educational Leadership Preparation*, 9(2), 47-70.

Walser, N. (2009). *The essential school board book: Better governance in the age of accountability*. Boston, MA: Harvard Education Press. p. xix.

- Wigfield, A., Brynes, J. P., & Eccles, J. S. (2006). Development during early and middle adolescence. In P. Alexander & P. Winne A. (Eds.) *Handbook of educational psychology* (2nd Ed.). New York: Macmillan Publishing.
- Wirt, F. M., & Kirst, M. W. (2001). *The political dynamics of American education*. Berkeley, CA: McCutchan Publishing Corporation.
- Zhao, W., Dweck, C. S., & Mueller, C. (1997). Implicit theories and depression-like responses to failure. *Manuscript submitted for publication*.

APPENDIX A- EMAIL TO PARTICIPANTS

Dear Illinois School Board member:

My name is Brenda Vishanoff and I am a doctoral student at Northern Illinois University in the Department of Leadership, Educational Psychology, and Foundations. I am completing my Ed.D. in Educational Administration. The focus of my doctoral dissertation research has revolved local school board member beliefs and behaviors and their relationship to student academic achievement. As a local school board member, your insights are essential to this field of research. Please take fifteen minutes of your time to answer an anonymous survey about the characteristics you value as a local school board member.

My dissertation director is Dr. Kelly Summers, Assistant Professor of Educational Administration, Department of Leadership, Educational Psychology, and Foundations, Northern Illinois University. You are welcome to contact either her or me with any questions you may have. Dr. Summers can be reached at ksummers@niu.edu. If you are willing to complete this survey, please click on the link below. Thank you in advance for your valuable time.

Or copy and paste the URL below into your internet browser:

Best Regards and thank you,

Brenda Vishanoff

APPENDIX B- REMINDER EMAIL TO PARTICIPANTS

Dear Illinois School Board member,

This is a reminder of the invitation to participate in an anonymous survey about the characteristics you value as a local school board member. This survey will take approximately 15 minutes. As a local school board member, your insights are essential to this field of research.

The focus of my doctoral dissertation research has revolved local school board member beliefs and behaviors and their relationship to student academic achievement. My dissertation director is Dr. Kelly Summers, Assistant Professor of Educational Administration, Department of Leadership, Educational Psychology, and Foundations, Northern Illinois University. You are welcome to contact either her or me with any questions you may have. Dr. Summers can be reached at ksummers@niu.edu.

If you are willing to complete this survey, please click on the link below. Thank you in advance for your valuable time.

Or copy and paste the URL below into your internet browser:

Best Regards and thank you,

Brenda Vishanoff, NIU doctoral student

Department of Leadership, Educational Psychology, and Foundations

APPENDIX C- SURVEY TOOL

Demographic Information from Delegardelle dissertation tool (2006):

Please indicate the school district in which you serve on the local school board (this will be kept completely confidential): _____

Please indicate your gender: _____female _____male

Please indicate the percentage of low-income students in your district:_____

Please indicate the number of years you have served on a local school district school board:_____

Please indicate the type of school district in which you serve as local board member:

_____Elementary

_____High School

_____Community Unit

Please indicate the size of the school district where you reside:

_____less than 1000 students

_____1000-2000 students

_____2000-3000 students

_____3000-4000 students

_____4000-5000 students

_____5000 or more students

Please indicate whether or not you currently have or had children or grandchildren in the district where you live: _____yes _____no

Please indicate your highest level of education:

_____ Did not graduate from high school

_____ High school graduate or GED

_____ Some college/post high school training

_____ Bachelor's Degree

_____ Advanced Degree (MA, Ph.D., Ed.D., JD. MD, DVM, etc.)

Please indicate your age: _____18-34
 _____35-54
 _____55-64
 _____65 or older

Implicit Theory Three-Item Questionnaire (Dweck et al., 1995)

1. You have a certain amount of intelligence and you can't really do much to change it.
2. Your intelligence is something about you that you can't change very much.
3. You can learn new things, but you can't really change your basic intelligence.

Participants indicate their agreement with the above statements on a six-point scale:

- 1- Strongly agree 2 3 4 5 6- Strongly disagree

Survey Tool from Delegardelle dissertation (2006)

The following research questions will be asked of local school board members in this survey:

Please indicate the amount of time your board currently spends on the following tasks:

1. Discussion of ways to improve student achievement in the district.
2. Ensuring time exists for staff to work together to improve student learning.
3. Developing and expressing a belief that the staff can significantly affect student learning.
4. Establishing criteria to guide the staff in choosing initiatives to improve student learning.
5. Evaluating the effectiveness of professional development for improving student learning.
6. Monitoring progress of student learning in relation to improvement goals.
7. Influencing a community-wide belief that all students can and should be expected to learn the basic skills necessary to succeed in their current grade level.
8. Mobilizing the community to support the goals for improving student learning.

9. Ensuring there is strong leadership for improving instruction in ways that result in improved student learning.
10. Establishing and communicating a singular focus for improving student learning (for example: a primary focus on improving reading comprehension).
11. Adopting and monitoring long-range and annual improvement goals to improve student learning.
12. Adopting and monitoring plans for improving student learning.
13. Adopting and monitoring procedures for regularly informing the community about students learning progress.
14. Discussing/ reviewing legal mandates and rules related to improving student learning.

Each question will have the following fully anchored responses from which participants will chose their most accurate answer:

- A significant time
- B some time
- C minimal time
- D none
- E don't know

The following additional questions will be asked on the survey:

Please indicate the importance of the following tasks for local school board members:

15. Discussing improvement in student learning.
16. Ensuring time exists for staff to work together to improve student learning.
17. Developing and expressing a belief that the staff can significantly affect student learning.

18. Establishing criteria to guide the staff in choosing initiatives to improve student learning.
19. Evaluating the effectiveness of professional development for improving student learning.
20. Monitoring progress of student learning in relation to improvement goals.
21. Influencing a community-wide belief that all students can and should be expected to learn the basic skills necessary to succeed in their current grade level.
22. Mobilizing the community to support the goals for improving student learning.
23. Ensuring there is strong leadership for improving instruction in ways that result in improved student learning.
24. Establishing and communicating a singular focus for improving student learning (for example: a primary focus on improving reading comprehension)
25. Adopting and monitoring long-range and annual improvement goals to improve student learning.
26. Adopting and monitoring plans for improving
27. Adopting and monitoring procedures for regularly informing the community about students learning progress.
28. Discussing/ reviewing legal mandates and rules related to improving student learning.

Each question will have the following fully anchored responses from which participants will chose their most accurate answer:

- A very important
- B somewhat important
- C not very important
- D not at all important
- E don't know

Ten School Board Behavior Vignettes based on Iowa Lighthouse Study (Rice et al, 2000)

1. At a June school board meeting, your board is given a comprehensive academic achievement report from the past school year. At the presentation, you understand that 6th, 7th and 8th grade student achievement has not improved according to predicted growth and district targets. In response to this presentation, you are most likely to do the following:
 - a. State your understanding of the high challenge students and teachers encounter in pursuing academic achievement. Encourage teachers to keep doing their individual best in teaching their students even though the challenges faced by students will ultimately heavily predict their academic achievement potential.
 - b. While you celebrate the student achievement growth in the elementary grades and thank the staff for their efforts on behalf of students, you also insist on better results in the next school year. Specifically, you inquire as to how resources, professional development and collaboration could be improved to give students a greater chance to meet their academic potential.

2. Because of a major shift in the state school funding formula and the loss of a few large local businesses, your district needs to cut 1 million dollars to balance the budget for the next fiscal year. As you make painful but necessary cuts to staff positions for the following school year, your response to this situation would most likely be:
 - a. You expect the cuts in staff positions will bring additional challenge to your district. However, you insist it is possible for students to still meet projected

academic growth scores if the district carefully and strategically reconfigures remaining resources to best meet the academic needs of students.

- b. You anticipate this will negatively affect student achievement and will be disheartening to teaching staff. You decide the best way to advocate for the needs of your students and teachers is to write state legislators and hold a town hall with district parents to communicate how recent funding changes will inevitably and negatively impact student achievement.
3. Community members repeatedly ask you why local student achievement levels are lower than the county average. Community members express the negative impact this has on their home value and their concern that low student achievement makes their city a less desirable place for future business development. In response to these community members, you are most likely to state the following:
 - a. Students in your district face overwhelming socio-economic challenges. Placing blame on the school district for poverty levels and a flawed school funding formula is not helpful for students' futures. You believe teachers and school leaders are doing all they can to help students learn but increasing student achievement will continue to be difficult because of unavoidable challenges.
 - b. Students and school district administration certainly have many challenges that impede student growth. While these challenges are disheartening, school board members can best lead by studying academic achievement data and aligning resources, working towards even small gains in student achievement.

4. As you begin a strategic planning process in your school district, you consider several very different models. One model involves an executive team in the planning process for a weekend. Another model incorporates many community stakeholders into the discussion over several months. As you discuss which model to pursue as a board, you are most likely to suggest the following:
 - a. Because you value high levels of involvement and shared decision-making, you would like to see the district pursue an option that involves multiple stakeholders and goal setting together periodically over multiple months. While this would involve time on many people's part to learn background issues in the district and study available research on this topic, it would be worth it. You feel this option affords an opportunity to learn as a board.
 - b. Time is precious at board meetings and it is quite a big commitment to involve so many people over multiple months. You prefer to delegate the decision making for this to the superintendent and executive team of the board, administration and a few community members. Since the superintendent is the sole employee charged with learning, interpreting information, and recommending solutions to problems, you believe it is most efficient to ask the superintendent to lead the executive team in this process.

5. Communication has become an increasingly important concern in your district. The teachers' union representatives have recently made public comment at board meetings complaining about how communication often breaks down in the district. They cite board

decisions and discussions not being well informed or communicated clearly to teachers.

You are most likely to respond in a board discussion on this topic by saying:

- a. You believe it is not the role of the board to know how communication occurs to staff or how teams within the district interact with one another. You assume it is happening because it is a district goal. You ask the superintendent to follow up on this concern.
 - b. You believe it is important for board members to be able to explain and describe specific ways board actions and goals are communicated to staff after board meetings. You ask the superintendent to share this communication plan with you at a future board meeting. In addition, you reflect on whether board members have been regularly hearing from teaching teams and faculty committees to understand their successes and challenges in meeting district goals. If this needs improvement, you suggest enhancing this information for future board table conversations.
6. You have recently begun reflecting on your board's role in establishing a supportive workplace that helps staff succeed in roles. You recall the times your board has recognized staff during the presentation portion of your board meeting or have otherwise celebrated staff accomplishments in town hall meetings or community events. Which of the following would most accurately describe your board's current practice:
- a. As a board, you can cite specific ways you have shown appreciation for staff within the past 6 months. This has not been just at board meetings but also at other district events throughout the year. Your board has articulated a belief that

student achievement and positive district change is happening and will continue to happen. The Board is appreciative of the current staff and district team.

- b. As a board, you have mixed feelings about the success of the teachers in your district and are honestly frustrated with academic achievement and current district leadership. You discreetly suggest looking for higher achieving employees because you believe this would help your district fare much better in meeting student achievement goals.
7. Through a board governance review, you are asked to reflect on your board's current philosophy of district wide and school wide staff development. Which of the following best describes what your response would be?
- a. Board members are able to describe staff development activities in the district. They can also describe the link between teacher training and district goals for students. Board members describe a belief in the importance of staff development activities focused on student needs. Staff development is part of a collective effort to improve student achievement and is tied to student learning needs.
 - b. District leadership crafts staff development based on what teachers think is best and based on what is required for teacher certification. There is on-going staff training and a budget for this, but a comprehensive plan for staff development is ever-changing and not well laid out. Some of the teachers feel these professional development days are not helpful and it would be better to have more student contact time in place of professional development activities.

8. As you fulfill the state requirement for local school boards to review and approve school improvement plans, you discuss as a board how to best accomplish this task. For the coming year, you suggest the following:
 - a. Board members should refer to the superintendent as the primary source of information. Data on student achievement should be received as a report to the board but there is precious time at board meetings and you don't see how a deep discussion of school improvement plans connects to an eventual board decision. You prefer to receive the school improvement plans with a brief overview but do not believe it is the board's role to review them in any detail.
 - b. Board members should ideally hear multiple perspectives on school improvement plans that include not just the superintendent but also the curriculum director, principals and teachers. You argue it is very important to spend time at the board table studying this data. As board members, you should be able to cite at any time several district stats such as overall student achievement, poverty rates and student needs. You choose to review this monthly at board meetings and desire to study, learn, read and listen together before making decisions and evaluating initiatives.

9. During a board meeting, you are asked to reflect on factors that could be contributing to your overall student achievement scores. You know parent involvement is usually a factor in student achievement and you would describe the level of parental involvement in your district as follows:

- a. As a board, you have identified how best to connect with and listen to district parents. Fellow board members can name specific ways the district involves parents and all board members have indicated a desire for more involvement. You desire to make plans to continue to involve even higher numbers of parents in the future.
 - b. You have tried in the past to improve parental involvement but it hasn't really helped. The lack of parent interest in education is a possible factor that hinders student learning in your district. You are somewhat frustrated by the lack of parent involvement but feel this is inevitable given the make-up of the community.
10. While attending a community event, a young family learns you are on the school board and asks you some questions about the district. This family is deciding between enrolling their children in the public schools or choosing a private school for their children's education. They specifically ask you about student achievement scores on the school report card and express concern with what they saw online. Which of the following is most likely to be your response:
- a. You share information about the learning conditions in the schools, specific initiatives to improve education and describe the needs of students. You cite specific goals to improve reading and math and how teachers were working as teams to improve student learning. You mention there is high need among many of the children in the district but the board, administration and teachers together have high expectations for all students.

- b. You suggest this family meets with the superintendent to learn about district goals and district improvement plans. You finish by stating that some students are doing very well academically but other students with greater need cannot be realistically expected to meet the same expectations.