2017

Examination Of Growth Mindset Through The Teacher Evaluation Model

Chrystal Street
Indiana State University

EXAMINATION OF GROWTH MINDSET THROUGH THE TEACHER EVALUATION MODEL

A Dissertation

Presented to

The College of Graduate and Professional Studies

Department of Educational Leadership

Indiana State University

Terre Haute, Indiana

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

---

by

Chrystal Street

December 2017

Keywords: instructional practices, evaluation, professional development, leadership, mindset

VITA

Chrystal Marie Street

EDUCATION

2017-Present	Indiana Principal Leadership Academy, Indianapolis, Indiana Group 5
2017	Indiana State University, Terre Haute, Indiana Ph. D. in Educational Administration
2011	Indiana State University, Terre Haute, Indiana Director of Curriculum and Instruction
2010	Indiana State University, Terre Haute, Indiana Ed. S. in Educational Leadership
1993	Indiana University Southeast, New Albany, Indiana B.S. in Elementary Education

PROFESSIONAL EXPERIENCE

2016-Present	Brownstown Central Community Schools, Brownstown, Indiana Elementary Principal
2014-2016	Medora Community Schools, Medora, Indiana Elementary and Jr./Sr. High Principal
2008-2014	Ivy Tech Community College, Columbus, Indiana Adjunct Professor in School of Education
1999-2014	Crothersville Community Schools, Crothersville, Indiana Teacher, Curriculum Director, Testing Coordinator
1996-1999	ABC Stewart Montessori School, Columbus, Indiana Teacher
1993-1996	Scott County School District 2, Scottsburg, Indiana Title 1 Instructional Aide

COMMITTEE MEMBERS

Committee Chair: Dr. Terry McDaniel, Ph.D

Associate Professor, Educational Leadership

Indiana State University

Committee Member: Dr. Brad Balch, Ph.D.

Professor and Dean Emeritus, Educational Leadership

Indiana State University

Committee Member: Michael Langevin, Ph.D

Adjunct Professor, Educational Leadership

Indiana State University

ABSTRACT

The purpose of this quantitative study was to identify the instructional leadership practices that develop a growth mindset in teachers and to determine if the evaluation model will lead to enhanced pedagogical practices. Schools were separated into schools of affluence and poverty. Schools of affluence had less than a 35% free and reduced lunch status. Schools of poverty were identified as having a free-reduced lunch status of 45% or greater. This study examined research based instructional practices in the areas of curriculum, instruction, and assessment. Other practices that are considered best practices were identified in the areas of professional development and evaluation practices. A link between curriculum, instruction, assessment, professional development, and evaluation and growth mindset were the motivation for this study.

It was important to identify the current practices of principals in the areas of curriculum, instruction, assessment, professional development, and evaluation. Five other questions were then generated in which null hypotheses were developed. Do poverty levels explain a statistically significant difference on the curriculum composite score? Do poverty levels explain a statistically significant difference on the instruction composite score? Do poverty levels explain a statistically significant difference on the assessment composite score? Do the curriculum, instruction, assessment, professional development, and evaluation composite scores explain a statistically significant amount of variance within the mindset composite score for schools of poverty? Do the curriculum, instruction, assessment, professional development,

evaluation composite scores explain a statistically significant amount of variance within the mindset composite score for schools of affluence?

Principals in the states of Indiana, Michigan, Ohio, and Kentucky were asked their perceptions in the areas of curriculum, instruction, assessment, professional development, evaluation and mindset. A 5-point Likert-type agreement scale was used in all areas except instruction and mindset in which participants were asked to choose a level of percentage. Based on the findings, principals report that teachers are using research-based practices in the areas of curriculum, instruction, and assessment. For schools of poverty, instruction and assessment composite scores were predictors for mindset. In schools of affluence, as instruction and professional development composite scores increased, the mindset composite score increased.

The overall indication of the research is that poverty levels have a statistically significant difference on the curriculum composite scores. A continued emphasis from leaders in the area of instruction should greatly impact the effect that teachers have on student performance in the classroom. Further identifying the instructional practices in assessment for schools of poverty, the area of professional development for schools of affluence, and a focus on instruction in all schools will facilitate a growth mindset.

ACKNOWLEDGEMENTS

Over the past two and a half years, my knowledge in the field of education has grown significantly. As a result, I have become even more eager to learn more and reflect on the practices that greatly affect students, teachers, and administrators that will help make me a better educator. There are a number of people that have helped immensely with this project. I would like to thank my committee chair, Dr. Terry McDaniel, who eagerly and willingly accepted the responsibility of guiding and supporting me through the process. In addition, he has been a tremendous professor who has helped broaden by insights in the field of education. Dr. Brad Balch, who was also on the committee, has provided guidance and support, which helped evolve the dissertation into a much better piece of research. The final committee member, Dr. Michael Langevin, has been the driving force for the duration. He pushed me, challenged me, and supported me. In addition, he has changed the way I think as an educator. Each member of the committee has provided something unique and different which is the reason that I was able to finish the dissertation and enjoy the process.

Along the way, I have had a number of colleagues and friends who have encouraged me and I am very grateful for their support. The bulk of my support comes from my family who ultimately made the biggest sacrifices while many evenings were spent researching and writing. To my husband, Brian, I could not imagine where I would be if you did not support and encourage me with everything that I choose to do. You always wonder what I will do next which is the reason why I keep going. Thank you for your support and I love you dearly. To my

children, Corey and Kennedy, I hope that all those hours that were taken away from you by me being on the laptop prove to you that you are capable of reaching any of your dreams if you believe that you can do it and have the persistence to move forward. Along the way, sacrifices are made, but in the end, if you have the love and support of your family and friends, you can do anything. I also love you both with all my heart. Remember that your education is your ticket to wherever you want to go.

LIST OF TABLES

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

"People must be accountable for their work" (Pink, 2009, Chapter 4, para. 63) and there is a huge amount of accountability in the education field, especially since the enactment of No Child Left Behind and Race to the Top. Administrators and teachers have an increased burden to show that students are showing academic achievement and making adequate yearly progress. Standardized testing has been around for many years, but with the implementation of No Child Left Behind signed into law in 2001, the progress of students is now shown through assessments (Yoshida & Strong, 2014).

The single most influential factor in determining how well a child learns is the quality of the classroom teacher (Vandevoort, Amrein-Beardsley, & Berliner, 2004) but in many classrooms across the country, students are not showing signs of growth. Teachers receiving the same rate of effectiveness in the evaluation process is known as the widget effect (Weisberg, Sexton, Mulhern, & Keeling, 2009). Poor performing teachers have been able to remain in the teaching profession because most teachers are rated as good or great (Weisberg et al., 2009). Administrators are now required to receive training in the evaluation process as a result of legislative code developed because of the widget effect. However, the amount of time and money invested in training administrators to be better evaluators is not reversing the widget effect (Weisberg et al., 2009).

Background of the Problem

Administrators do not have the skills and knowledge needed to be instructional leaders which is a result of the preparation programs training with the wrong type of model (Gray, 2009). Administrators were originally trained as managers and not as instructional leaders (Gray, 2009). "Those who support teachers—mentors, coaches, supervisors, and so on—must be able to recognize classroom examples of the different components of practice, interpret that evidence against specific levels of performance, and engage teachers in productive conversations about their practice" (Danielson, 2010, p. 10). Good instructional leadership means giving teachers regular feedback on how they are performing in the classroom (The New Teacher Project, 2012).

The New Teacher Project conducted a study in four states using information gathered from 15,000 teachers and 1,300 administrators (Weisberg et. al. 2009). The authors claimed that teachers were viewed as interchangeable parts, or widgets, in which their performance is rated equally effective among other teachers (Weisberg et al., 2009). This phenomenon is known as the widget effect (Weisberg et al., 2009). The widget effect is described as administrators rating teachers so that there is little difference between evaluation scores (Weisberg et al., 2009). Researchers who conducted the study on the widget effect maintained that professional development for teachers is not sufficient and new teachers do not get the help that they need. Teachers who are rated high on evaluations are not recognized for their contributions and the poor performance does not improve.

The educational policies on effectiveness of classroom teachers have shifted. Former policies on improving teachers' qualities were focused around the qualifications on the teacher rather than on performance in the classroom (Jacobs, 2016). Currently, teachers are required to

show student growth, have multiple observations from school administrators, and survey information from parents, students, and colleagues (Jacobs, 2016). To date in 35 states, teacher performance ratings must be tied to student outcomes (Jacobs, 2016).

Typical evaluations put teachers in categories such as proficient, effective, emerging, and needs improvement. Administrators recognize poor performance but less than 1% of teachers are rated as "unsatisfactory" in teacher evaluations (Mizelle, 2010). The problem with these categories is that there is no common language as to what each one of the terms mean, and there is no guidance on how teachers can improve in those areas (Danielson, 2010). Teachers who are tenured and receive ineffective ratings on evaluations are rarely dismissed from their jobs (Weisberg et al., 2009). Teachers who do an outstanding job in the classroom are often not recognized for their hard work and they cannot be "compensated, promoted, or retained" (Mizelle, 2010, p. 90).

Marzano (2012) conducted a study of 3000 teachers in which he asked them if the measurement or growth of a teacher was the most important in the evaluation. Participants stated that measurement and development were important but more emphasis should be placed on development. According to Marzano, there are three characteristics of an evaluation system that will help teachers improve. The first is the evaluation system must be comprehensive and specific. A comprehensive system will identify all of the elements teachers need that demonstrates academic achievement. Specific characteristics encompass the main behaviors and strategies teachers need to use. The second characteristic that will help teachers improve is to have a developmental scale in the evaluation tool such as a scale or rubric to track individual skill development. Acknowledging and rewarding teacher growth is the third characteristic that

will help teachers improve. Teachers would identify specific elements in which they were not using or beginning and chart progress throughout the year.

According to Marzano, Warrick, and Simms (2014) if the evaluation tool is used as a tool of measurement, a teacher's skill level is determined by a few components. In developing teachers, the evaluation should be comprehensive and specific and with the ability of the teacher to grow in a number of pedagogical strategies. "Acknowledging and supporting growth naturally leads to a school providing job-embedded professional development and providing opportunities for teachers to observe and discuss effective teaching" (Marzano et al., 2014, p. 50).

Taylor and Tyler (2012) contended that the teacher evaluations can serve as "an effective professional development tool" (p. 3629). Evaluations should cause teachers to establish constant goal-setting for areas teachers want to work on, specific professional development supports and coaching, and opportunities to share expertise, as part of recognizing teachers' strengths and needs (Darling-Hammond, 2012, p. 33). Taylor and Tyler (2012) found that teachers are the most productive the years after they are evaluated.

Darling-Hammond (2012) stated that the evaluation process should consist of "formal professional development" with "job-embedded learning opportunities" (p. 33). Performance can be improved by deliberate practice (Pink, 2009). Pink (2009) recommended that in order for individuals to improve, they must be willing to get feedback on a continuing basis.

Researchers with The New Teacher Project found that there is no evidence that the current methods of professional development are helping teachers improve from year to year (The New Teacher Project, 2015). If all teachers are essentially top performing teachers as suggested by information in the widget effect, the professional development that schools offer is not targeted for the individual needs of the educator (Creemers & Kyriakides, 2015). Over 50

percent of teachers in a study claimed that they do not receive continuous professional development ongoing, which is tailored to their needs (The New Teacher Project, 2015). One suggestion from the report is to differentiate professional development based on individual needs of the teacher.

Reporters have conveyed to readers for a number of years that there is a teacher shortage across the nation. A journalist reported in the Indianapolis Star that the state of Indiana issued 4,806 initial practitioner licenses in 2014-2015 and 3,802 licenses in 2013-2014, which is a 21% decrease (Schneider, 2015). Since 2009, there has been a 33% drop in the number of issued initial practitioner's licenses in Indiana (Schneider, 2015). If teachers are not entering the profession to begin with and are not staying in the business, then administrators need to do what they can to retain and develop the ones that stay.

How can schools keep good teachers? The New Teacher Project (2012) circulated another report entitled "Greenhouse Schools," which are institutions "with carefully fostered cultures that help teachers and students reach greater heights" (p. 2). Great teaching is a priority in this type of school. Teachers are observed more frequently and given feedback about their performance (The New Teacher Project, 2012). Greenhouse schools are able to retain more of their top teachers (The New Teacher Project, 2015).

In Pink's (2009) book, *Drive: The Surprising Truth About What Motivates Us,* he described two types of motivation. Motivation 2.0 is based on extrinsic rewards, the "carrots and sticks" approach. He stated, "Rewards, we've seen, can limit the *breadth* of our thinking. But extrinsic motivations—especially tangible, 'if-then' ones—can also reduce the *depth* of our thinking" (Pink, 2009, Chapter 2, para. 69). Motivation 3.0 operates under the assumption that "people *want* to be accountable—and that making sure they have control over their task, their

time, their technique, and their team is the most effective pathway to that destination" (Pink, 2009, Chapter 2, para. 69).

The first law of mastery is that "mastery is a mindset" (Pink, 2009, Chapter 5, para. 32). In an interview with Dana Truby from Scholastic in 2009, Pink stated in order to get higher-level work from individuals, we need to develop autonomy, mastery, and purpose in order to build on motivation (Truby, 2006). "Begin with one, mastery is impossible. Begin with another mindset, mastery is inevitable" (Pink, 2009, Chapter 5, para. 37). Pink (2009) stated, "Human beings have an innate inner drive to be autonomous, self-determined and connected to one another" (Chapter 3, para. 8). Pink said that there are five steps that can be followed over a period of time so that one might become a master. The first step is purposeful practice to improve performance. The second step is to repeat the process a great number of times. Seeking critical feedback on a continual basis is the third step. The fourth step would be to focus on areas of weakness. The last phase is to expect the process to be very tiring mentally and physically and be prepared for the challenge (Pink, 2009).

Statement of the Problem

Evaluations have become automatic for administrators and little time or effort is put into the process (Weisberg et al., 2009). District leaders do not ensure that evaluators receive training so that they can provide feedback that will help a teacher (Weisberg et al., 2009). Weisberg et al. (2009) reported that most administrators evaluate teachers two or less times and less than 60 minutes. Many teachers expect to receive positive feedback from their administrator following an observation (Weisberg et al., 2009).

Marzano (2012) stated that a teacher's skill in the classroom can be decided by a small set of criteria when the evaluation system primarily focuses on measurement of a teacher. "An

evaluation system should identify and measure individual teachers' strengths and weaknesses accurately and consistently, so that teachers get the feedback they need to improve their practice and so that schools can determine how best to allocate resources and provide support" (Weisberg et al., 2009, p. 10).

Derrington and Campbell (2015) reported some findings from a three-year research student in the southeastern states regarding the redesigned teacher evaluation policies (Derrington & Campbell, 2015). They found that in the first two years, principals did not have enough time to learn the requirements, procedures, and rubrics associated with the new evaluation methods (Derrington & Campbell, 2015). Principals had to decide whether to be more visible and show support to teachers or to comply with the time commitments needed to conduct the evaluations to comply with policy (Derrington & Campbell, 2015). Derrington (2014) found in one study that principals were not able to develop strategies for teacher growth based on the criteria in the rubric. Administrators are to serve as instructional leaders and to provide feedback but many of them have not taught in the classroom in the last five years (DeNisco, 2015).

Purpose of the Problem

The purpose of this quantitative study was to identify the current practices of principals in the areas of curriculum, instruction, and assessment that develop a growth mindset in teachers and to determine if the evaluation model would lead to enhanced pedagogical practices. Following the research, a survey was be developed that administrators will give teachers in conjunction with the evaluation system. Information from the survey will help the administrator provide a more focused professional development for teachers, enabling them to grow as educators.

Significance of the Study

This study contributed to the current research in education by examining the current evaluation practices of administrators, in addition to the development of instructional practices. Current research supports the importance of the classroom teacher on the academic achievement of a student. School leaders can use this study as a prognostication to highlight instructional leadership practices that will facilitate a growth mindset in the areas of curriculum, assessment, and instruction.

Research Questions

1. What are the current practices of principals within the areas of curriculum, instruction, assessment, professional development, and evaluation?
2. Is there a statistically significant difference among poverty levels on the curriculum composite score?
3. Is there a statistically significant difference among poverty levels on the instruction composite score?
4. Is there a statistically significant difference among poverty levels on the assessment composite score?
5. Do the curriculum, instruction, assessment, professional development, and evaluation composite scores explain a statistically significant amount of variance within the mindset composite score for schools of poverty?
6. Do the curriculum, instruction, assessment, professional development, and evaluation composite scores explain a statistically significant amount of variance within the mindset composite score for schools of affluence?

Research Design

Empirical research was used in this quantitative study to measure knowledge and gather information based on actual experience in the field of education. A survey and/or questionnaire was developed that was sent to administrators in Indiana public schools who are responsible for the evaluation in their schools (Appendix A). The goal was to gather an overview of the findings from a smaller sample to a larger population.

Theoretical Framework

Adults can be motivated to learn by external factors such as pay or to keep their jobs, or they could be motivated by their love of learning (Merriam, 2001). There are five fundamental components of andragogy (Merriam, 2001) that define adult learners as (a) having an autonomous self-concept and knowing how to guide their own learning, (b) having a number of background experiences that can be utilized for learning, (c) having learning needs that are very similar to shifting social roles, (d) having the ability to apply new knowledge and be problem-centered, and (e) using intrinsic motivation as a means to learn.

Guskey (1980) stated that mastery learning is a philosophical approach with which students can learn material to the point of mastery if provided the right instructional approaches. The application of the mastery theory has resulted in the development of two instructional approaches (Guskey, 1980), which are the teacher/development approach and the curriculum/materials approach. In the teacher/development approach, teachers are trained in the concepts of mastery learning and then create materials for the implementation of the strategies that will be used. With the curriculum materials approach, a group typically consisting of curriculum developers, mastery learning specialists, or writers, will work to create packages of curriculum materials that teachers can modify to fit the mastery learning format.

Assumptions

An assumption was made that participants answered the survey questions honestly. Procedures were put in place to protect confidentiality and anonymity but confidentiality and anonymity cannot be guaranteed. All participants were volunteers and at any time could choose to withdraw from participation with no implications.

Limitations

Bias was not controlled on the responses from the survey instrument nor the ability of the individual to interpret the question. Survey participants were asked to participate willingly and their honesty in answering questions is beyond the control of the researcher. Surveys were sent via email to all administrators in Indiana public schools with an anticipated 50% response rate. Administrators would include those who had the authority to evaluate teachers and the survey instrument had a question in which the administrator would state the evaluative role within the district. Time was a limitation since the window for the survey instrument was only open for a short period.

Delimitations

Delimiting factors included the type of research questions as well as the questions selected for the survey. Delimitations included who participated in the study, which type of school was selected, as well as the geographic region of the selected participants. Participants in the study included principals in K-12 public or charter schools in Indiana, Ohio, Kentucky, and Michigan. The gender or ethnicity of the participants was not taken into account for the purpose of this study.

Definition of Terms

Assessment composite score: For the purpose of this study, the assessment composite score was average of all the practices in the assessment domain of the survey instrument

Composite score: For the purpose of this study, the composite scores will be the average of the curriculum, assessment, and instruction domains of the survey instrument.

Curriculum composite score: For the purpose of this study, the curriculum composite score was the average of all the practices in the curriculum domain of the survey instrument.

Fixed mindset: Fixed mindset is "Believing that your qualities are carved in stone" (Dweck, 2006, p. 6)

Growth mindset: Growth mindset is the "belief that your basic qualities are things you can cultivate through your efforts" (Dweck, 2006, p. 7).

Highly qualified teacher: A teacher who is deemed qualified to teach the subject areas in which the teacher is assigned because the teacher holds the required certification or licensure (IDEA, 2004).

Instruction composite score: For the purpose of this study, the instruction composite score was the average of all the practices in the instruction domain of the survey instrument.

ISTEP+: The assessment used by the state of Indiana that measures a student's achievement in the content areas of English/language arts, mathematics, science and social studies (Indiana Department of Education, 2016)

Schools of affluence: For the purpose of this study, a school with a free and reduced lunch percentage of less than 35% will be considered a school of affluence (as cited in Langevin, 2010).

School of Poverty: For the purpose of this study, any school with a free and reduced lunch percentage of 45% or higher will be considered a school of poverty (Langevin, 2010).

Student achievement: For the purpose of this study, student achievement is the performance on standardized testing.

School: For this study, a school is a public school serving any population of students.

Summary and Organization of the Study

This study is divided into five chapters. The first chapter contains the problem, the statement of the problem, purpose of the study, research questions, null hypotheses, definition of terms, significance of the study, and limitations. The second chapter contains a review of the related literature divided into the categories of accountability, evaluations, best practices, assessment practices, professional development, and mindset. Chapter 3 presents information about the methodology used during the study including the purpose, research questions, null hypotheses, description of the same, data sources, collection procedures for the data, and the method of analysis. Chapter 4 has the findings through the quantitative analyses of the first three chapters. The final chapter contains a summary of the findings, conclusions, implications, and recommendations for further research.

CHAPTER 2

REVIEW OF LITERATURE

The review of the literature is based on eight areas related to education in addition to an area related to mindset and the instructional leadership practices that will facilitate a growth mindset. The main areas of the study were determined by focusing on essential components of the teacher evaluation that impact instructional capacity. The chapter includes the presentation of a theoretical base, the standards movement and accountability, evaluations, instructional leadership practices, curriculum development, research-based instruction, assessment practices, and professional development.

Leaders have a great impact on teacher success (Leithwood, Louis, Anderson, & Walhstrom, 2004). The role of school principal has shifted from someone who dealt mostly with student behavior control and money to someone who is more focused on student outcomes and achievement (Lyons & Algozzine, 2006). In the future, school leaders should have more responsibility determining the type, content, and form of training that teachers will need and how the training will integrate into existing practices (Lyons & Algozzine, 2006).

Lyons and Algozzine (2006) claimed that teachers and teaching are at the core of student achievement and instructional quality (Hattie, 2009; Marzano, 2003). As one component of instructional capacity, the student, should be part of increasing instructional capacity (Cohen & Ball, 1999). The development of instructional capacity in schools has been the result of educators working on the teacher quality or the instructional materials (Cohen & Ball, 1999).

Cohen and Ball (1999) ascertained that instructional capacity was a result of worthwhile and substantial learning.

Standards Movement and Accountability

In the 1950s the American education system was being criticized (Jolly, 2009). When the Soviet Union launched Sputnik, the United States was caught off guard and since education was being attacked, the federal government provided an extraordinary amount of funding to improve education in the country (Jolly, 2009). There was an increased emphasis on math and science (L. Jones, 2009), which encouraged more people to pursue scientific careers (Wissehr, Concannon, & Barrow, 2011) and the National Defense Education Act (NDEA) was passed by Congress in 1958 (Jolly, 2009) to support a variety of science initiatives (Richerme, 2012).

In 1983, The National Commission on Excellence in Education (NCEE) was contracted to write *A Nation at Risk.* The report outlined some serious problems in American education (L. Jones, 2009) and "cited dropping test scores and lagging international competiveness as indicators of poor teaching and inadequate student learning in American schools" (Richerme, 2012, p. 35). After the *A Nation at Risk* report, states delved deeper into teacher certifications requirements as well as implemented new statewide assessments developed from the new accountability initiatives (Richerme, 2012). In 1968, NDEA was amended to include English, reading, and other subjects (Jewett, 1964). Lyndon B. Johnson signed the Elementary and Secondary Education Act (ESEA) of 1965 (McMurrey, 2014). The goal of the ESEA was to give the same educational opportunities for every student and to eliminate the gaps in education and achievement among underprivileged students and those who were more affluent (McMurrey, 2014). The opening remarks of *A Nation at Risk* report were

> All, regardless of race or class or economic status, are entitled to a fair chance and to the tools for developing their individual powers of mind and spirit to the utmost. The promise means that all children by virtue of their own efforts, competently guided, can hope to attain the mature and informed judgement needed to secure gainful employment, and to manage their own lives, thereby serving not only their own interests but also the progress of society itself. (U.S. Department of Education, para. 1, 1983).

Prior to the Common Core Standards, educators in each state were responsible for their own curricula (Zhang & Yin, 2014). Outcomes-based education started in the late 1980s and early 1990s (Conley, 2015) in which students were expected to master the standards. Malone and Nelson (2006) claimed that standards can improve achievement. During the time that President Clinton was in office in the 1990s, the Improving America's Schools Act was designed as a means to organize standards and then use assessments to measure those standards (Darling-Hammond, Wilhoit, & Pittenger, 2014). In the late 1990s, state boards of educations and legislatures put an increased demand on school accountability (L. Jones, 2009).

The reauthorization of the ESEA in the year 2001 became known as No Child Left Behind, which was signed into effect during the George W. Bush administration (McMurrey, 2014). The intention behind No Child Left Behind laws was to make education more equitable for students of all social and ethnic groups with an obligation to provide highly qualified teachers to all students (Darling-Hammond et al., 2014) as well as to raise reading and math scores substantially (McMurrey, 2014). In addition, funding for Title I programs increased (Shanahan, 2014). New accountability requirements, testing, and reporting resulted from No Child Left Behind and new literacy programs were established (Shanahan, 2014). Gordon, Kane, and

Staiger (2006) defined teachers who hold a bachelor's degree and are getting or working to obtain state certification as highly qualified.

As part of No Child Left Behind, schools must now obtain adequate yearly progress and are assigned grades (L. Jones, 2009). Provisions of the No Child Left Behind law dictated that all U.S. students in Grades 3 through 8 be tested in the content areas of math and language arts and high school students would take an assessment in those areas as well (Conley, 2015; Judson, 2012). Thirty-one states assess students for science at three grade levels (Judson, 2012). There were no provisions in No Child Left Behind that held states accountable for science scores even though states should have had standards in place and assessed those standards (Judson, 2012). Since 2002, consequences have been imposed for those schools that have not met annual growth targets for students (Darling-Hammond, et al., 2014).

Between 2009 and 2012, Congress appropriated $5.05 billion dollars for the Race to the Top initiative in the form of competitive grants for state education agencies (Hallgren, et al., 2014). The grant application featured six main areas of focus (Hallgren, et al., 2014). In the teacher evaluation area, there were a number of criteria that needed to be met. First, educators had to create distinct ways to measure the student achievement growth for all students. A rigorous and fair evaluation system had to be created and implemented. Third, a number of rating categories had to be used to differentiate teacher effectiveness that has a major emphasis on student achievement growth. Teacher's contributions had to be considered in the rating categories. Teachers had to be given feedback that was timely and constructive during the annual evaluations. Last, evaluations would be utilized to help administrators make decisions about professional development, compensation, promotion, tenure, and certification. In addition, the removal of ineffective teachers would be based on the information gathered from evaluations.

In 2010, the Common Core State Standards (CCSS) were released in order to provide more consistency in what students should learn (Zhang & Yin, 2014) by ensuring that students had equal access to resources, opportunities, treatment, and success (Liebtag, 2013). The CCSS is not a curriculum and does not list resources that teachers must use (Martin, Hill, & Lawrence, 2014). A section of the CCSS outlines what the standards are and what students should know but does not indicate what teachers should teach (Papola-Ellis, 2014). Standards for reading, writing, listening and speaking are the goals of language literacy for the CCSS (Zhang & Yin, 2014). Students are required to read more complex texts as a result of the CCSS (Shanahan, 2014). Well-constructed assessments that had tasks with real-world relevance were another component of the CCSS initiative (Colwell, 2013). Teachers are no longer required to follow a set pacing guide but should take time to unpack the standards and make informed instructional decisions (Liebtag, 2014). Conley (2015) stated that every state will implement the CCSS in some capacity or even develop a version to fit its own needs.

Some educators oppose the shift to the CCSS (Polikoff, 2014). Zhao (2012), writer of *World Class Learners: Educating Creative and Entrepreneurial Students* wrote "the Common Core State Standards represent the increasing trend of national homogenization of student learning in the world" (p. 27). Other opposition to the CCSS claimed that national homogenization was the increased national control of what children should learn (Zhao, 2012). This should done by identifying core subjects, developing centralized curriculum standards and using high stakes testing to enforce standards of core academic subjects (Zhao, 2012). Polikoff (2014) stated that much opposition to the CCSS was political in nature. President Barack Obama signed the Every Student Succeeds Act (ESSA) into law in December 2015 (ESSA, 2015). In order to guarantee that students and schools are successful, the U.S. Department of Education

(2015) has outlined several provisions in ESSA. For the first time, educators will teach high academic standards that will help students to thrive in college and careers. Important information will be provided to all stakeholders by using statewide assessments that will measure the students' progress toward the high academic standards and more emphasis will be placed on localized assessments. State performance targets and school ratings will be state driven and based on multiple measurements instead of being set by the federal government. Commitments will be made to increase high-quality preschool. Schools that are in the bottom 5% will be identified and educators can expect interventions and support for the state. Schools with high dropout rates can also expect support. Additional funding will be reserved for the lowest performing schools.

In the past, accountability meant policymakers used information gathered from assessments to help make decisions on instructional programs and resources for students (Haladyna, 2006). Haladyna (2006) defined accountability in today's standards as holding someone responsible for what students learn. Ydesen and Andreasen (2014) added that accountability means authorities hold its institutions responsible.

There was an inseparable relationship between school accountability structures and the state (Dorn & Ydesen, 2015). Lawmakers are responsible for developing or forming the possible uses of accountability (Dorn & Ydesen, 2015). Policy makers have gone to extraordinary measures to raise the quality of teaching and learning (Cohen & Bhatt, 2012). Relationships between the state and its institutions can become strained since state, authorities, and politicians have different views than what stakeholders such as institutions, educators, and citizens have. Concerns about school inequality and underperforming schools are the result of these policies with extensive efforts to improve teaching and learning (Cohen & Bhatt, 2012). Cohen and

Bhatt (2012) affirmed that teachers in weak schools need more support in standards, learning, and accountability that result from the policies.

Dorn and Ydesen (2015) reported four repeated characteristics when looking at accountability from a historical perspective of education. The most dominant characteristic was that accountability practices always have elements that are deeply rooted in culture as a ritual of verification. Accountability should not be separated from society at large with connected questions of power, access and management to education, and social selection. Accountability practice contains a clear shape that makes some organizational gaps while closing others. The final characteristic is that strong disciplining effects will emerge as a result of accountability practices.

Some of the first accountability systems in the United States started in the 1960s (Peck, 2014). In 1966, James Coleman and others were commissioned to study the lack of educational opportunities by different religious and ethnic groups. This report became known as the Equality of Educational Opportunity, or the Coleman Report. J. S. Coleman, Campbell, Hobson, McPartland, Mood, and Weinfeld (1966) brought attention to the gaps in achievement and the availability of educational opportunities among white students and those that were minorities or those with a low socio-economic status. The report also documented how standardized tests measure what students learn. Coleman et al. (1966) addressed the achievement that students exhibited as a result of the school that they attended. The authors also found that teachers with a college degree have higher achieving students (Coleman et al., 1966.)

During the 1980s, classroom researchers gathered a plethora of evidence on teaching actions that were associated with student achievement on standardized tests (G. Hall, Smith, & Nowinski, 2005). Darling-Hammond et al. (2014) maintained that even though students have

shown visible gains on state assessments, scores on the National Assessment of Educational Progress (NAEP) and Program for International Student Assessment (PISA) have not shown the same results. The NAEP scores have remained fixed for 8th through 12th graders (Darling-Hammond et al., 2014). On the PISA, U.S. students' scores fell in the areas of math, reading, and science between 2000 and 2012 (Darling-Hammond et al., 2014). Students from other countries continued to outperform students in the United States on the PISA (Darling-Hammond et al., 2014). Noticeable achievement gaps remained for students of all social and ethnic groups (Darling-Hammond et al., 2014).

A test score is the only criteria that is used to assess students in an accountability system that is test-based (Haladyna, 2006). However, student-centered accountability or holistic accountability, focuses on more than test scores. Doug Reeves (2004a) mentioned in his book, *Accountability for Learning: How Teachers and School Leaders Can Take Charge,* the holistic accountability gives educators more specific information about curriculum as well as information on teaching and leadership practices. Student-centered accountability focuses on what individual students are doing as opposed to a widespread mean of classes or schools. Reeves (2004a) also upheld the ideas that test scores are of little value to educators if the true context of the score was not known.

Evaluation

Educators are expected to be evaluation experts as a result of high-stakes consequences (Mann & Smith, 2013). Marzano et al. (2014) stated, "Teacher evaluation is one of the major initiatives of the second decade of the 21st century" (p. 46). If student learning was to improve, teacher evaluations must focus on student achievement, particularly performance evaluations (Piro, Wiemers, & Shutt, 2011).

Administrators have very little training in the evaluation process (Weisberg et al., 2009). Typically, administrators base an evaluation on two or less classroom observations that are less than 60 minutes long (Weisberg et al., 2009). Weisberg et al. (2009) found that even with a great deal of options in which administrators can rate a teacher's effectiveness, most of the teachers are put into the top two categories. The highest is not reserved for the ones who have the highest performance (Weisberg et al., 2009).

Educators are held to high levels of accountability with fewer resources and the interest in teacher effectiveness may continue to be pursued (Slocombe, Miller, & Hite, 2011). Cohen and Bhatt (2012) suggested some clear criteria needs to be outlined that differentiate teachers that are effective and those that are not. Districts that use merit pay proposals may have teachers that do not have the skills needed to boost student performance (Cohen & Bhatt, 2012).

During the evaluation process with staff, administrators may resort to practices that are more evaluative than developmental (Baecher, McCormack, & Kung, 2014). When teachers get feedback after an evaluation, the feedback does not lead to professional development since the process was viewed as administrative control (Baecher et al., 2014). The use of multiple evaluators from inside and outside of the school can eliminate any biases that could emerge from an evaluation (Gordon et al., 2006).

Mann and Smith (2013) maintained the best evaluations focus on several aspects. Evaluations can provide feedback about the progress of a school or student on goals or objectives that have been previously established. Areas are identified that warrant further growth, improvement, or attention. Administrators can identify areas in which students and the school excel with continued commitment for the processes that were the result of positive results.

Administrators can use the information from an evaluation to substantiate if students are growing and learning and if they are not, further action must be pursued.

Marzano (2012) claimed that the evaluation system should have three primary characteristics. The first was that the model needs to be comprehensive and specific. The model should have all of the components that researchers have claimed raise student achievement. Specific teacher behaviors and instructional practices have been highlighted in the model. The second characteristic is that the system has a development scale with a rubric that teachers can use to track their development. The last component of the evaluation model is that teacher growth is recognized and rewarded (Marzano, 2012).

Jacob and Lefgren (2007) suggested that administrators get an idea of a teacher's performance from three sources. The first is through formal and informal observations of the teacher working with students or colleagues. The second was a parent request for a student not to be placed in a particular teacher's classroom. The last source was from student achievement scores.

During the post-observation conference, a time was set-up to discuss the observed lesson (Baecher et al., 2014). The administrator generally dominates the conference since it was a reflection of notes the supervisor took during the observation (Baecher et al., 2014). Giving teachers a say in how the evaluation process works may be a factor in the improvement of classroom instruction (Balch & Koedel, 2014).

Value-added assessments could be used by educators as a means to show how well schools are doing (Cohen & Bhatt, 2012). Value-added modeling (VAM) is a statistical method used in evaluations in which students projected growth scores are determined by comparing his/her test score from the previous year with the score from the current year and then comparing

the growth with others in the same grade level (L. Lee, 2011). A value-added measure shows gains in a student's individual performance as the *value* that school adds to that individual's performance (Cohen & Bhatt, 2012). Using these value-added measures will have less of an effect between a student's scores and his or her socio-economic status because the emphasis was placed on how much the student grows as opposed to a predetermined level of performance (Cohen & Bhatt, 2012).

C. Lee (2014) conducted a study to determine the perceptions of teachers who have been evaluated using the VAM on their effectiveness. The research showed that using the VAM had a negative impact on teacher attitudes and that student scores are not a valid measurement on the effectiveness of teachers. In addition, there are additional circumstances beyond the teacher's control that impact the way he/she teaches. The VAM model does not seem to be the best model for what teachers believe the purpose of education should be. Administrators are not likely to use value-added measures to evaluate teachers and will likely use achievement levels (Jacob & Lefren, 2007). Future student achievement was best predicted through the use of value-added measures of teacher effectiveness (Jacob & Lefgren, 2007).

A VAM may help by incorporating it into an overall "combination" approach (Balch & Koedel, 2014). Teachers in the Boston school districts have 50% of the evaluation score come from 15% of a school-wide component and 35% of the teacher-level component that incorporates value-added (Balch & Koedel, 2014). Students are given a predicted score based on prior testing scores, individual characteristics, and schooling environment (Balch & Koedel, 2014).

There are dramatic differences in teacher quality (Jacob & Lefgren, 2007). Jacob and Lefgren (2007) suggested that administrators can identify those teachers who have the highest or

lowest achievement gains but have a harder time differentiating between teachers that are in the middle. They also emphasized that administrators are not as aware of the achievement of high ability students and more aware of the achievement of the low ability students.

The most effective teachers are not being identified, promoted, compensated, and retained (Weisberg et al., 2009) and they are not being rewarded for being high-performing (Gordon et al., 2006). It is important that teachers who are high-performing in districts with a number of low-income families receive an increase in salary (Gordon et al., 2006).

Evaluation systems have not been used to remove ineffective classroom teachers (Piro et al., 2011). Most teachers receive a satisfactory rating on teacher evaluations with less than 1% being rated at unsatisfactory (Weisberg et al., 2009). "Our schools are indifferent to instructional effectiveness-except when it comes time to remove a teacher" (Weisberg et al., 2009, p. 4). New teachers receive at least one satisfactory rating on their most recent evaluation even though they are least effective the first few years they start teaching (Weisberg et al., 2009).

Teacher tenure continues to be debated among politicians (Leana, 2010). The widget effect is the assumption that classroom effectiveness remains the same from one teacher to another (Weisberg et al., 2009) and that all teachers get tenure and a good evaluation (Rhee, 2013). Advocates of tenure maintain teachers should be able to practice their own professional judgment in the classroom since they are the ones who are in the classroom on a daily basis (Leana, 2010). Those who oppose tenure claimed that bad teachers are protected from being terminated or being remediated (Leana, 2010).

Weisberg et al. (2009) made several suggestions that would help to reverse the widget effect. The evaluation system should differentiate teachers based on their ability to help students achieve. Administrators should be trained and held accountable for consistency and fairness.

The evaluation system should be used for teacher placement, retention, professional development, dismissal, and for monetary rewards. For a teacher who is not effective, a rating of ineffective will be clear and professional development areas will be suggested. Teachers who do not improve will have the opportunity to partake in low-stakes options that allow teachers to leave with a one-day hearing in which the teacher had a fair evaluation process and that the professional development suggestions were followed.

Teacher tenure continues to be awarded to educators who are deemed ineffective in the classroom (Gordon et al., 2006). Forty-one percent of administrators reported that they always granted tenure to a teacher and renewed a probationary teacher (Weisberg, et al., 2009). If teachers are going to be granted tenure after the completion of their second year, they should be informed of their achievement and given the ability to improve (Gordon et al., 2006). Gordon et al. (2006) suggested that administrators who allow low performing teachers to continue working in the district should do two things. First, the principal should get a waiver from the state. Second, the administration should provide public notice of the waiver.

Instructional Leadership Practices

DuFour (2002) stated, "Educators are gradually redefining the role of the principal from instructional leader with a focus on teaching to a leader of a professional community with a focus on learning" (p. 15). Instructional leaders of the past concentrated on input of the learning process when focused on the teaching (DuFour, 2002). Today's instructional leaders shift from "inputs to outcomes" and "intentions to results" (DuFour, 2002, p. 15).

Blase and Blase (1999) found two major components of instructional leadership, which include allowing teachers to talk with one another to promote reflection and encouraging professional growth. Allowing teachers to reflect on their professional practice encompasses: (a)

making suggestions, (b) giving feedback, (c) modeling, (d) using inquiry and getting advice and opinions, and (e) giving praise (Blase & Blase, 1999). Principals fostered professional growth by (a) highlighting the study of teaching and learning, (b) supporting collaboration work with teachers, (c) encouraging coaching with staff, (d) encouraging the restructuring of programs, (e) using the principles of adult learning, growth, and development in each stage of staff development, and (f) using action research for more informed instructional decision making (Blase & Blase, 1999, p. 135).

Curriculum Development

The organization, structure, and format of school remains the same today as it was in the 20th century (Kereluik, Mishra, Fahnoe, & Terry, 2013). There seems to be a discrepancy between what teachers want and what they actually need in order to improve their instruction (Daniels, Pirayoff, & Bessant, 2013). Students achieve more academically if teachers know what practices contribute to classroom learning (Daniels et al., 2013). Individuals who have mutual goals are motivated to collaborate with a shared commitment to help and rely on each other to achieve their goals (Slater, 2004). The collaboration was intended to help teachers increase teaching capacity (Slater, 2004).

Lunenberg (2011) defined curriculum development as the "process of planning, implementing, and evaluating curriculum that ultimately results in a curriculum plan" (p.1). Curriculum is part of the reason for high quality education programs and services (Khan & Law, 2015). Ornstein and Hunkins (2009) suggested that "curriculum development encompasses how a curriculum is planned, implemented and evaluated, as well as what people, processes and procedures are involved" (p. 15).

There seems to be a disconnection between what schools publish as the curriculum and what is actually taught in the classroom (Khan & Law, 2015). A guaranteed and viable curriculum is one that can be taught in the amount of time that is allowed for students and also taught in every classroom (Marzano et al., 2014). Marzano and his colleagues (2014) suggested six major components for a school to have a guaranteed and viable curriculum. The curriculum and the assessments must follow state and local standards. The curriculum must be focused enough so that it can be sufficiently taught in the amount of time that is available for instruction. Every student should have the chance to learn the most essential components of the curriculum. Educators determine clear and measureable goals and the critical needs are addressed so that overall school achievement can be improved. Data are analyzed, interpreted, and used regularly in order to monitor progress toward school improvement goals. Programs and practices are in place so that students can accomplish individual achievement goals and receive interventions when needed.

When teachers are choosing the standards in which to teach, it is important to plan to teach the standards that are the most essential (Schmoker, 2016). According to Marzano, Pickering, and Pollock (2001), there is not enough time in the school year to teach all of the standards so priority should be given to the standards that are deemed as most important. Anisworth (2003) endorsed using power standards, which are the standards and indicators essential for student success. Teachers should give students multiple opportunities to demonstrate mastery of the power standards through assessments that are aligned to the power standards (Ainsworth, 2003).

Power standards should have endurance, leverage, and necessity (Reeves, 2004b). Standards that are enduring are life-long. Teaching standards that have skills and knowledge for

different subject areas provides leverage to the students. Standards that are necessary for the next grade level provide readiness for the subsequent levels of learning (Ainsworth, 2004).

Little research has been conducted on a new teacher's ability to plan instruction. From the little research that has been done, new teachers feel confident about curriculum (Graff, 2011). Some studies show that teachers struggle with curriculum on a more basic or conceptual level (Graff, 2011). "A skill that goes beyond the basics of planning and leads toward becoming a reflective educator is the ability to make decisions based on the systematic collection of evidence" (Graff, 2011, p. 163).

In curriculum design, Tyler believed that teachers should implement curriculum designed by administrators (Läänemets & Kalamees-Ruubel, 2013). Tyler (1949) stated that when educators develop curriculum, they should be able to determine the educational purposes that need to be reached and how the educational purposes will help with the process. In addition, educators need to determine the best way to arrange the experiences and what the plan is to determine if the educational purposes have been reached. These four principles were the focus of developing curriculum for decades and still serve as guiding questions for curriculum development (Läänemets & Kalamees-Ruubel, 2013).

Tyler and Taba's models both have the same same sequence of steps. The first is to identify the objectives, goals, and purpose. Next is to develop activities or experiences that relate to the goals. After the activities and experiences have been organized, it is then time to evaluate the goals (Kelting-Gibson, 2005).

Looking back through the history of curriculum development, the backwards design approach is quite different than what has ever been done before (Kelting-Gibson, 2005). With backwards planning, teacher must determine the essential questions that need to be answered by

the end of the unit (K. Jones, Vernette & Jones, 2009). Emberger (2006) said that tracking curriculum with backwards planning allows teachers to determine if students are reaching the goals that have been set for them.

Wiggins and McTighe developed a curriculum approach in which they utilized some of the same steps previously utilized by their predecessors but they changed the order as cited in Kelting-Gibson, 2005. This framework has become known as understanding by design. After the essential questions are developed, teachers developed the assessments of the understandings and then created lessons and activities to achieve the pre-determined objectives (K. Jones et al., 2009). Graff (2011) contended that the framework developed by McTighe and Wiggins "provides a structure with which to help prospective teachers in a content methods course to begin to transform their content knowledge into pedagogical content knowledge" (p. 155). The McTighe and Wiggins framework was designed to be systematic and flexible for classroom teachers (Graff, 2011).

Graff (2011) stated that enduring understandings "inform the standards" (p. 157) and allow for students to make connections from current classes into future classes as well as into the lives beyond school. McTighe stated that understandings were the "underlying concepts, principles, and processes that are central to a subject or topic" (Richardson, 2008, p. 30). Wiggins and McTighe (2008) acknowledged that high schools should focus on learning for understanding instead of relying mainly on recall and basic skills. "Learning for understanding requires that curriculum and instruction address three different but interrelated academic goals: helping students (1) acquire important information and skills, (2) make meaning of that content, and (3) effectively transfer their learning to new situations both within school and beyond it" (Wiggins & McTighe, 2008, p. 36).

Literacy Standards

The literacy standards are the criteria in which students are considered to be literate in the 21st century (CCSS Initiative, 2010). There are five dimensions in the CCSS literacy standards, which include standards for reading, fundamental reading skills, writing, speaking and language, and listening (Zhang & Yin, 2014). The goal is that all students are college and career ready in literacy by the end of high school (CCSS Initiative, 2010).

In order to meet the demands of literacy standards in the Common Core, literacy standards are now part of social studies, science, and the technical subjects (Coleman & Pimental, 2012). Elementary students are required to do more reading and writing of informational texts (Goatley & Hinchman, 2013). Content area teachers at the secondary level will need to actively participate in the sharing of literacy instruction (Goatley & Hinchman, 2013). Teachers in the areas of science, social studies, and technical subjects have special literacy skills that must be taught (Coleman & Pimental, 2012).

Mathematical Process Standards

The standards for mathematical practice are explained in the Common Core State Standards for Mathematics (CCSSM) as "varieties of expertise that mathematics educators at all levels should seek to develop in their students" (National Governors Association Center for Best Practices & Council of Chief State Schools Officers, 2010, p. 6). Students are expected to be able to be persistent when solving problems. When working problems, students should be able to model as well as reason quantitatively and in abstract terms. Other mathematical practices that students should demonstrate include being able to articulate their reasoning and find mistakes in other's work while being precise. Appropriate tools should be used and the structure

of the problem should be investigated and used. Educators should look for the consistency in which students show regularity in their repeated reasoning.

21st Century Skills

Students must learn the skills necessary to live in a complex, multitasking, and technology-driven world and all students need to have access to the new technological world (Tucker, 2014). The 21st century skills that students will need are more demanding than what students have been exposed to in education (Antonenko, Jahanzad, & Greenwood, 2014). Skills that students will need for the future are really not new, according to Rotherham and Willingham (2009).

During the industrial age, workers were able to specialize in an area and their expertise contributed to the overall physical product (Kivunja, 2015). If changes were needed in the process, a manager initiated the process (Kivunja, 2015). Most stakeholders believe that schools are changing in order to meet the requirements for 21st century learning (Corcoran & Silander, 2009). In the 21st century, workers will need to be able to adjust and take the initiative needed to get the work completed (Kivunja, 2015). In order for workers to be efficient and productive in the future, they will need to adapt by taking the initiative to learn new ideas, concepts, processes, and expectations (Kivunja, 2015).

The CCSS have a heavy emphasis on 21st century skills (Martin, Hill, & Lawrence, 2014). Intertwining content knowledge and 21st skills will be necessary and should not be taught as isolated events (Rotherham & Willingham, 2009). Educators can help students prepare for their future by bringing the world into their classroom and by giving students the opportunity to interact with one another (Tucker, 2014). Educators will need to study how to teach 21st century

skills such as problem solving, collaboration, and self-direction in the same way that they have learned to teach students reading and computation skills (Rotherham & Willingham, 2009).

Students who work with a wide range of people in the 21st century will need to be skilled in collaboration and communication (Kereluik et al., 2013). Tucker (2014) mentioned the collaboration learning theory in which people are required to work with each other to discuss ideas, to gather new knowledge, and to solve problems. As students start to enter the workforce, the need for skilled problem solvers will also continue to grow (Antonenko et al., 2014). A collaborative problem solving model known as the DEEPER model was developed that comprises six problem solving steps that include design, explore, explain, present, evaluate, and reflect (Antonenko et al., 2014).

Rotherham and Willingham (2009) predicted that 21st century skills will eventually be a fad if not implemented with fidelity like other curriculum initiatives. Current strategies are not enough to guarantee that every student will have the skills to be successful in today's society (Darling-Hammond et al., 2014). In order to ensure that all students are proficient in the use of 21st century skills, three components are needed: better curriculum, better teaching, and better assessments, and they must be implemented in unison (Rotherham & Willingham, 2009).

Research-Based Instruction

"A highly effective instructional approach or 'best practice' is one that results in measurable improvements in performance on examinations or standardized tests" (Corcoran & Silander, 2009, p. 166). Cohen and Bhatt (2012) stated that the largest school influence on learning is teaching and teaching quality is a key characteristic of academic achievement. The shift from a focus on teaching to a focus on student learning has deep consequences (DuFour, 2004).

Abdi (2014) stated that the traditional classrooms centered around the teacher have students who are basically unengaged. He even went on to say that most classrooms involve a more traditional method in which direct and one-sided instruction are usually the main ways that teachers teach. A number of strategies can be used to engage the student in learning such as establishing learning targets and relevance, wait time, problem solving/inquiry, graphic organizers, vocabulary, questioning, modeling, and differentiation.

Schmoker (2016) suggested that effective instruction has many important components. The lesson should start with a clear learning objective and the teacher should tell the students how they will be assessed over the material. Lessons are then taught in chunks with focused practice. Checks for understanding should be used for each chunk of the lesson. Teachers should then make adjustments to instruction by reteaching or clarifying parts that students did not get before moving to the next stage of the lesson.

Purpose

Fisher and Frey (2014a) mentioned in their book, *Better Learning Through Structured Teaching,* that when educators create lessons, focused instruction is important. Clearly stating the purpose, or successfully explaining the objective to the students, drives instruction (Fisher & Frey, 2011). Students are able to get a good idea of the relevance of a lesson when purpose is established at the beginning of the lesson (Fisher & Frey, 2014a) in kid-friendly language (Dean, Hubble, Pitler, & Stone, 2012). When establishing purpose, students need to know *what* they are learning for the lesson and *why* they are learning (Fisher & Frey, 2014a). Teachers should explain what the students will be doing with what they have learned (Fisher & Frey, 2011a). Students that know the purpose of the lesson have concrete evidence of what will be expected as evidence in learning through the process of checks for understanding (Fisher & Frey, 2014b).

Student Engagement

Hattie (2009) contended that learners must actively be engaged in learning. "Lessons that fall short of engagement and understanding have little staying power and diminish both students' enthusiasm for learning and students' power as learners" (Tomlinson, 2014, p. 64). Students who do not feel supported, welcome or accepted in the classroom are unlikely to be engaged (Marzano, Pickering, & Heflebower, 2011).

Fisher and Frey (2014a) fine-tuned an instructional framework known as the gradual release of responsibility. The gradual release of responsibility was constructed as a means for students to become more engaged in their learning as well as self-directed learners. In Fisher and Frey's book, *Better Learning Through Structured Teaching* (2014a), the authors described a four-phase process. In the focused instruction phase, "I do it," a clear lesson purpose is established. In the "we do it" component of the guided instruction, purposeful groups have been formed based on formative assessment data. Teachers work with small groups of students that share the same instructional needs. The collaborative learning phase includes the "you do it together" and "you do it independently". During collaborative learning, students can work together and engage in accountable talk and argumentation. In collaborative learning, teachers can clear any misconceptions as well as confirm what the students already seem to know.

Differentiation

Differentiation is a teaching model, an instructional strategy, or collection of strategies focused on how teachers teach and how students learn in a classroom—not what teachers teach or what students learn (Tomlinson, 2014). In order for students to take full advantage of their gains, differentiation is essential in the classroom (Latz, Speirs Neumeister, Adams, & Pierce, 2008). The differentiated classroom uses student readiness, interest, and learning profile to

modify the content, process, and products to meet the needs of the student and propel them forward in their acquisition of learning goals (Tomlinson, 2014). What the teacher will differentiate requires teachers to consider what curricular element needs to be modified to help students learn (Tomlinson, 2014). These are focused on content, process, product, affect, and learning environment (Tomlinson, 2014).

In a differentiated classroom, the focus is on shifting the responsibility for learning to the student and empowering them with the proper tools to do so (Tomlinson, 2014). Students become more independent in their learning when in a differentiated classroom (Tomlinson, 2014). The teachers in classrooms in which differentiation is used successfully adjust the learning tasks to the appropriate levels of challenge (Tomlinson, 2014). Teachers then raise the complexity level as students demonstrate they have a firm grasp and are ready for the next level (Tomlinson, 2014).

Administrators must be supportive to teachers when using differentiation (Latz et al., 2009). Educational Leaders can help support teachers in creating differentiation within their teaching practices by creating a building focused on such principles (Tomlinson, 2014). These connections should be evident in the beliefs and goals being laid out to the staff (Tomlinson, 2014). Well-thought out plans to implement differentiation within buildings and creating time for teachers to collaborate on practices they are implementing in the classroom help to "foster classrooms where excellent teaching is targeted to the variable learning needs of diverse students" (Tomlinson, 2014, p. 172).

Administrators should model the differentiation process within staff development programs (Tomlinson, 2014). Determine what is essential for staff to tackle, assess where teachers are, provide support and feedback as new ideas are implemented, and then create the

next learning opportunity based on teacher needs (Tomlinson, 2014). Peer coaching is one strategy that teachers can use to implement differentiation more effectively (Latz et al., 2009).

Wait Time

Wait time can be used with questioning. Lemov (2010) stated in the book *Teach Like a Champion* that wait time occurs when the teacher intentionally waits a few seconds before asking students for the answer. Fisher and Frey (2014b) stated that wait time was especially effective for ELL students who need to translate the English to their primary language and then their answer back to English.

Walsh and Sattes (2011) claimed that there are many benefits to wait time. First, students are more likely to respond more correctly and completely more often. Second, more students will participate in answering the questions. Third, students will engage in higher levels of thinking. Students are also more likely to answer with evidence. By using wait time students are more likely to come up with more academic questions on their own. The confidence level of the student increases and classroom management problems decrease. Last, the students' level of thinking should match the cognitive level of the classroom if given a sufficient amount of wait time.

Inquiry

Active learning strategies such as problem solving and inquiry should be implemented to engage the learner (Edwards, 2015). The inquiry-based approach shifts the learning from the teacher to the student (Harrison, 2014). When teachers try to implement inquiry-based teaching into their classrooms, there are four obstacles: measuring the quality of inquiry, using discourse for improvements, blending inquiry seamlessly into other content areas, and effectively managing an inquiry classroom (Quigley, Marshall, Deaton, Cook, & Padilla, 2011).

Graphic Organizers

Students can use graphic organizers to organize and structure concepts and information to promote thinking about relationships between concepts (Zollman, 2009, p. 4). Graphic organizers are also known as word maps (Phillips, Foote, & Harper, 2008). Graphic organizers are tools that students can use to visually represent the most important information in a given text (Singleton & Filce, 2015). Verbal and nonverbal cues can be found in graphic organizers, which make the ability to remember and recall easier (Lott & Reed, 2015). Types of graphic organizers include fishbone, concept maps, flowcharts, and matrices (C. Lee & Tan, 2010).

Vocabulary

The CCSS emphasize academic vocabulary (D. Coleman & Pimentel, 2012). The larger a student's vocabulary, the easier it will be for the student to understand a particular text (National Institute of Child Health and Human Development, 2000). Academic vocabulary can be found in all content areas in all types of texts (Coleman & Pimental, 2012).

Sedita (2005) stated that teachers need to spend more time on vocabulary instruction. Vocabulary development was very important in enhancing student learning (Marzano et al., 2014) because students can understand ideas and concepts more quickly than students who have limited vocabularies (Sedita, 2005). Teachers should model good word learning behaviors when teaching vocabulary such as using graphic organizers, clustering, and mnemonics (Phillips et al., 2008).

Marzano and Pickering (2005) suggested a six-step process for vocabulary instruction. The first step was to provide a description, explanation, or example of the new term being studied. Next, the students should be asked to restate the description, explanation, or example in their own words. The third step should allow the students to make a visual representation of the

term. This can be a picture, symbolic, or graphic. Then, allow the students to participate in activities in which the students are allowed to have a focused review of the terms being studied. Students should also be given time to discuss the terms with each other. The last step will allow students to participate in games in which the vocabulary terms are being utilized.

Questioning

Teachers spend a huge chunk of time in class questioning students (Hattie, 2009). Questioning moves the student from being a passive participant to one who participates as an active meaning maker (Walsh & Sattes, 2015). "Questioning is a powerful strategy for building comprehension" (Mantione & Smead, 2003, p. 55).

Walsh and Sattes (2011) stated that there is one purpose for quality questions, "to engage students in interactions with their teachers and peers around the content under study so as to increase student understanding and mastery of curriculum goals" (p. 16). Sometimes teachers get in a hurry to get answers from the students and do not spend enough time developing the questions (Willingham, 2009). "The practices of quality questioning empowers students to engage in challenging forms of discourse that require openness, respect for different points of view, and persistence to develop new understandings (Walsh & Sattes, 2015).

Teachers should model the types of questions they want their students to answer (Fisher & Frey, 2014b). Walsh and Sattes (2015) suggested four approaches that educators can use with quality questioning so that students have meaningful engagement in discussion. First, the questions should trigger and support student thinking and interactions. Next, all participants should be expected to be equally involved. In order to maintain and deepen thinking, student responses should be scaffolded. Last, the culture should support thoughtful and respectful discussion.

Assessment Practices

There has been a long history of using standardized testing in the United States (Koretz, 2002). The major changes in assessment practices will help to ensure that students will be ready for college and careers (Conley, 2015). Assessments should be a combination of state and local initiatives in which the state testing gives an overall view of how the student is doing and the localized assessments show more on how the student is doing to reach certain learning targets (Conley, 2015).

In order for students to show that they understand material at high levels, assessments should be created so that students have the opportunity to demonstrate that new content has truly been mastered (Blackburn, 2008). The key components of assessment are that students have learning outcomes, aligned measurement of student learning that provides a valid foundation for assessment, and re-teaching of learning goals if needed (Haladyna, 2006). Today's standardized tests must be aligned to content standards and instruction must be aligned to content standards and standardized assessments (Haladyna, 2006).

Currently, the only method used to measure student achievement is standardized tests in reading and math (Conley, 2015). Conley (2015) adds that achievement tests mainly are multiple choice items that measure just a few things that students have learned with very little application with real-world problems. The Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC) have been delegated the task of designing assessment that mimic the demand of the CCSS (Darling-Hammond et al., 2014).

With what educators know about student learning and preparing students for their future, current assessment practices that focus on grading and evaluation will need to be changed

(Roscoe, 2013). Emberger (2006) pointed out that principals and teachers have very little training in the area of assessment. Amrein and Berliner (2002) asserted that high stakes testing does not seem to be an indicator of student learning and that testing practices need to be reformed. They also indicated that testing practices can result in unintended negative consequences as a result of testing practices.

Rigor/Depth of Knowledge

Blackburn (2008) described rigor as a process that involves depth and thought, which requires effort. Strong, Silver, and Perini (2001) defined rigor as the "goal of helping students develop the capacity to understand content that is complex, ambiguous, provocative, and personally or emotionally challenging" (p. 7). Teachers should focus on depth of understanding and not how much is covered when determining rigor within the classroom (Blackburn, 2008).

The most well-known questioning taxonomy is the one created by Bloom known as Bloom's taxonomy (Vogler, 2005). The domain used most in the taxonomy is cognitive skill (knowledge), which links to mental skills (Hess, Jones, Carlock, & Walkup, 2009). The cognitive skills that are needed for an individual to complete a task are put into categories and the thinking process needed to answer questions is depicted in Bloom's taxonomy (Hess et al., 2009). The categories were labeled as knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956) and range from simple to complex and from concrete to abstract (Krathwohl, 2002). Lower level skills were considered to be knowledge and comprehension and the higher level skills were application, analysis, synthesis, and evaluation (Kastberg, 2003). Today, educators still use Bloom's taxonomy as a tool to develop and evaluate assessments (Kastberg, 2003).

Originally Bloom's taxonomy focused on one dimension, the cognitive domain (Kastberg, 2003). In 2001, Anderson and Krathwohl included cognitive process *and* knowledge as cited in Kastberg, 2003). The processes in the domains are the verbs and the knowledge that students need are the nouns (Kastberg, 2003). The dimensions changed to remember, understand, apply, analyze, evaluate, and create (Vogler, 2005).

The Depth of Knowledge (DOK) model contains the depth of content understanding and range of a learning activity that are needed for an individual to complete an activity from beginning to end (Hess et al., 2009). Each level of Webb's DOK model contains the complexity of the content and the task (Hess et al., 2009). Educators utilize DOK to determine the level of complexity and depth of state standards and to revise existing standards to higher cognitive levels for instruction (Hess et al., 2009). Cognitive rigor is the combination of Bloom's taxonomy and Webb's DOK (Hess et al., 2009).

Common Formative Assessments

"Schools with the greatest improvements in student achievements consistently use common assessments" (Reeves, 2004, p. 70). Common assessments should not focus on the standards that are easiest to test but should concentrate on those that are course and department priorities (Richardson, 2008). Common formative assessments can be utilized to provide teachers with data prior to waiting on the results of a yearly summative standardized test (Reeves, 2004) and should take place about once every six weeks (Fisher & Frey, 2014b). Reeves (2004) stated, "The use of a common assessment for each major discipline allows teachers to have daily discretion and independence while preserving a schoolwide commitment to equity and consistency of expectations" (p. 71).

Assessment practices should shift away from teachers having a pre-determined set time for students to show what they have learned such as an every Friday quiz or end of unit test. On-going assessment is a better way to determine if students understand the concepts that have been presented (Emberger, 2006). This can be done through formative assessments. Teachers can determine how students are doing relative to classroom learning goals when using formative assessments (Brookhart, 2008).

Checks for Understanding

Teachers should have a plethora of assessment systems in place to determine if modifications, accommodations, and extensions are working for students (Fisher & Frey, 2014b). Fisher and Frey (2014b) suggested that checking for understanding should be part of the formative assessment system and can be used to improve learning. Teachers identify goals, give students feedback, and use the errors and misconceptions that students have made to plan instruction (Fisher & Frey, 2014b).

Hattie and Timperley (2007) recognized three phases of feedback as feed-up, feed-back, and feed-forward. The first is to establish the purpose, objective or learning target(s). Teachers can align their strategies with their learning outcomes if a clear purpose has been established. The feedback phase is responding to student work. Teachers should provide individual responses, which should be directly related to the purpose and performance goal. The final phase, feed-forward, involves using data to plan instruction and intervention.

Checks for understanding were developed as a methodical approach to formative assessment and should happen at the minimum of every 15 minutes (Fisher & Frey, 2014b). Fisher and Frey (2014b) affirmed that when teachers check for understanding frequently,

students learn how to monitor their own understanding. This monitoring helps students to become self-regulated learners (Fisher & Frey, 2014b).

Formative Assessment

Ruiz-Primo and Furtak (2007) address the differences between formal and informal formative assessment. Formal formative assessment happens when the teacher has selected an activity for the students to do so that information can be more accurately gathered. Teachers take time to analyze and interpret the information. Teachers plan for this type of assessment through all phases of lesson planning: at the beginning, throughout the lesson, and at the end. Informal formative assessment was designed to be more spontaneous and can occur during any time when there is student-teacher discourse. "During informal formative assessment, teachers must react on the fly by recognizing whether a student's response is a scientifically accepted idea and then use the information from the response in a way that the general flow of the classroom narrative is not interrupted" (Ruiz-Primo & Furtak, p. 59). Therefore, informal formative assessments are often unrecorded.

Summative Assessments

Educators can keep track of the learning that has occurred by using summative assessments (Kinne, Hasenbank, & Coffey, 2014). Summative assessments are not given as frequently as formative assessments (Van Clay, Soldwedel, & Many, 2011). Teachers can use summative assessment "to generate end-point determinations that answer the question, was the expected learning mastered or not?" (Van Clay et al., 2011, p.17).

Performance Assessments

Performance assessments should be more than just recall; they should focus on application, critical thinking, and transfer (Richardson, 2008). When performance assessments

are used, teachers can utilize "anchors" which serve as a means to show different performance levels (Richardson, 2008). A mixture of constructed response, multiple choice, and performance-based assessments can provide "robust evidence of student understanding" (McTighe & Thomas, 2003, p. 53).

Fisher and Frey (2014) suggested that performance tasks are the core of differentiated instruction because they allow learners with diverse needs "creative ways to show competence" (p. 85). The development of higher order skills should be done through higher-quality assessments that incorporate authentic performance based tasks (Darling-Hammond et al., 2014). Analytical rubrics are the tool that is often used to score performance assessments (Brookhart, 2010).

Self-Assessment

A key element of formative assessment is self-assessment (Andrade & Valtcheva, 2009). Black and Wiliam concluded in their 1998 study that formative assessment was an important component of improving student learning and can raise standards of achievement. Students and teachers benefit from the use of formative assessment. Teachers are able to find out what students are learning and at what pace by using formative assessment (Clay, Soldwedel, & Many, 2011). Teachers can use it as a means to change instructional practices and students can use it to modify study habits (Kinne et al., 2014). Teachers should use short cycles of assessment and then provide students with feedback (Clay, Soldwedel, & Many, 2011).

Rubrics

Using rubrics as a form of formative assessment has benefits for the teacher and for the student (Kinne et al., 2014). Rubrics are used to assess student performance and are not evaluative, but descriptive (Brookhart, 2013). Students who use rubrics as part of self-evaluation

should see an increase in performance (Kinne et al., 2014). Kinne et al. (2014) found that teacher candidates who used rubric criteria for self- and peer assessment saw increases in their teaching performance.

Feedback

One major part of formative assessment was being able to provide feedback to students (Brookhart, 2008). Students should be provided feedback from educators following assessment (Rogier, 2014) and educators should review teaching practices and instructional objectives (Rogier, 2014). Brookhart (2008) commented that good feedback should be part of the classroom assessment in which students understand that learning is something that takes time and needs practice. Good feedback gives the student information about where he/she is in the learning process and what they need to do next (Brookhart, 2008).

Feedback is a consequence of performance and is conceptualized as information provided by an agent regarding aspects of one's performance or understanding (Hattie & Timperley, 2007, p. 81). Hattie and Timperley (2007) reiterated that the purpose of feedback was to reduce the inconsistencies between the current level of understanding or performance of the learner in relation to a goal that has been predetermined. There has been a great deal of research to show that effective feedback leads to greater learning gains with students (Nichol & McFarlane-Dick, 2006). When students and teachers are committed to goals that are appropriate, both parties better understand the criteria for success (Hattie & Timperley, 2007).

Nichols and McFarlane-Dick (2006) said that anything that will help increase a students' ability to self-regulate their own performance would qualify as good feedback practice. They go on to explain seven good feedback principles which are:

> (a) helps clarify what good performance is (goals, criteria, expected standards); (b) facilitates the development of self-assessment (reflection) in learning; (c) delivers high quality information to students about their learning; (d) encourages teacher and peer dialogue around learning; (e) encourages positive motivational beliefs and self-esteem; (f) provides opportunities to close the gap between current and desired performance; (f) provides information to teachers that can be used to help shape teaching" (Nichols & McFarlane-Dick, 2006, p. 206).

Hattie and Temperley (2007) developed a framework for effective feedback. The framework has three questions that will need to be addressed by the student and teacher for feedback to be the most effective. Those questions are: Where am I going? How am I going? Where to next? There are four levels to each question: task, process, self-regulation, and self. The first level, feedback about the task, involves the students knowing how to perform the task. The teacher may ask the learner to supply additional or accurate information. For example, a student may be asked to identify the major events of the Civil War. Students who need help understanding the process of the task could receive feedback from a teacher. The teacher would aid the student in processing the information. A strategy that the teacher might use would be to encourage the student to revisit suggestions that were made earlier in class for a paper. A student who was encouraged to further investigate a task may receive feedback from the teacher at self-regulation level. Telling a student that he/she has all of the information needed to write a thesis of a research paper would be an example of feedback at the self-regulation level. The student who gets affirmation to self would experience feedback at the fourth level.

Timing of feedback is important. Brookhart (2008) revealed in one of her books that "feedback needs to come while students are still mindful of the topic, assignment, or

performance in question" (2008, p. 10-11). Feedback should be given while students are still mindful of the learning goal and when they have reason to be still working on the learning goal (Brookhart, 2008). She goes on to say that if students do not have to revisit a topic, then feedback that should be given about a particular assignment would be pointless. One suggestion is to return tests and assignments promptly (Brookhart, 2008).

Data

With rigorous standards and standardized testing as well as a push from all levels of government, educators must have excellent skills in data based decision-making (Crum, 2009). There seems to be a positive relationship between the use of data to make instructional decisions and academic achievement (Anderson, Leithwood, & Strauss, 2010). Data use can provide important information on how teachers teach (Wayman, Midgley, & Stringfield, 2006). Educators can determine a particular level of mastery during a particular time by looking at achievement date (Venables, 2014).

Many schools are part of the data rich-information poor (DRIP) phenomenon (DuFour, 2004). Teachers are often presented with more data than they know what to do with and have no real direction in how to interpret it (DuFour, 2004). Armstrong and Anthes (2001) found that the most difficult part of using data was finding an appropriate intervention.

Using data can change teachers' perceptions about what is occurring in the classroom (Armstrong & Anthes, 2001). Researchers found that teachers who used data had higher expectations of their at-risk students (Armstrong & Anthes, 2001). Educators who go beyond identifying a problem when looking at data to taking action to problem solve are more likely to improve student learning (Anderson et al., 2010).

A Data Action Model was developed by Venables (2014) as a protocol for teams to review data and implement strategies for areas in which students need extra support. In the first stage of the model, data is gathered and reviewed. This phase takes a great deal of time in the entire process. Exploratory questions are gathered from "I notice" and "I wonder" statements. The next phase is the triangulation of the data in which teachers bring artifacts and other data to answer the exploratory question. Next, learning and instructional gaps are identified so that a target learning goal can be set. A decision has to be made on how the goal is achieved. Strategies and activities are decided with an action plan. The action plan is then implemented and could take four weeks. The final phase of the Data Action Model is to evaluate how well the plan worked and then decide on the next steps. This cyclical process may take two to nine weeks.

McTighe and Thomas (2003) suggested that educators write data summaries. The data summaries should be descriptive (not evaluative) and only be a few sentences. Data summaries were a "helpful way to transform achievement data into useful information" (McTighe & Thomas, 2003, p. 53). Data summaries can provide board members, parents, and community members with information in a format that is easier to understand (McTighe & Thomas, 2003). Another benefit from those who write the summaries would be to understand how well students are doing and have a more vested interest in trying to improve (McTighe & Thomas, 2003).

Reliability and Validity

The consistency of test scores is reliability (Rogier, 2014). If conditions did not change and a student took the same test and received the same results, the assessment would be considered reliable (Rogier, 2014). Variations with the student, scoring, or administration may result in a change in the reliability (Rogier, 2014).

Valid tests measure what they are intended to measure (Rogier, 2014). A test with high reliability may not have high validity (Rogier, 2014). Testing anxiety can increase the validity of test scores (Colwell, 2013). Haladyna (2006) claimed, "validation is the investigative process that appraises validity for test-score interpretation" (p. 34).

Self-Reflection

Teachers often reflect informally (Daniels et al., 2013). Reflective practice requires teachers to look at their teaching through different perspectives (Bard, 2014). Researchers show that teachers exhibit professional growth and they evaluate and reflect upon their teaching practices (Sharp, 2014). Teachers who receive feedback from their superiors have a hard time taking it constructively since there are different roles of authority (Bard, 2014).

Kereluik et al. (2013) developed a new model based on fifteen 21st century knowledge, skills, and learning. They analyzed each framework and found the common components and recommendations that would help them understand the knowledge that would be required of 21st century learners. The author's new model had three major categories, which were foundational knowledge, meta knowledge, and humanistic knowledge. Each of the three broader categories was broken down into smaller subcategories. The category of foundational knowledge included knowledge in content and across disciplines as well as digital literacy. Foundational knowledge is what students need to know. Students who act on the skills learned at the foundational level would have meta-knowledge. Problem solving, critical thinking, communication, collaboration, creativity, and innovation comprise the meta knowledge category. The values that students bring to their knowledge and actions are humanistic. Life/job skills, leadership, cultural competence, and ethical/awareness are the subcategories of humanistic knowledge.

Kereluik et al. (2013) make three suggestions based on the framework they developed. First, domain and disciplinary knowledge will be just as important in the future as they are now. Second, it was more important for students to know when and why to use technology than for them to know that technology is important. Last, teachers will need to help students develop meaningful relationships and interactions since technological advances have brought humans closer but yet farther apart.

Video is a means in which the administrator and teacher can watch and reflect on instruction simultaneously (Baecher et al., 2014). Administrators and teachers who use video may find things that would otherwise go unnoticed during an observation (Baecher et al., 2014). Using video for reflective practice has been accessible to teachers but underutilized in the teaching profession (Baecher et al., 2014).

Baecher et al. (2014) conducted a study in which video was used with a group of teachers in a master's program at a university. Some of the teachers had initial licenses and were teaching and the others were pre-service teachers. Supervisors could watch the instruction live or on video. The post-observation conference (POC) was scheduled for a time after the teacher and the administrator viewed the video. The authors found that the teachers could point out specific evidence of their instruction (Baecher et al., 2014). Using video helped teachers focus on key events during a lesson whereas discussion following a live observation was more about teacher welfare and challenges in instructional practices (Baecher et al., 2014). Enabling teachers the opportunity to view the video before the POC allows them to think over their lesson before discussing it with the supervisor and gives them the opportunity to bring up issues for discussion on their own (Baecher et al., 2014).

Professional Development

"Teachers cannot figure out all by themselves how to get all students to be proficient, and administrators, working alone, do not know how to create a system where all their teachers improve continuously. Indeed, no one ever could solve these problems, working alone" (Wagner, 2008, p. 156-157). There is an entire generation of teachers who are not aware that professional development practices involved a time in which teachers worked with one another as opposed to one in which they were accustomed to that involved a more centralized approach (Haydn, Barton, & Oliver, 2013). Instructional practices and student learning can be improved by professional development (Borko, 2004). Professional learning activities should center on how students learn and the work that they do (Stewart, 2014). "The goal of professional development is to affect school-level change" (Mayotte, Wei, Lamphier, & Doyle, 2013, p. 266). Students achieve more academically if teachers know what practices contribute to classroom learning (Daniels et al., 2013). In order for teachers to help students with conceptual understanding, they must have a deep understanding of the subjects they teach (Borko, 2004).

Borko (2004) acknowledged, "The professional development currently available to teachers is woefully inadequate" (p. 3). Teachers should receive mentoring and support during their first year on the job (Gordon et al., 2006). In a study conducted by Weisberg et al. (2009), 45% of teachers who were provided with identified areas of improvement on an evaluation said that they received useful support (Weisberg et al., 2009).

Administrators rarely consult teachers on how professional development will look (Daniels et al., 2013). Teachers are expected to differentiate classroom instruction for their students but professional development is rarely differentiated for teachers (Daniels et al., 2013). Teacher teams may have a bigger effect on changes in instruction (Corcoran & Silander, 2009).

Tension can occur when discipline boundaries are crossed but embedded professional development can help build the capacity of teachers (Cunnington, Kantrowitz, Harnett, & Hill-Ries, 2014).

Daniels et al. (2013) conducted research with two schools under program improvement in California since students did not meet identified targets in a number of areas. The principals wanted to create an environment in which teachers used reflective discourse to improve student learning. A program called Instruction Cadres (ICs) was developed in which teachers dedicated time to discuss if students were cognitively engaged and if students were learning. During the first part of the project, teachers chose an area in which to focus based on their pedagogical goals. The next part of the process was peer observations in which teachers watched each other in the same day. In the final phase, an informal meeting was conducted with all of the participants. Participants focused their comments around the essential questions. The authors found that teachers were able to problem solve during the debriefing without fear of judgment or evaluation and were more willing to suggest areas of concern for analysis. A major factor that emerged as a result of the ICs was principal support. Principals expected teachers to be honest in the challenges that they faced and as a result, teachers were more open about their struggles and ready to listen to possible solutions.

All teachers should have the chance to have professional development that is engaging, based on current research evidence, aligned with standards, and allows them the opportunity for peer engagement (Fisher & Frey, 2014b). Emberger (2006) advocated the use of working in teams to "establish fair and consistent standards" (p. 40). There are some ways that administrators can seek out the ideas of staff and individualize professional development for

groups. These strategies include communities of practice and professional learning communities (PLCs).

One strategy that schools can use to gain deeper insight into professional practice is the use of peer debriefing (Hail, Hurst, & Camp, 2011). Peer debriefing is a process that involves engaging a disinterested peer to look at situations more clearly (Hail et al., 2011). The disinterested peer is someone who knows a little something about the students or situation but is not directly involved. Principals who incorporate this process into schools may see an overall increase in staff morale and more reflection in instructional practices without the threat of being wrong (Hail et al., 2011).

Communities of practice (CoP) have some of the same features of ICs. Wegner and Wegner-Trayner (2015) defined a community of practice as a group of people who share the same passion or concern who frequently meet together to discuss how they can do it better. Teachers learn the most from participating in a community of practice with colleagues in the same subject area or with those in the same program (Stewart, 2014). A community of practices has three characteristics: the domain, the community, and the practice. People who are identified by the passions or interests that they share are considered the domain (Wegner & Wegner-Trayner, 2015).

Using the CoP is a model that outlines basic steps that teachers can take so that they can collaboratively discuss issues in which they have no solution (Wegner & Wegner-Trayner, 2015). Small groups of teachers ask questions about the data that was presented and discuss the next steps (Wegner & Wegner-Trayner, 2015). Wegner and Wegner-Trayner (2015) maintain that a CoP has three main elements, which are domain, community, and practice. In the domain, the group can be identified by the member's unique interest. The community furthers their

interests in the domain by participating in meaningful discussion and activities in which they can learn from each other. In the practice component, participants develop strategies and resources that are common to the group that evolve into a shared practice.

Some benefits of a community of practice include communication and follow-up. Participants need to be able to express their areas of concern and others need to be able to communicate suggestions and strategies. When items are addressed with the group, follow-up actions will result in members being accountable for actions and strategies (Soljan, Stanghan, & Henry, 2013). Another benefit of a community of practice is multiple viewpoints.

The use of professional learning communities (PLCs) has changed the way educators approach the work of schooling (Clay, Soldwedel, & Many, 2011). DuFour (2004) said there are three big ideas of a PLC. The first is ensuring that all students learn. When administrators and faculty commit to using professional learning communities, they are able to see the discrepancy between ensuring that all students learn and the strategies that are used when students do not learn the content. Schools that use PLCs respond to the lack of student learning in a timely manner by quickly identifying students who need extra support. Educators identify interventions instead of remediation and require students to receive extra help and support. The second big idea is a culture of collaboration. Teachers must work together to analyze their classroom practice and then make the needed improvements. One goal is to make public what was considered private. Focusing on results is the last big idea. Everyone works together to identify the current level of achievement and then goals are created. All staff work together to achieve the goals and then reflection occurs on the evidence of the progress.

Using PLCs is not a short cut to school improvement but a commitment to hard work (DuFour, 2007). PLCs must commit to working over the course of a semester or maybe even

more with a goal of professional improvement (Stewart, 2014). McTighe stated that "a whole department must work together to unpack content, identify learning priorities, identify appropriate assessment evidence, examine results, and identify the most effective ways to identify the problem areas" as cited in Richardson, 2008, p. 32.

Mindset

"Success in today's world requires the ability to access, synthesize, and communicate information; to work collaboratively across differences to solve complex problems; and to create new knowledge through the innovative use of multiple technologies" (Ledward & Hirata, 2011, p. 1). Teachers will need to have a growth mindset so that they can help students make sense of new or unknown information to solve problems (Faulkner & Latham, 2016). With a world that is every changing, an individual with a growth mindset has a tendency to embrace obstacles and persist when things get hard (Dweck, 2006).

Everyone has a belief about his or her own ability or intelligence. Mindset is the belief in how ability or intelligence can be changed (Gutshall, 2014). Dweck (2007) has conducted extensive research on mindset and claimed that parts of intelligence can be developed. She described two mindsets that people might have when they are confronted with a particular situation. These mindsets are the fixed mindset and the growth mindset. In a fixed mindset, intelligence is a stable and uncontrollable factor (Aditomo, 2015). A growth mindset is conducive to a malleable intelligence (Adimoto, 2015).

Dweck (2006) described the fixed mindset as a set of qualities that individuals have that do not change and that a fixed mindset comes with rules. Such rules might include don't make mistakes, always look smart, and don't work hard (Dweck, 2006). Development and change are

difficult for someone with a fixed mindset (Dweck, 2006) and they might be threatened by others' successes (Elish-Piper, 2014).

Believing that all people are equally intelligent or have the same ability to learn new skills does not make for a growth mindset (Aditomo, 2015). A malleable (or growth) mindset or a stable (fixed) mindset can impact the beliefs that educators have on the abilities of their students. If someone has a growth mindset, he/she believes that the ability to learn is not fixed (Elish-Piper, 2014). A growth mindset is "based on the belief that your basic qualities are things you can cultivate through your efforts" (Dweck, 2006, p. 7). The major goal of a growth mindset is to grow (Dweck, 2007) and there is no limit to what can be learned (C. Lee, 2014). In this type of mindset, people have the ability to stretch themselves almost to the point to being able to do the impossible.

Dweck (2006) found two things when studying success and mindset. Those with a growth mindset find success in the effort put forth even if that means they did not come out on top. Learning and improving are just as important as getting the win. Dweck also found that successful people get motivation from their mistakes, which prompts them to do better. Those with a growth mindset continue to love what they are doing even when times become difficult (Dweck, 2006).

Rattan, Good, and Dweck (2012) conducted research to determine if the mindset of teachers might impact their belief on what was attributed to a student's low performance. For example, an educator with more of a fixed mindset might determine that a student's bad score on a test was the result of a student having a lack of math intelligence or not being smart enough in math. Those educators with a fixed mindset "were more likely to comfort students for their presumed low ability and to engage in pedagogical practices that could reduce engagement"

(Rattan et al., 2012, p. 735). Stereotypes allow teachers with the fixed mindset to give up on students before they have even met them (Dweck, 2006).

Kawinkamolroj, Triwaranyu, and Thongthew (2015) recommended that teachers improve their mindset towards instructional approaches. These researchers also conclude that teachers who have a fixed mindset believe that the success of a student was based on their abilities that are unalterable. Teachers will then use the same instructional approaches with all students.

C. Hall (2013) suggested four ways to develop a growth mindset in schools: observation, dialog, feedback, and investment. Getting teachers to talk with one another is a way to cultivate a growth mindset. Teachers should have the opportunity to visit each other's classrooms to participate in peer observations. Supervisors should have conversations with teachers that go beyond dialog about observations and evaluations. There needs to be a trust-building process between the supervisor and the teacher in which the supervisor truly gets to know the teacher. C. Hall suggested giving students the opportunity to give feedback to teachers. This process is tricky, but if done the correct way, teachers can develop a growth mindset if they feel supported by administration if student comments were not favorable. In order to foster a growth mindset in the schools, the administration and teachers must be jointly invested in the endeavor. C. Hall claimed that "when teachers feel understood, valued, and supported, they are willing to be pushed into a stretch zone that enables them to thrive" (2013, p. 87).

The mindsets that people have about themselves as well as how they perceive others determine our expectations and behavior (Brooks, 2004). "People begin to behave in accord with the expectations we have of them and when they do, we are apt to interpret this as a sign that our expectations are accurate" (Brooks, 2004, p. 1). Brooks (2004) claimed certain mindsets that effective educators should portray which will also have an impact on students with

disabilities. His suggestions included addressing the social-emotional needs of students, meeting students' basic needs, eliminating labels that accuse, blame, and hinder education, and being empathetic. He also stated that all students learn differently and teachers should be willing to help students find ways in which they learn the best. Brooks even emphasized that teachers have a lifelong impact on teaching students resilience and should realize that all of their actions and words will have a lasting impact on students.

Growth mindset can be taught to managers (Dweck, 2006). Dweck (2006) described a workshop developed by Heselin and his colleagues that would help to foster a growth mindset in individuals. Participants first viewed a video and read an article on how the brain changes with learning. There was a series of exercises in which participants discussed why it was important to understand that people develop their abilities. They thought about areas in which they had low ability but then had a high ability. Participants wrote to a struggling understudy and gave suggestions on how his or her abilities can be developed. They discussed times in which they have witnessed individuals do things they never thought these people could do and then reflected on why and how the change takes place. Following the workshop, managers noted improvements in performance of the employees, how the employees would be coached, and the quality of their coaching suggestions. It is important to hire managers that exhibit a growth mindset and not to hire the most talented. Managers should have a zest for learning, the ability to give and receive feedback, and the aptitude to face and overcome challenges.

Dweck (2007) stated that "as educators, we want all of the students we teach to profit from our efforts" and "a growth mindset—ours and theirs—helps students to seek learning, to love learning, and to learn effectively" (p. 9.) "What matters are conceptions of teaching, learning, assessment, and teachers having expectations that *all* students can progress, that

achievement for *all* is interchangeable (and not fixed), and that progress for *all* is understood and articulated" (Hattie, 2009, p. 35).

Poverty

"There is a lingering—if unspoken—belief that poor children are just not as intelligent as other children" (Ullucci & Howard, 2015, p. 178). Poverty is a social problem in the United States that continues to grow (Ullucci & Howard, 2015). The achievement gaps between students of poverty and affluence continue to remain (Southworth, 2010).

Jiang, Granja, and Koball (2017) reported that over 21% of children in the United States live in poverty, which equates to one in five. Approximately 43% live in families that are considered low-income. Many of these children have parents who work full-time.

Ullucci and Howard (2015) reported that urban and rural schools have lowered expectations for students with the belief that students with a lower socio-economic do not have the ability to learn. Teachers will then assign tasks and provide experiences that add to the student's current feeling of incompetence. "Immersed in the myriad negative data about children in poverty, we are concerned that teachers may adopt and maintain deficit and pathological thinking about the academic potential of students who come from impoverished backgrounds (Ullucci & Howard, 2015, p. 172).

It is hard to find teachers for students who live in high poverty areas (Ullucci & Howard, 2015). Ullucci and Howard (2015) contended that the teachers who teach in these areas have little experience interacting with students with this type of background. The teachers may believe that the students do not have the skills to be successful learners, they cannot be efficiently and that there is little support in the home (Ullucci & Howard, 2015). Teachers may use the excuse that poverty is one of the reasons why students fail (Ullucci & Howard, 2015).

Anyon (1980) studied five schools over the course of a year to identify how different types of schools were preparing students, which ranged from working class schools to executive elite schools. Her work was the result of other researchers claiming that students who are from schools with a higher poverty level had a more practical curriculum than those who attended the affluent schools, which would lead them to jobs that might be attributed to more social power. The schools did not only differ in resources but also in teaching methods and resources.

Anyon (1980) went on to state that students who attended the working class schools were given work with little relevance. Students spent a great deal of time copying things from the board. Work was graded on whether students could follow the right steps and not on if answers were right or wrong. Teachers in this school would explain one way to do a mathematical practice by repeating the steps to the student. If the student did not understand, the teacher would suggest more practice. Students do not engage in creative writing. Students had very little choice opportunity to make decisions. The teacher carefully guards materials, and there is little sense of community within the classroom.

In the working class schools, student work is about getting the right answer according to Anyon (1980). Students often have to figure out what the directions are asking in order to derive an answer. There is some choice and decision-making within the classroom but lessons are crafted from the textbook. Students might be asked how they do a problem. Creative activities are saved for enrichment. Assignments are not related to the students' interests or feelings. Three students are allowed to be out of the classroom at one time.

Anyon (1980) reflected that students who attended the more affluent schools were asked to express themselves and often through the choices that each one made. There was more collaboration and negotiation with the teacher. Written work involved essays, scientific write-

ups, and research reports. Classroom discussion is important and the opinions of the students are valued. Students do not have to ask permission to leave the classroom and were responsible for getting their own materials even if it meant the materials were from the teacher's desk.

Summary

Education has evolved a great deal over the last several years, there are some things that have consistently remained the same in the field. Students are expected to be able to perform at higher levels and be prepared for careers that at this time do not exist. Many researchers strongly claim that the teacher is the driving force responsible for student achievement and teachers are responsible for having a number of instructional strategies that helps students prepare for a different world after graduation. Principals perform evaluations to ensure that teachers are utilizing the best research based instructional practices and provide the resources that teachers need to develop their pedagogy. School initiatives in mindset could allow for students and teachers to further grow their learning for schools with different types of socio-economic status.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

After a thorough examination of the literature, the researcher has highlighted the areas of curriculum, instruction, assessment, and mindset. Specifics areas mentioned in Chapter Two in the area of curriculum include standards, 21st century skills, literacy, and math process standards. Research based instructional practices include engagement, feedback, vocabulary, graphic organizers, inquiry, and wait time. Rubrics, self-assessments, checks for understanding, and summative/formative assessments are included in the area of assessment. Growth and fixed mindset were further investigated in Chapter 2.

The purpose of the study and the research questions that were part of Chapter 1 are reviewed in Chapter 3. Chapter 3 will also include the null hypothesis, description of the sample, the survey design and the trustworthiness in data collection. Data sources, data collection methods, data tabulation and analysis procedures as well as the method of analysis will encompass the remainder of Chapter 3.

Purpose of the Study

The purpose of this quantitative study was to identify the instructional leadership practices that develop a growth mindset in teachers and to determine if the evaluation model will lead to enhanced pedagogical practices. A survey was developed that administrators gave teachers in conjunction with the evaluation system. Information from the survey will help the

administrator provide a more focused professional development for teachers enabling them to grow as educators.

Research Design Rationale

The type of study that has been selected for this study was a quantitative research approach. Ary, Jacobs, and Sorensen (2010) stated that a quantitative method can consist of "empirical approaches, experimental designs, and often statistical testing" (p. 421) that "strives for testable and confirmable theories that explain phenomena by showing how they are derived from theoretical assumptions" (p. 420). Random sampling is used to generalize findings in a quantitative study (Ary et al., 2010).

Poverty levels are the independepent variables for Questions 2 through 4 and the dependent variables are the composite scores. In Questions 5 and 6, the predictor variables are the composite scores and the criterion variable is mindset. For the purpose of this study the F/R lunch percentage of the school represented the overall school poverty level in which schools will be placed into groups based on quartiles.

Research Questions

The following research questions were used for this particular study:

R1. What are the current practices of principals within the areas of curriculum, instruction, assessment, professional development, and evaluation?

R2. Is there a statistically significant difference among poverty levels on the curriculum composite score?

R3. Is there a statistically significant difference among poverty levels on the instruction composite score?

R4. Is there a statistically significant difference among poverty levels on the assessment composite score?

R5. Do the curriculum, instruction, assessment, professional development, and evaluation composite scores explain a statistically significant amount of variance within the mindset composite score for schools of poverty?

R6. Do the curriculum, instruction, assessment, professional development, evaluation composite scores explain a statistically significant amount of variance within the mindset composite score for schools of affluence?

Null Hypotheses

The following null hypotheses were utilized for the study.

$H_0$1. There is no statistically significant difference among poverty levels on the curriculum composite score.

$H_0$2. There is no statistically significant difference among poverty levels on the instruction composite score.

$H_0$3. There is no statistically significant amount of among poverty levels on the assessment composite score.

$H_0$4. The curriculum, instruction, assessment, evaluation, and professional development composite scores do not explain a statistically significant amount of variance within the mindset composite score for schools of poverty.

$H_0$5. The curriculum, instruction, assessment, evaluation, and professional development composite scores do not explain a statistically significant amount of variance within the mindset composite score for schools of affluence.

Description of the Sample

The sample consisted of principals and who are currently employed as administrators in K-12 public or charter schools. Principals who participate in the survey had at least one year of administrative experience and currently evaluate teachers in the building. Participation in the study is voluntary and they may choose to terminate participation at any time.

Survey Design

There are six steps involved in survey research (Ary et al, 2010). The first step is planning the research questions. The next step is to define the population with a decision on which of the populations will be surveyed. Steps 3e and 4 include determining a sample of the population and then designing the survey instrument. The survey is then conducted. The final step is to process the data and report any findings (Ary et al., 2010).

The survey was comprised of several main sections. The first three sections encompassed the practices that principals use to evaluate teachers in the areas of curriculum, instruction, and assessment. Questions on professional development comprise one portion of the survey. The next section was used to determine if the teacher has a growth mindset as a result of the evaluation process. The last section entailed demographic information to determine whether the administrator is a principal, whether he or she has served as an evaluator, and the number of years experience as an administrator. In addition, principals were asked to determine if their schools were schools of affluence or poverty.

The survey encompassed a total of 42 questions. Appendix A encompasses the survey questions with the link to the research. The actual survey that will be used for this project can be found in Appendix B.

Trustworthiness in Data Collection

Trustworthiness, or dependability, is defined as "the extent to which variation can be tracked or explained" (Ary, Jacobs, & Sorensen, 2010, p. 502). This can be accomplished by conducting an "audit trail" (Ary, Jacobs, & Sorensen, 2010, p. 502), which contains all of the information on every aspect of how the survey was done. Audit trails include information about how and why the study was conducted and careful notes were kept (Ary, et al., 2010).

A focus group was selected to review the survey. The focus group helped determine how participants may interpret the questions and might make suggestions on how the questions could be rephrased (Ary, Jacobs, & Sorensen, 2010). "Changes in such things as phrasing, the amount of information offered, and the choices of answers available to respondents, can influence the outcome of a survey to a greater or lesser degree" (Ary, Jacobs, & Sorensen, 2010, p. 395). The focus group consisted of principals who are members of the Reds II Greensburg Ph. D. cohort from Indiana State University. Feedback was given by the focus group will me to rephrase directions, questions, or answer choices and make the necessary corrections.

Validity was defined by Field (2013) as "whether an instrument actually measures what it sets out to measure" (p. 12). "To be valid, the instrument must first be reliable" (Fields, 2013, p. 13). Wiersma and Jurs (2009) defined reliability as "the consistency of the research and the extent to which studies can be replicated" (p. 9). For each composite score that is formed, a Cronbach's alpha test was used to determine if reliability exists within that section. This type of test is generally used for items that do not have answers that are considered right or wrong (Ary, Jacobs, & Sorensen, 2010). A Cronbach's alpha only requires one administration of the survey (Wiersma & Jurs, 2009). A score of .7 or higher was used as that is the accepted level for

reliability. Each section had a score of .7 or higher, therefore, a composite score was able to be determined in each section.

Data Sources

For this study, email addresses of public school principals were collected from the Departments of Education in Indiana, Kentucky, Ohio, and Michigan. A letter was sent requesting school email addresses for all principals in public or charter schools for grades K-12 (Appendix C). There are three schools in the Brownstown Central Community School corporation. Results from Brownstown Central Community Schools will be excluded from participation since it is my place of employment.

After approval from the Institutional Review Board at Indiana State University and permission from the faculty at Indiana State University, participants received an invitation via email to participate in the research study (Appendix D). Researchers (Ary et al., 2010) suggested that emailing a notification before sending the actual survey to participants could result in people who are more likely to respond. Participants were informed that their participation was voluntary and in no circumstances would individuals try to be identified by name or school. Participants were made aware that they could choose to not be a part of the study at any time during the time that the survey was open. Approximately one week after the initial email was sent to inform participants about the study, the actual survey was sent via email to participants who agreed to participate. All responses have been kept confidential. Information found in the study was organized as a collection of responses and no individual responses were reported out in any of the summary findings.

Random sampling was used to ensure that all of the sample population would "have an equal and independent chance of being selected" (Ary et al., 2010, p. 150). Participants were

invited to participate by email. The email was sent to all participants and contained the link to the survey as well as the instructions on how to complete the survey online. Strachota, Conceição, and Schmidt (2006) claimed that online surveys result in a greater response rate, increased time efficiency, decreased data entry errors, and are less expensive to administer. To generate sufficient power for the inferential test, a sample size of at least 100 is preferred. The survey was set up in Qualtrics, which is an online platform that researchers can use to deliver and get the results of surveys. My email address as well as my university sponsor's (Dr. Terry McDaniel, Associate Professor of Educational Leadership) email address was provided if the participants had any questions, comments, or concerns regarding the survey or analysis of the results. The survey was open for two weeks. At the end of the first week, participants were sent an email thanking them for their participation if they completed the survey and/or a reminder that there was one week remaining to compete the survey instrument.

Data Tabulation and Analysis Procedures

After data was collected, responses were exported from Qualtrics into SPSS version 22. Coding was checked and anything that needed to be coded was coded. All of the information was double checked for accuracy.

Questions in the survey were combined to create a composite score. Within SPSS the questions for each section was tested using a Cronbach's alpha to determine whether reliability exists. The sections were averaged in order to form a composite score to represent each person's responses. These composite scores were then used as the quantitative data necessary to test the null hypotheses.

As long as at least 85% of the questions were answered, they were included in the results. Responding to less than 85% of the questions could impact the findings negatively. With each

section using an average rather than a cumulative score, the absence of one question would not impact the composite score formation. If an individual did not answer the demographic information, that person would ineligible to be included in null hypotheses.

Method of Analysis

The questions in the study were answered by the use of descriptive and inferential statistics. Descriptive statistics were used to summarize, simplify and organize quantitative data (Gravetter & Wallnau, 2013). In inferential statistics, "statistics are measures of the sample and parameters are measures of the population. Inferences are made about the parameters of the statistics" (Wiersma & Jurs, 2009, p. 405).

The first research question was answered descriptively. These descriptors might have included means, standard deviations, frequencies, and percentages. As the differences between groups was analyzed, it was determined that an independent-samples *t* test is one type of test that could be used. Questions 2-4 utilized an independent-samples *t* test because I was looking to find differences on one dependent variable with one independent variable that has two levels.

Research questions 5-6 were analyzed using a simultaneous multiple regression. If there was more than one significant predictor variable that could show a significant amount of variance within the criterion variable and then I would have the capacity to build a prediction equation. If the predictor variable explained a significant amount of variance within the criterion variable, this predictor variable would be included along with any other significant predictor variables in the formation of a prediction equation. The model summary statistics will be interpreted in order to provide insight into the overall strength of the relationship between the linear composite of the predictor variables and the criterion variable as well as to identify the amount of explained variance.

There are a number of assumptions that were linked to the tests that have been selected for this study. For independent sample t-tests, independence, normality, and homogeneity of variance were examined. For multiple regression, independence of the residuals, normality of the residuals, homoscedasticity, linearity, and multicollinearity were investigated. A nonparametric test was used if assumption of normality is violated. Fewer assumptions can be made when using a parametric test (Fields, 2013). The assumption has been violated if the p-value is less than .05. The confidence intervals and significance tests will need to be invalidated if the assumption of independence is violated (Fields, 2009). For multiple regression, each predictor in the coefficients output was examined. The research questions were two-tailed since there is no inclination of which direction. The alpha level of .05 was chosen for each test.

Summary

The intent of this chapter was to acquaint the reader with the methodology and procedures that were used to replicate the study. The purpose of the study and the rationale for the research design were major points that are covered in the first part of the chapter. Careful attention was paid to the development and distribution of a valid and reliable survey instrument. The statistical tests that were used were outlined in the method of analysis.

CHAPTER FOUR

FINDINGS OF THE STUDY

The purpose of this quantitative study was to determine the instructional leadership practices that develop a growth mindset in teachers. The researcher also set to determine if the evaluation model will lead to enhanced pedagogical practices. Factored into the study were variables of the evaluation process and the professional development of the teachers following an evaluation.

Survey Instrument

The questions for the survey were personalized for the areas of curriculum, instruction, and assessment. Questions from each of these areas formed an overall composite score. Principals were also asked to answer questions in the areas of professional development, the evaluation process, and growth mindset in which a composite score was determined for each of those areas. A Cronbach's alpha was used to determine reliability after face and content validity were established.

Statistical Test

For this study, independent sample *t* tests and simultaneous multiple regressions will be used. The assumptions that were checked for the independent sample *t* tests that were checked were independence, normality, and homogeneity of variance were examined. For multiple regression, independence of the residuals, normality of the residuals, homoscedasticity, linearity, and multicollinearity were checked for multiple regression. If the assumption of normality is

violated, a nonparametric test was used. The assumption has been violated if the p-value is less than .05. For multiple regression, each predictor in the coefficients output were examined. The research questions were two-tailed since there is no inclination of which direction. The researcher chose an alpha level of .05 for this project.

Predictor Variables

Poverty levels are the predictor variables for questions two through four and the dependent variables are the composite scores. In questions five and six, the three predictor variables are the curriculum, instruction, and assessment composite scores and the criterion variable is mindset. For the purpose of this study, the free/reduced lunch percentage of the school represented the overall school poverty level in which schools were placed into groups based on quartiles.

Presentation of Study Sample

Surveys were sent to principals who worked in public schools in the states of Indiana, Kentucky, Michigan, and Ohio. Principals were asked to identify their school as a school of affluence (free and reduced lunch status of less than 35%) or a school of poverty (free and reduced lunch status of greater than 45%). Any school that was between 35.1% and 44.99% free and reduced lunch status were excluded from the study. Of the online surveys that were sent, 322 were completed online. Principals were asked to tell whether they were in their first year or if they had more than one year experience evaluating teachers.

Survey Reliability

Chronbach's alpha was used to determine the reliability of the survey. In order for the survey to be reliable, a score of $\alpha = .70$ or greater needed to be obtained for each section. The curriculum composite score consisted of five items with an alpha score of $\alpha = .71$. The

assessment composite score contained seven items with an alpha score of α = .75. Five items in the instruction had a composite score with n alpha score of α = .91. The evaluation composite score comprised five items with an alpha score of α = .76. Five items in the professional development composite score had an alpha score of α = .76. The mindset composite score contained eleven items with an alpha score of α = .94. Since each composite score had an alpha level of α = .70 or greater, the survey can be considered reliable and valid. As a result, no questions or sections needed to be eliminated from the survey.

Descriptive Statistics

The first question for this study was to determine the current practices of principals within the areas of curriculum, instruction, and assessment. Participants were asked a number of questions regarding instructional leadership practices. Questions in the areas of curriculum, assessment, evaluation and professional development utilized a 5-point Likert scale in which participants were asked to rate a level of agreement. For the areas of instruction and mindset, survey respondents were asked to choose a level of percentage in which teachers would fall based on the question.

Demographic information was gathered from the last few questions of the survey to determine if principals were in their first year and if they were responsible for completing teacher evaluations. The entire sample consisted of 322 respondents. Of those 24 (7.5%) were within their first year as a principal. Out of the participants, 297 (92.2%) have been in the principalship for one year or more. Those who completed teacher evaluations were (99.4%) and one principal (.3%) was not responsible for conducting evaluations. One participant selected to not answer the questions regarding being within the first year as an administrator or if evaluating teachers was part of the job requirement.

Out of the 322 respondents, participants were asked to describe the structure of their school building. The majority of principals who took the survey were considered to be working in an elementary building 158 (49.1%). Middle school or a junior high school made up 52 (16.1%) and high school only participants were 58 (18.0%). Some principals associated themselves with a combination of elementary and middle school/junior high 27 (8.4%) and there were some that worked in a combination of middle school/junior high and high school 25 (7.8%). The socio-economic status of these schools mostly encompassed a free and reduced lunch rate of 45.1% and greater. Schools that were identified as having a 45% or greater free/reduced lunch status were 185 (57.5%) and those with a free and reduced lunch status between 35.1% and 44.99% were 61 (18.9%). A number of the principals surveyed reported the free and reduced lunch status as being below 35% 75 (23.3%) . One participant neglected to identify the socio-economic status of the building.

The survey was divided into several sections in which questions were combined to create composite scores for curriculum, instruction, and assessment. In the area of curriculum, Standards, relevance, and purposeful planning were the key components that made up the curriculum composite scores. Principals agreed or strongly agreed 277 (86%) that teachers were actively involved in aligning all curriculum to current standards. When asked if power standards had been prioritized to help provide focus within the curriculum, the most frequent response was agree or strongly agree 244 (75.6%) and 37 (11.4%) did not agree that power standards have been prioritized. Principals agreed or strongly agreed 278 (55.3%) that progress is tracked on each of the power standards to ensure that there is a guaranteed and viable curriculum and 69 (21.4%) disagreed or strongly disagreed. A majority of principals surveyed reported that they were in agreement 257 (79.8%) that 21st century skills were embedded into the curriculum.

When asked if the mathematical process and literacy standards were embedded into the curriculum if applicable, the majority conveyed that they agreed at some level 294 (91.3%).

The topics of engagement, differentiation, and inquiry helped to make up the instruction composite score. In this area, participants were asked to identify a percentage for each area. Over 50% 237 (73.6%) of teachers are reported to demonstrate high levels of active engagement in virtually all lessons. When principals were asked approximately what percentage of teachers demonstrated an exceptional ability to differentiate lessons based on the individual needs of students, answers varied. Of those principals surveyed, about 183 (56.9%) of teachers were able to differentiate lessons and 138 (42.8%) fell below 50%. Principals that were surveyed responded that over 50% [189 (60.8%)] of teachers frequently demonstrate the capacity to promote inquiry within students. When asked about the percentage of classrooms that have practices in place to ensure each lesson has a clear purpose in which students are aware, principals reported that over 80% of teachers identify a clear purpose 158 (49.1%). Over 50% of teachers 235 (72.9%) connect virtually all lessons to something that is relevant to their students.

The composite score in assessment covered a number of topics on rigor, data, and feedback. Principals agreed or strongly agreed 245 (76.1%) that teachers that teach the same content use common assessments in order to gather data to discuss collaboratively, whereas some disagreed 41 (12.8%). Teachers have sufficient time to ensure that their assessments are aligned to the rigor of the standards by exploring proper depth of knowledge levels were in agreement by principals 180 (55.9%). Out of the 320 respondents, 189 (58.7%) were in agreement that teachers created action plans to shape their instruction based on student data. When asked if teachers spent more time and energy providing feedback than grading assessments, principals disagreed 124 (38.5%) and 93 (28.9%) agreed. More principals agreed 187 (58%) than

disagreed 60 (18.7%) that teachers provide quality feedback that informs students where students are in the learning process and what they need to do next. Principals are in agreement 244 (75.7%) that teachers are given time to analyze student data and that teams of teachers have clear protocols in place to analyze data 165 (54.3%).

Principals were asked a number of questions on evaluation practices. Many principals agreed 248 (77%) that the current evaluation model used in school reflects specific behavior and instructional practices that raise student achievement and that teachers were given specific strategies for development following a performance evaluation 254 (78.6%). Many principals agreed 246 (76.4%) the teacher evaluation model has a development scale with a rubric that can be used to track teacher development. Principals reported that they agreed or strongly agreed 235 (72.9%) that teacher growth is recognized through the evaluation model, while others disagreed 42 (13%). A great majority of principals agreed 265 (82.35%) that frequent and regular feedback is given to teachers following walk-throughs or observations.

In the area of professional development, of the 322 principals surveyed, a majority agreed 293 (91%) teachers receive support on areas needed for improvement following an evaluation but fewer were in agreement 141 (43.8%) that teachers received formal professional development following an evaluation. Principals reported that they agreed 185 (57.5%) teachers receive differentiated professional development. When asked if principals had time to develop strategies for teacher growth based on the criteria in the rubric used for teacher evaluations, they agreed at 110 (34.1%) and there were more who disagreed 135 (42%). A number of principals agreed 251 (78%) that teachers were given time to reflect on their professional practice.

Another area of the survey included questions on mindset for the whole population sample. When combining percentages for areas over 71% and above, the subcategory of

teachers having high expectations for all students 217 (67.9%). This was the area with the highest percentage. The area with the lowest percentage of a combination of 71% and above was the area of teachers embedding into the curriculum opportunities for students to take risks 94 (29.4%).

Schools of Poverty

For the purpose of this study, schools of poverty and schools of affluence were compared to the whole sample. Schools of poverty had a greater than 45% free/reduced lunch status and schools of affluence were considered ones in which the free/reduced lunch status was less than 35%. Multiple tables are depicted to show the comparisons for each composite score to either a school of poverty or affluence.

The descriptive statistics for the curriculum composite score ranged from 1.60 to 5.00 with an average score of 3.90 (SD = .59) for the whole sample. Schools of poverty show a range of 2.20 to 5.00 with a mean of 3.91 (SD = .59). The whole school sample and the school of poverty distribution show very similar results for the curriculum composite score. Table 1 depicts the curriculum distributions for schools of poverty. For the whole sample, administrators had the greatest agreement 205 (63.7%) that the math process and literacy standards were embedded into the curriculum if applicable whereas schools of poverty had an overall agreement of 21 (52.5%), which is lower than the whole sample population.

Table 1

Curriculum Distributions for Schools of Poverty

Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Curriculum Alignment	5 (2.7%)	11 (5.9%)	16 (8.6%)	79 (42.7%)	74 (40.0%)
Power Standards	0 (0%)	18 (9.7%)	28 (15.1%)	93 (50.3%)	46 (24.9%)
Guaranteed and Viable Curriculum	4 (2.2%)	35 (18.9%)	41 (22.2%)	22 (55.0%)	13 (32.5%)
21st Century Skills	1 (.5%)	13 (7.0%)	24 (13.0%)	113 (61.1%)	34 (18.4%)
Embedded math process and literacy standards	6 (3.2%)	8 (4.3%)	5 (12.5%)	21 (52.5%)	9 (22.5%)

The descriptive statistics for the instruction composite score ranged from 1.00 to 9.80 with an average score of 6.53 (SD = 1.87) for the whole sample and 1.00 to 9.80 with a mean of 6.40 (SD = 1.88) for the schools of poverty. Table 2 shows the distributions for the instruction composite score. Schools of poverty show the greatest percentages between 81-90% in the area of having a clear purpose that students know 60(32.4%), which is similar to the whole sample 105 (32.6%). Having a clear purpose was the highest percentage for schools of poverty and the whole sample.

Table 2

Instruction Distributions for Schools of Poverty

Question	0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
High levels of engagement	4 (2.2%)	8 (4.3%)	7 (3.8%)	16 (8.6%)	19 (10.3%)	22 (11.9%)	38 (20.5)%	34 (18.4%)	32 (17.3%)	4 (2.2%)
Differentiate lessons	7 (3.8%)	8 (4.3%)	21 (11.4%)	26 (14.1%)	24 (13.0%)	21 (11.4%)	26(14.1%)	36 (19.5%)	15 (8.1%)	1 (.5%)
Promote inquiry	4 (2.2%)	11 (5.9%)	19 (10.3%)	20 (10.8%)	30 (16.2%)	30 (16.2%)	22 (11.9%)	33 (17.8%)	13 (7.0%)	3 (1.6%)
Clear purpose	3 (1.6%)	5 (2.7%)	6 (3.2%)	8 (4.3%)	7 (3.8%)	15 (8.1%)	29 (15.7%)	26 (14.1%)	60(32.4%)	26 (14.1%)
Relevance	3 (1.6%)	11 (5.9%)	9 (4.9%)	15 (8.1%)	18 (9.7%)	19 (10.3%)	30 (16.2%)	42 (22.7%)	30(16.2%)	7 (3.8%)

For schools of poverty, the descriptive statistics for the assessment composite score ranged from 2.14 to 5.29 with an average score of 3.74 (SD = .69) compared to the whole sample, which ranged from 1.57 to 5.29 with a mean of 3.70 (SD = .69). The standard deviation and mean are very similar to each other. The assessment distributions for schools of poverty can be found in Table 3. Administrators are in agreement that teachers are given time to analyze student data in schools of poverty 122 (65.9%) compared to the whole sample 193 (59.9%). This was the highest percentage in the subcategory for assessment.

Table 3

Assessment Distributions for Schools of Poverty

Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Common assessments	3 (1.6%)	11 (11.4%)	18 (9.7%)	79 (42.7%)	64 (34.6%)
Rigor and DOK	6 (3.2%)	44 (23.8%)	24 (13.0%)	88 (47.6%)	23 (12.4%)
Action plans	3 (1.6%)	37 (20.0%)	29 (15.7%)	98 (54%)	17 (9.2%)
Feedback vs. grading	10 (5.4%)	63 (34.1%)	62 (33.5%)	44 (23.8%)	6 (3.2%)
Quality feedback to inform students	3 (1.6%)	34 (18.4%)	42 (22.7%)	96 (51.9%)	10 (5.4%)
Time to analyze student data	3 (1.6%)	12 (6.5%)	17 (9.2%)	122 (65.9%)	30 (16.2%)
Protocols for analyzing data	4 (2.2%)	36 (19.5%)	36 (19.5%)	86 (46.5%)	23 (12.4%)

Table 4 depicts the professional development score for schools of poverty. In the whole sample, the descriptive statistics for the professional development composite score range from 1.00 to 5.00 with an average of 3.46 (SD = .66). Schools of poverty range from 1.00 to 5.00 with a mean of 3.50 (SD = .67). Schools with greater than 45% free/reduced lunch level have the highest percentage in agreement 137 (74.1%) and strongly agree 33 (17.8%) that teachers receive support on areas needed for improvement following an evaluation. The whole sample also had the highest percentage of agreement in the area 240 (74.5%) and strongly agree 53 (16.5%).

Table 4

Professional Development Distributions for Schools of Poverty

Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Support in improvement areas	1 (.5%)	3 (1.6%)	11 (5.9%)	137 (74.1%)	33 (17.8%)
Formal PD	4 (2.2%)	38 (20.5%)	59 (31.9%)	72 (38.9%)	12 (6.5%)
Differentiated	4 (2.2%)	35 (18.9%)	38 (20.5%)	84 (45.5%)	24 (13.0%)
Time to develop strategies for growth	15 (8.1%)	61 (33%)	38 (20.5%)	61 (33%)	10 (5.4%)
Time to reflect on professional practice	4 (2.2%)	23 (12.4%)	11 (5.9%)	123 (66.5%)	24 (13%)

The descriptive statistics for the evaluation composite score ranged from 2.00 to 5.00 with an average score of 3.85 (SD = .61) for the whole sample. Schools of poverty show a range of 2.00 to 5.00 with a mean of 3.88 (SD = .63). This shows a very similar mean and standard deviation for this composite score. Table 5 shows the distributions for schools of poverty. When comparing the whole sample to the schools of poverty, overall percentages were similar. Schools of poverty had the highest agreement 115 (62.2%) in giving specific strategies to teachers for development following a performance evaluation. This area also had the highest agreement for the whole sample 203 (63%). The biggest discrepancy in the data was in the area of frequent and regular feedback that is given to teachers following walk-throughs or observations. The whole sample strongly disagreed 21 (6.5%) whereas schools of poverty had none in this area 0(0%).

Table 5

Evaluation Distributions for Schools of Poverty

Question	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
Behaviors and practices that raise achievement	2 (1.1%)	12 (6.5%)	27 (14.6%)	105 (56.8%)	39 (21.1%)
Strategies for development	1 (.5%)	15 (8.1%)	21 (11.4%)	115 (62.2%)	33 (17.8%)
Development scale with rubric to track development	2 (1.1%)	19 (10.3%)	18 (9.7%)	101 (54.6%)	45 (24.3%)
Teacher growth is recognized	2 (1.1%)	21 (11.4%)	26 (14.1%)	105 (56.8%)	31 (16.8%)
Teachers are given feedback	0 (0%)	16 (8.6%)	18 (9.7%)	113 (61.1%)	38 (20.5%)

For the mindset and instructional leadership practice composite score, the descriptive statistics for the whole sample ranged from 1.91 to 9.91 with a mean of 6.94 (SD = 1.70). For schools of poverty, the range was from 1.91 to 9.64 with an average of 6.75 (SD = 1.77). The administrators that were surveyed had the highest agreement percentage in the 80-90% range 86 (26.7%) in the area in which teachers have expectations for all students for the whole sample and the area of having the percentage of teachers willing to use new ideas and resources in their instruction 81 (25.2%) ranked as second for the entire sample population in the 80-90% range. For schools of poverty, the greatest percentage of agreement was in the area of teachers continually helping students find a way to learn 48 (25.9%) in the 80-90% category. In the

study, it was observed that the second highest percentage of agreement was in the area of teachers having high expectations for all students 46(24.9%) in the 80-90% range. In the 80=90% range, schools of poverty have the least percentage of agreement for teachers in the area of embedding risk taking into the curriculum 11(22.9%). Table 6 shows the mindset and instructional leadership practice distributions for schools of poverty.

Table 6

Mindset Distributions for Schools of Poverty

Question	0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
Emphasis on process over effort	5 (2.7%)	6 (3.2%)	11 (5.9%)	15 (8.1%)	17 (9.2%)	28 (15.1%)	26 (14.1)%	41 (22.2%)	30 (16.2%)	4 (2.2%)
Seek own PD	7 (3.8%)	16 (8.6%)	13 (7.0%)	34 (18.4%)	13 (7.0%)	23 (12.4%)	32 (17.3%)	19 (10.3%)	20 (10.8%)	8 (4.3%)
Teachers are open to change	2 (1.1%)	8 (4.3%)	11 (5.9%)	9 (4.9%)	14 (7.6%)	25 (13.5%)	33 (17.8%)	48 (25.9%)	24 (13.0%)	11 (5.9%)
Help students find a way to learn	2 (1.1%)	3 (1.6%)	10 (5.4%)	10 (5.4%)	16 (8.6%)	19 (10.3%)	27 (14.6%)	38 (28.5%)	48 (25.9%)	12 (6.5%)
Passion for learning while teaching	2 (1.1%)	5 (2.7%)	7 (3.8%)	14 (7.6%)	12 (6.5%)	33 (17.8%)	34 (18.4%)	36 (19.5%)	33 (17.8%)	9 (4.9%)
Use new ideas and resources	0 (0%)	4 (2.2%)	10 (5.4%)	8 (4.3%)	12 (6.5%)	20 (10.8%)	34 (18.4%)	42 (22.7%)	40 (21.6%)	15 (8.1%)
Embed risk taking	3 (1.6%)	8 (4.3%)	16 (8.6%)	23 (12.4%)	19 (10.3%)	32 (17.3%)	30 (16.2%)	29 (15.7%)	22 (11.9%)	2 (1.1%)
Teach intelligence and ability can be developed	8 (4.3%)	11 (5.9%)	17 (9.2%)	6 (3.2%)	24 (13.0%)	18 (9.7%)	26 (14.1%)	36 (19.5%)	31 (16.8%)	8 (4.3%)
High expectations	1 (.5)	5 (2.7%)	8 (4.3%)	8 (4.3%)	8 (4.3%)	19 (10.3%)	17 (9.2%)	41 (22.2%)	46 (24.9%)	32 (17.3%)
Learning attributed to effort over genetics	3 (1.6%)	4 (2.2%)	8(4.3%)	8(4.3%)	14(7.6%)	14(7.6%)	33(17.8%)	42(22.7%)	42(22.7%)	17(9.2%)
Desire to drive student learning success	0 (0%)	4 (2.2%)	9(4.9%)	14(7.6%)	10(5.4%)	19(10.3%)	27(14.6%)	49(26.5%)	42(22.7%)	11(5.9%)

Table 7 shows the descriptive statistics for schools of poverty. An overall comparison of the entire sample and schools of poverty indicate that the means and standard deviations are quite similar. The greatest variance can be seen in the areas of instruction composite score 6.40 (SD =1.88) and mindset 6.75 (SD = 1.77). For schools of poverty, the professional development composite score had the lowest average 3.50 (SD = .67). Compared to the whole sample, the instruction composite score 6.53 (SD = 1.87) and the mindset composite score also had the greatest variance. Just like the schools of poverty, the mean for the whole sample population in the area of professional development was the lowest 3.46 (SD = .66)

.

Table 7

Descriptive Statistics for Schools of Poverty

Question	N	Minimum	Maximum	Mean	Standard Deviation
Curriculum Composite Score	185	2.20	5.00	3.91	.59
Instruction Composite Score	185	1.00	9.80	6.40	1.88
Assessment Composite Score	185	2.14	5.29	3.74	.68
Evaluation Composite Score	185	1.00	5.00	3.88	.63
PD Composite Score	185	1.00	5.00	3.50	.67
Mindset Composite Score	185	1.91	9.64	6.75	1.77

Schools of Affluence

The curriculum distributions for schools of affluence can be found in Table 8. In the whole sample, the descriptive statistics for the curriculum distributions composite score range from 1.60 to 5.00 with an average of 3.90 (SD = .59). Schools of affluence range from 2.60 to 5.00 with a mean of 3.92 (SD = .57). In schools of affluence, principals agreed 46 (61.3%) that 21st century skills are embedded into the curriculum, which is similar to the whole sample 199 (61.8%)]. The greatest disagreement 12(16.0%) for schools of affluence is tracking progress on

each of the power standards to ensure that there is a guaranteed and viable curriculum. This is the most disagreed upon category in the whole sample 55 (17.1%).

Table 8

Curriculum Distributions for Schools of Affluence

Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Curriculum Alignment	1 (1.3%)	1 (1.3%)	5 (6.7%)	38 (50.7%)	30 (40.0%)
Power Standards	1 (1.3%)	7 (9.3%)	10 (13.3%)	37 (49.3%)	20 (26.7%)
Guaranteed and Viable Curriculum	5 (6.7%)	12 (16.0%)	20 (26.7%)	29 (38.7%)	9 (12.0%)
21st Century Skills	0 (0%)	4 (5.3%)	10 (13.3%)	48 (64.0%)	13 (17.3%)
Embedded math process and literacy standards	0 (0%)	2 (2.7%)	5 (6.7%)	46 (61.3%)	22 (29.3%)

The descriptive statistics for the instruction score ranged from 1.00 to 9.00 with an average score of 6.53 (SD = 1.87) for the whole sample. This composite score had the greatest range compared to any of the other areas for the entire sample population. Schools of affluence show a range of 2.40 to 9.60 with a mean of 6.99 (SD = 1.68). Table 9 depicts the instruction distributions for schools of affluence. For the whole sample, administrators surveyed reported that over 71% 158(63.4%)of teachers have practices in place to ensure that each lesson has a clear purpose in which students are aware. Schools of affluence have similar findings 50(66.6%).

Table 9

Instruction Distributions for Schools of Affluence

Question	0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
High levels of engagement	0 (0%)	3(4.0%)	0 (0%)	1 (1.3%)	8 (10.7%)	9 (12.0%)	14 (18.7%)	21 (28.0%)	12 (16.0%)	7 (9.3%)
Differentiate lessons	0 (0%)	3(4.0%)	11 (14.7%)	6 (8.0%)	5 (6.7%)	12 (16.0%)	12 (16.0%)	14 (18.7%)	8 (10.7%)	3 (4.0%)
Promote inquiry	3 (4.0%)	1 (1.3%)	5 (6.7%)	4 (5.3%)	10 (13.3%)	12 (16.0%)	17 (22.7%)	14 (18.7%)	7 (9.3%)	2 (2.7%)
Clear purpose	0 (0%)	1 (1.3%)	1 (1.3%)	3 (4.0%)	4 (5.3%)	8 (10.7%)	8 (10.7%)	9 (12.0%)	25 (33.3%)	16(21.3%)
Relevance	1 (1.3%)	2 (2.7%)	2 (2.7%)	1 (1.3%)	8 (10.7%)	8 (10.7%)	14 (18.7%)	16 (21.3%)	18 (24.0%)	5 (6.7%)

The descriptive statistics for the assessment composite score ranged from 1.57 to 5.29 with an average score of 3.70 (SD = .69) for the whole sample. Schools of affluence show a range of 2.14 to 5.29 with a mean of 3.78 (SD = .67). This shows a very similar mean and standard deviation for this composite score. The distributions for schools of affluence can be seen in Table 10. Principals in schools of affluence agreed 45 (60%) that teachers provide quality feedback to students to let them know where they are in the learning process. For the whole sample, principals had a slightly lower level of agreement 173 (53.7%). Principals in schools with a poverty level of less than 35% disagreed that teachers have sufficient time to align assessments to the rigor of the standards by exploring the proper depth of knowledge 17 (22.7%). They also disagreed that teachers spend more time and energy providing feedback than grading assessments 18 (24%). The whole population sample shows similar disagreements. Principals disagreed that there was not enough time to align assessments to rigor 79 (24.5%) and that teachers spend more time grading than providing feedback 108 (33.5%).

Table 10

Assessment Distributions for Schools of Affluence

Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Common assessments	1 (1.3%)	7 (9.3%)	8 (10.7%)	37 (49.3%)	22 (29.3%)
Rigor and DOK	3 (4.0%)	17 (22.7%)	15 (20.0%)	32 (42.7%)	8 (10.7%)
Action plans	1 (1.3%)	8 (10.7%)	20 (26.7%)	37 (49.3%)	8 (10.7%)
Feedback vs. grading	2 (2.7%)	18 (24.0%)	27 (36.0%)	24 (32.0%)	4 (5.3%)
Quality feedback to inform students	1 (1.3%)	9 (12.0%)	17 (22.7%)	45 (60.0%)	3 (4.0%)
Time to analyze student data	1 (1.3%)	9 (12.0%)	13 (17.3%)	39 (52.0%)	13 (17.3%)
Protocols for analyzing data	1 (1.3%)	14 (18.7%)	19 (25.3%)	29 (38.7%)	12 (16.0%)

The descriptive statistics for the professional development composite score ranged from 1.00 to 5.00 with an average score of 3.46 (SD = .66) for the whole sample. Schools of affluence indicate a range of 2.00 to 5.00 with a mean of 3.40 (SD = .61). Table 11 shows the professional development distributions for schools of poverty. Principals from the whole sample population neither agreed nor disagreed 96 (29.8%) that teachers receive formal professional development following an evaluation. The administrators from the school of affluence reported similar results 21 (28.0%). Schools of affluence showed the strongest agreement in the area of providing

support to teachers on areas needed for improvement after an evaluation. The whole school population had almost identical results 240 (74.5%).

Table 11

Professional Development Distributions for Schools of Affluence

Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Support in improvement areas	0 (0%)	2 (2.7%)	5 (6.7%)	56 (74.7%)	12 (16.0%
Formal PD	2 (2.7%)	23 (30.7%)	21 (28.0%)	26 (34.7%)	3 (4.0%)
Differentiated	1 (1.3%)	16 (21.3%)	17 (22.7%)	33 (44.0%)	8 (10.7%)
Time to develop strategies for growth	4 (4.0%)	29 (38.7%)	23 (30.7%)	18 (24.0%)	1 (1.3%)
Time to reflect on professional practice	0 (0%)	10 (13.3%)	10 (13.3%)	49 (65.3%)	6 (8.0%)

For schools of affluence, the descriptive statistics for the evaluation composite score ranged from 2.40 to 5.00 with an average score of 3.76 (SD = .67) compared to the whole sample, which ranged from 2.00 to 5.00 with a mean of 3.85 (SD = .61). The evaluation distributions for schools of affluence can be found in Table 12. Administrators are in agreement that teachers are given frequent and regular feedback following walk-throughs or observations 56 (74.7%) and very strongly agree 12 (16.0%). The whole sample is a bit lower for the two categories with 200 (62.1%) agreeing and 65 (20.2%) disagreeing. Principals are in agreement 203 (63%) that specific strategies to teachers for development following a performance evaluation for the entire sample. Schools of affluence show similar agreement 5(66.7%).

Table 12

Evaluation Distributions for Schools of Affluence

Question	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
Behaviors and practices that raise achievement	1 (1.3%)	9 (12.0%)	9 (12.0%)	41 (54.7%)	15 (20.0%)
Strategies for development	0 (0%)	6 (8.0%)	12 (16.0%)	50 (66.7%)	7 (9.3%)
Development scale with rubric to track development	2 (2.7%)	15 (20.0%)	10 (13.3%)	40 (53.3%)	8 (10.7%)
Teacher growth is recognized	0 (0%)	10 (13.3%)	13 (17.3%)	41 (54.7%)	11 (14.7%)
Teachers are given feedback	0 (0%)	2 (2.7%)	5 (6.7%)	56 (74.7%)	12 (16.0%)

Table 13 illustrates the mindset and instructional leadership distributions for schools of affluence. The descriptive statistics for the mindset composite score ranged from 1.91 to 9.91 with an average score of 6.94 (SD = 1.70) for the whole sample. For schools of affluence, the range was from 4.09 to 9.82 with a mean of 7.45 (SD = 1.48). Schools of affluence had a smaller range than the whole sample.

Administrators responded that over 71% of their teachers 217 (67.9%) have high expectations for all students for the whole sample. The percentage was lower for schools of affluence 44 (58.6%). The highest percentage for schools of affluence was in the 81-90% category. Two subcategories fell in this range which were that teachers are willing to use new

ideas and resources in their instruction 23 (30.7%) and learning is attributed to effort instead of family genetics 23 (30.7%). Teachers having high expectations for all students was the subcategory that showed the greatest percentage for the sample population 86 (26.9%).

Table 13

Mindset Distributions for Schools of Affluence

Question	0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
Emphasis on process over effort	2 (2.7%)	3 (4.0%)	3 (4.0%)	5 (6.7%)	7 (9.3%)	5 (6.7%)	12 (1.0%)	19 (25.3%)	11 (14.7%)	8 (10.7%)
Seek own PD	2 (2.%0	1 (1.3%)	7 (9.3%)	8 (10.7%)	8 (10.7%)	8 (10.7%)	17 (22.7%)	15 (20.0%)	7 (9.3%)	2 (2.7%)
Teachers are open to change	0 (0%)	0 (0%)	3 (4.0%)	2 (2.7%)	6 (8.0%)	5 (6.7%)	16 (21.3%)	17 (22.7%)	19 (25.3%)	7 (9.3%)
Help students find a way to learn	0 (0%)	0 (0%)	4 (5.3%)	3 (4.0%)	3 (4.0%)	3 (4.0%)	10 (13.3%)	22 (29.3%)	17 (22.7%)	1 3(17.3%)
Passion for learning while teaching	0 (0%)	0 (0%)	2 (2.7%)	2 (2.7%)	4 (5.3%)	10 (13.3%)	16 (21.3%)	18 (24.0%)	13 (17.3%)	10 (13.3%)
Use new ideas and resources	0 (0%)	0 (0%)	1 (1.3%)	2 (2.7%)	3 (4.0%)	8 (10.7%)	14 (18.7%)	11 (14.7%)	23 (30.7%)	13 (17.3%)
Embed risk taking	1 (1.3%)	3 (4.0%)	3 (4.0%)	9 (12.0%)	6 (8.0%)	8 (10.7%)	16 (21.3%)	17 (22.7%)	8 (10.7%)	4 (5.3%)
Teach intelligence and ability can be developed	2 (2.7%)	4 (5.3%)	3 (4.0%)	2 (2.7%)	9 (12.0%)	7 (9.3%)	14 (18.7%)	15 (20.0%)	10 (13.3%)	9 (12.0%)
High expectations	0 (0%)	0 (0%)	0 (0%)	1 (1.3%)	3 (4.0%)	2 (2.7%)	7 (9.3%)	17 (22.7%)	22 (29.3%)	22 (29.3%)
Learning attributed to effort over genetics	0 (0%)	0 (0%)	2 (2.7%)	2 (2.7%)	2 (2.7%)	3 (4.0%)	14 (18.7%)	14 (18.7%)	23 (30.7%)	15 (20.0%)
Desire to drive student learning success	0 (0%)	0 (0%)	2 (2.7%)	3 (4.0%)	3 (4.0%)	4 (5.3%)	15 (20.0%)	12 (16.0%)	22 (29.3%)	14 (18.7%)

Schools of affluence have the greatest variance in the instruction composite score 3.92 (SD = .57) and in the mindset composite score 7.45 (SD = 1.48). These were the two areas in which the whole sample and schools of affluence showed the greatest amount of variance. Table 14 depicts the descriptive statistics for schools of affluence.

Table 14

Descriptive Statistics for Schools of Affluence

Question	N	Minimum	Maximum	Mean	Standard Deviation
Curriculum Composite Score	75	2.60	5.00	3.92	.57
Instruction Composite Score	75	2.40	9.60	6.99	1.68
Assessment Composite Score	75	2.14	5.29	3.78	.67
Evaluation Composite Score	75	2.40	5.00	3.76	.58
PD Composite Score	75	2.00	5.00	3.40	.61
Mindset Composite Score	75	4.09	9.82	7.45	1.48

Each composite score is represented in Table 15 to show comparisons between the whole sample population, schools of poverty, and schools of influence. The largest mean schools for all population is the mindset composite score with the greatest mean for schools of affluence (M = 7.45 and SD = 1.48)]. Professional development was the lowest mean score for all groups with schools of affluence having the lowest mean [(M = 3.40 and SD = .61)].

Table 15

Comparison of Composite Scores for Schools of Poverty and Schools of Affluence

Composite Score	Whole Sample			Schools of Poverty			Schools of Affluence		
	N	M	SD	N	M	SD	N	M	SD
Curriculum	322	3.90	.59	185	3.91	.59	75	3.92	.57
Instruction	322	6.53	1.87	185	6.40	1.88	75	6.99	1.68
Assessment	322	3.70	.69	185	3.74	.68	75	3.78	.67
Evaluation	322	3.85	.61	185	3.88	.63	75	3.76	.58
PD	322	3.46	.66	185	3.50	.67	75	3.40	.61
Mindset	322	6.94	1.70	185	6.75	1.77	75	7.45	1.48

Schools of affluence rated themselves slightly higher in all categories with the expectation of the areas of evaluation and professional development. Principals from schools of poverty rated themselves slightly higher in the areas of curriculum, assessment, evaluation, and professional development. The whole sample population had a mean that was lower than schools of poverty and affluence in the areas of curriculum, assessment, and mindset.

Inferential Testing

For the inferential testing of the null hypotheses, independent samples t-test and multiple regressions were used. Schools were spattered into areas of poverty and affluences based on the free/reduced lunch rate. For this study, the following null hypotheses were tested:

$H_0$1. There is no statistically significant difference among poverty levels on the curriculum composite score.

$H_0$2. There is no statistically significant difference among poverty levels on the instruction composite score.

$H_0$3. There is no statistically significant amount of among poverty levels on the assessment composite score.

$H_0$4. The curriculum, instruction, assessment, evaluation, and professional development composite scores do not explain a statistically significant amount of variance within the mindset composite score for schools of poverty.

$H_0$5. The curriculum, instruction, assessment, evaluation, and professional development composite scores do not explain a statistically significant amount of variance within the mindset composite score for schools of affluence.

Null Hypothesis 1

The first null hypothesis was examined to determine if there were differences among the curriculum composite scores between schools of poverty and schools of affluence. This null was tested using an independent samples *t*-test to determine if the two groups were statistically different on the dependent variable. The assumptions of outliers, normality, and homogeneity of variance were checked to ensure the validity of the inferential findings.

There were no outliers within the dependent variable scores for either group. This was determined by an examination of the box plots. There are no data points more than 1.5 standard deviations away from the edge within the edge of the box plots.

Normality was checked to ensure that the scores of the dependent variable are normally distributed for schools of poverty and affluence. This was checked using the Shapiro-Wilk test. In order for this assumption to be met, the significance value has to be greater than .05. For the first null, the significance value was greater than .05. This assumption has been met.

The homogeneity of variance was used to confirm that the variances within both groups on the dependent variable were equal to each other. This assumption was met since the p-value in the Levene's test was greater than .05. For this study, the p-value was .596.

In the independent samples *t* test, an alpha level of .05 was used to determine if there were significantly significant differences among poverty levels on the curriculum composite scores. The test was not significant, $t(258) = -.13$, $p = .898$, two-tailed. An examination of the schools of poverty ($M = 3.91$, $SD = .59$) indicates that there is not a statistically significant difference in composite scores compared to schools of affluence *($M = 3.92$, $SD = .57$).* This null hypothesis was retained.

Null Hypothesis 2

The second null hypotheses was also tested using an independent sample *t* test. The researcher found that there was not a statistically significant difference among poverty levels on the instruction composite score. The independent samples *t*-test was used to verify that the two groups have the same averages. The same assumptions were tested that were tested with the first null hypotheses.

When looking at the box plots, it was determined that there were no outliers for any group. Each of the data points was within 1.5 standard deviations from the edge of each box plot. This assumption has been met.

The Shapiro-Wilk test was used to check for normality. In order for this assumption to be met, the significance value has to be greater than .05. For the first null, the significance value was greater than .05. This assumption has been met.

To determine if the variances within both groups on the dependent variable were the same to one another, the assumption of homogeneity of variance was used. This assumption was

met since the p-value in the Levene's test was greater than .05. For this study, the p-value was .288. This assumption has been met.

An alpha level of .05 was used to determine if there were significantly significant differences among poverty levels on the instruction composite scores. The test was significant, *t(*258) = -2.36, p = .019, two-tailed. Looking at the schools of poverty (M = 6.40, SD = 1.88) indicates that there is a statistically significant difference in instruction scores compared to schools of affluence (*M* = 6.99*, SD* = 1.68*).* Based on the information given, the null will be rejected.

Null Hypothesis 3

There is no statistically significant amount of variance among poverty levels on the assessment composite score is the third null. The independent samples *t*-test was used to test this hypothesis. Just like the first two nulls, this one did not have any outliers. Therefore, the assumption for outliers has been met. Normality was checked using the Shapiro-Wilks test. For this study, the significance value is .657. In order for this assumption to be met, the p-value must be greater than .05. The normality assumption has been met.

Levene's test of Equality of Variances was used to determine the homogeneity of variance. The assumption of homogeneity was met since the p-value was .549, which is greater than .05. This assumption has been met.

In order to verify that there are significantly significant differences among poverty levels on the assessment composite score, an alpha level of .05 was used in the independent samples *t*-test. The test was not significant, *t*(258) = -445, p = .657, two-tailed. Looking at the data for the schools of poverty (M = 3.74, SD = .68) indicates that there is not a statistically significant

difference in assessment compared to schools of affluence (M = 3.78, SD = .67*).* This null will be retained.

Null Hypothesis 4

Null hypothesis 4 states curriculum, instruction, assessment, evaluation, and professional development composite scores do not explain a statistically significant amount of variance within the mindset composite score for schools of poverty. This hypothesis was tested using multiple regression. When using a regression model, the underlying assumptions need to be checked to ensure that they have been met and to confirm that there are accurate predictors from the data. In order for the assumption to be met, the residuals should form a horizontal band indicating a linear relationship between the collective predictor variables (composite scores) and the criterion variable (mindset). There is a linear relationship between the composite scores and the mindset composite score. This assumption has been met.

The data was checked for outliers. The assumption of outliers is met when no standardized residual falls outside of ± 1.5 standard deviations. For schools of poverty, this assumption has been met for Null 4.

The next assumption that was checked was multicollinearity to ensure certain the predictor variables are not too heavily correlated. Tolerance levels must be over .2 for the assumption to be met. The tolerance levels for this study range from .47 to .71; therefore, the assumption for multicollinearity has been met.

The Durbin-Watson test was used to check for the assumption of independence of residuals. There should be no correlation between the residuals. For this assumption to be met the Durbin-Watson value should be around 2 and the value in this study was 1.85. This assumption has been met for independence of residuals.

The assumption of homoscedasticity is met when the plot does not show evidence of the residual increasing or decreasing as the predicted value of the criterion variable increases. Plots were visually inspected. This assumption has been met.

The residuals needed to be checked for normal distribution. The normality of residuals assumption will be met when the residuals are aligned with the diagonals on the Normal P-P Plot of Regression Standardized Residual. Plots were visually inspected.

R is a large correlation. For this study, *R* is .846. The coefficient of determination (R^2) is the measure of the amount of the total variance that is shared with the criterion variable and the predictor variables (Field, 2013). For this study, the criterion variable is mindset; the composite scores are the predictor variables. The R^2 is .715, which means that 71.5% of the variance in the mindset composite score can be explained by the composite scores. The adjusted R^2 is the amount of shrinkage in a model of regression (Field, 2013). R^2 was .715 but the adjusted R^2 was .707. The .08 difference between R^2 and the adjusted R^2 accounts for the shrinkage in the model. This model has a standard error of estimate that is .959, which is the standard deviation of the data points as they are distributed among the prediction line.

Information gained from the model show that composite scores have the capability to predict mindset for schools of poverty. To determine the significance of R^2 in the model, an ANOVA was used. It was found that at least one of the composite scores can be used to predict mindset in schools with a greater than 45% free/reduced lunch status. The ANOVA was significant, $F(5,179)=89.90$, $p < .001$.

The model shows that there are two predictors (composite scores) that explain a significant amount of variance for mindset in schools of poverty: instruction and assessment. The instruction composite score was a significant predictor of mindset ($t = 16.357$, $p < .000$).

Assessment was also a significant predictor of mindset (t = .21.00, p = .037) as shown in Table 16. The other three predictor variables (curriculum, professional development, and evaluation) did not explain a significant amount of variance in the mindset composite score.

Table 16

Unstandardized and Standardized Partial Regression Coefficients for Composite Scores for Schools of Poverty

Independent Variables	B	SE	β	*t*	Sig.
Curriculum Composite Score	.029	1.61	.010	.181	.856
Instruction Composite Score	.730	.045	.776	16.357	.000
Assessment Composite Score	.320	.152	.123	2.100	.037
Evaluation Composite Score	.038	.145	.014	.265	.792
PD Composite Score	-.044	.151	-.016	-.290	.772

The unstandardized regression coefficient for the instruction composite score was .730 for schools of poverty. As the instruction composite score increases by one unit, there will be a .730 change in the mindset composite score. The assessment composite score had an unstandardized regression coefficient of .320, which indicates that for every one unit of change in assessment, there will be a .320 change in mindset composite score.

The standardized partial regression coefficient (β weight) for the instruction composite score was .776 and assessment had a standardized partial regression coefficient (β weight) of .123. The instruction composite score had the largest impact of predicting mindset composite scores.

Null Hypothesis 5

The fifth null was investigated using multiple regression. This null states that there is no statistically significant amount of variance between the curriculum, instruction, assessment, professional development, and evaluation composites scores and the mindset composite scores for schools of affluence. When using a regression model, the underlying assumptions need to be checked to ensure that they have been met and to confirm that there are accurate predictors from the data. In order for the assumption to be met, the residuals should form a horizontal band indicating a linear relationship between the collective predictor variables (composite scores) and the criterion variable (mindset). There is a linear relationship between the composite scores and the mindset composite score. The assumption for linearity has been met.

Outliers were checked. The standardized coefficients range from -.116 to .797. For the assumption of outliers to be met, each standardized residual must fall with ±1.5 standard deviations. This assumption has been met for the fifth null.

Multicollinearity was checked to ensure certain the predictor variables are not too heavily correlated. For the assumption to be met, tolerance levels must be over .2. Tolerance levels ranged from .53 to .79. The assumption for multicollinearity has been met for this null for schools of affluence.

The assumption of independence of residuals was checked using the Durbin-Watson test. There should be no correlation among the residuals. The Durbin-Watson value should be around 2 for the assumption of independence of residuals to be met. The Durbin-Watson value was 1.88. This assumption has been met for independence of residuals.

The assumption of homoscedasticity is met when the plot does not show evidence of the residual increasing or decreasing as the predicted value of the criterion variable increases. The plots were checked visually. The assumption of homoscedasticity has been met.

The residuals needed to be checked for normal distribution. Plots were visually checked. The normality of residuals assumption will be met when the residuals are aligned with the diagonals on the normal P-P plot of regression standardized residual.

R is a large correlation. For this study, *R* is .816. The R^2 is .666, which means that 66.6% of the variance in the mindset composite score can be explained by the composite scores for schools of affluence. The adjusted R^2 was .666 but the adjusted R^2 was .642. The .22 difference between R^2 and the adjusted R^2 accounts for the shrinkage in the model. This model has a standard error of estimate that is .887, which is the standard deviation of the data points as they are distributed among the prediction line.

To determine the significance of R^2 in the model, an ANOVA was used. Table 20 shows the ANOVA model statistics for mindset for schools of poverty. Information gained from the model show that composite scores have the capability to predict mindset for schools of affluence. In schools of affluence, at least one of the composite scores can be used to predict mindset. The ANOVA was significant, $F(5,69)=27.50$, $p < .001$.

The model shows that there are two predictors (composite scores) that explain a significant about of variance in mindset for schools of affluence: instruction composite score and professional development composite score. The instruction composite score was a significant predictor of mindset ($t= 9.625$, $p < .000$). The professional development composite score was also a significant predictor of mindset ($t = 2.045$, $p = .045$) as shown in Table 21. The

curriculum, assessment, and evaluation scores did not explain a significant amount of variance in the mindset composite score.

Table 17

Unstandardized and Standardized Partial Regression Coefficients for Composite Scores for Schools of Affluence

Independent Variables	**B**	**SE**	**β**	***t***	**Sig.**
Curriculum Composite Score	.292	.232	.113	1.258	.213
Instruction Composite Score	.703	.073	.797	9.625	.000
Assessment Composite Score	-.257	.212	-.116	-1.211	.230
Evaluation Composite Score	-.179	.207	-.069	-.864	.391
PD Composite Score	.386	.189	.160	2.045	.045

For schools of affluence, the unstandardized regression coefficient for the instruction composite score was .703. As the instruction composite score increases by one unit, there will be a .703 change in the mindset composite score. The professional development composite score had an unstandardized regression coefficient of .386, which indicates that for every one unit of change in assessment, there will be a .386 change in mindset composite score.

The standardized partial regression coefficient (β weight) for the instruction composite score was .797. The professional development composite score had a standardized partial regression coefficient (β weight) of .160. Like schools of poverty, the instruction composite score had the largest impact of predicting mindset composite scores for schools of affluence.

Summary

This chapter focused on finding the answers to six research questions regarding the areas of curriculum, instruction, and assessment that lead to enchanced instructional practices and a growth mindset. To find the answers to the questions in this study, quantitative data was used. The first research question about the pedagogical practices used in schools was answered using a descriptive statistical analysis in schools of poverty and affluence. Questions 2 through 4 involved schools with the same socio-economic demographics. Poverty level were investigated to determine if they were predictors in the areas of curriculum, instruction, and assessment. Questions five and six were used to determine if composite scores for curriculum, instruction, assessment, professional development, and evaluation were predictors of a growth mindset. A survey instrument was created and given to principals in the states of Indiana, Michigan, Ohio, and Kentucky. The responses to the survey question were used as the data for this research.

A descriptive statistical analysis was used to answer question 1. There are a number of practices that principals report teachers using in schools of poverty such as a clear focus for instruction, common formative assessments, and the use of power standards. For questions 2through 4 curriculum and assessment are not predictors for poverty levels; however, instruction is a predictor as found by using an independent samples *t*-test. Questions number 5 and 6 were answered using simultaneous multiple regression. For question 5, the instruction and assessment scores were predictors for a growth mindset in schools of poverty. Question 6 had similar results for schools of affluence. Instruction was a predictor for growth mindset but professional development was another predictor for schools with less than 35% free/reduced lunch status.

CHAPTER 5

OVERVIEW, FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

The final chapter of this quantitative study will be divided into five sections, which include an overview of the study, findings, discussion, conclusions, and recommendations for further research. The overview of the study will summarize the purpose of the study and the parameters of the investigation. The findings section will address the results from Chapter 4. In the discussion section, the results will be interpreted while connecting them to the instructional leadership practices that will facilitate a growth mindset in teachers. The conclusions section will provide insights on the importance of mindset in the classroom setting and what can be done in schools of poverty and affluence to aide in promoting a growth mindset. The last section will have suggestions for suggestions on future research and how additional study might further enrich this study or other studies on mindset in schools.

Overview of Study

The purpose of this quantitative study was to identify the instructional leadership practices that develop a growth mindset in teachers and to determine if the evaluation model will lead to enhanced pedagogical practices. The intent of this study was to determine if schools of poverty and schools of affluence promoted certain instructional strategies and which of those strategies would lead to a growth mindset in classroom teachers. Multiple regression was used to determine statistical significance.

Surveys were sent to principals in the states of Indiana, Michigan, Ohio, and Kentucky through Qualtrics in order to attempt to answer the six research questions. Participants had two weeks to respond to the questions in six constructs: curriculum, instruction, assessment, professional development, evaluation, and mindset. The questions in each construct were combined to determine a composite score.

The following questions were investigated during this study:

R1: What are the current practices of principals within the areas of curriculum, instruction, and assessment?

R2. Is there a statistically significant difference among poverty levels on the curriculum composite score?

R3. Is there a statistically significant difference among poverty levels on the instruction composite score?

R4. Is there a statistically significant difference among poverty levels on the assessment composite score?

R5. Do the curriculum, instruction, assessment, professional development, and evaluation composite scores explain a statistically significant amount of variance within the mindset composite score for schools of poverty?

R6. Do the curriculum, instruction, assessment, professional development, and evaluation composite scores explain a statistically significant amount of variance within the mindset composite score for schools of affluence?

The descriptive question was answered by using a statistical descriptive analysis for each of the constructs and the mean was calculated. An independent samples *t* test was used to answer the second, third, and fourth questions. Multiple regression was used for the last two

questions. The statistical analysis of the data was calculated by using the SPSS software program.

The research from Chapter 2 corroborates the instructional practices that lead to academic achievement in schools. This study attempted to provide information on what practices administrators can use to facilitate a growth mindset in teachers and if the evaluation model will lead to enhanced pedagogical practices. The comparison between schools of poverty and schools of affluence have disparities in the areas of curriculum, instruction, assessment, professional development, and evaluation but there should be some common practices that administrators can endorse that will promote a growth mindset in teachers. These practices should then trickle down to benefit the students by allowing them to develop a growth mindset as opposed to one that is fixed.

The conceptual theoretical model that was designed for this study was based on current evaluation practices of administrators and the instructional practices that are promoted within their schools. The results were intended to show that the evaluation model would reflect those instructional practices that would encourage a growth mindset within the teaching staff. The instructional practices that promote academic achievement were the foundation of the survey along with the practices that encourage a growth mindset.

Findings

The findings of this survey were reported in Chapter 4. The following null hypotheses were tested to predict the instructional leadership practices that would promote a growth mindset in teachers.

1. There is no statistically significant difference among poverty levels on the curriculum composite score.

2. There is no statistically significant difference among poverty levels on the instruction composite score.

3. There is no statistically significant amount of among poverty levels on the assessment composite score.

4. The curriculum, instruction, assessment, evaluation, and professional development composite scores do not explain a statistically significant amount of variance within the mindset composite score for schools of poverty.

5. The curriculum, instruction, assessment, evaluation, and professional development composite scores do not explain a statistically significant amount of variance within the mindset composite score for schools of affluence.

The first research question was answered using descriptive statistics. For the entire population, schools of affluence and schools of poverty reported similar results. In the area of curriculum, principals found high levels of teachers were actively involved in aligning the curriculum to standards and that 21st century skills were embedded into the curriculum. Teachers are reported to have high levels of engagement within their classroom and do a good job of connecting lessons to something that would be relevant for students. In the area of assessment, teachers are able to get together to discuss data that has been gathered from common formative assessments. According to the principals surveyed, a great number of teachers (91%) receive support on areas needed for improvement following an evaluation. A smaller number (57.5%) reported that the professional development following an evaluation is differentiated to

meet the needs of a teacher or small groups of teachers. Approximately 67.9% of teachers seem to have high expectations for students.

For schools of poverty, it was reported that teachers are embedding mathematical process and literacy standards into the curriculum. Teachers have a clear purpose during instruction and students know the purpose of the lesson. In the area of assessment, teachers in schools of poverty are given time to analyze student data. Principals report that teachers are given frequent and regular feedback following a walk-through or observation. In the area of professional development, teachers receive support on areas needed for improvement. Teachers with students in schools of over 45% poverty have high expectations for all students and are willing to use new ideas and resources in their instruction.

In schools of affluence, 21st century skills are embedded into the curriculum. Just like schools of poverty, administrators report that teachers in schools of affluence state a clear purpose to the lesson that students know. For assessment, teachers are able to provide students with quality feedback so that students know where they are in the learning process. Following an evaluation, teachers receive support in areas needed for improvement. Teachers in low poverty schools have high expectations for all students.

Research questions 2 and 4 can be answered together since they have similar results. For the second research question, the null hypothesis was retained and concluded that the curriculum composite score does not show a statistically significant difference among poverty levels. The null hypothesis was retained for question 4. It was deduced that the assessment composite score does not show a statistically significant difference among poverty levels. This could be an indication that the standards have changed with an emphasis on Common Core-like standards and a reflection of the change in standardized test to reflect the change of the new standards.

The new changes take a bit of time to adjust curriculum and form assessments to reflect the new standards.

Research question 3 showed the null hypothesis was rejected. It was concluded that the instruction composite score is a difference for various poverty levels. Based on the answers to the questions in the survey, "what teachers *do* matters" (Hattie, 2009, p. 22) and it appears that schools of poverty and affluence are making instruction the top priority. Some of the instructional strategies that over 50% of teachers are using include demonstrating high levels of active engagement in virtually all lessons (Marzano et al., 2011), differentiating lessons based on the student needs (Tomlinson, 2014), promoting inquiry (Abdi, 2014: Edwards, 2016), revealing a clear purpose that students are aware of (Fisher & Frey, 2011; Schmoker, 2016), and connecting lessons to something relevant to students (Fisher & Frey, 2011).

The outcome for Research Question 5 was to reject the null. The conclusion is that instruction and assessment composite scores are predictors for the mindset composite score for schools of poverty. Curriculum, professional development, and evaluation composite scores were not predictors for the composite mindset score in schools that have a 45% or greater free/reduced lunch status.

There are several potential reasons that instruction and assessment composite scores are predictors for mindset in schools of poverty. One reason could be that schools of poverty are often served with additional Title 1 and Title II funding that can be used for developing teachers instructional and assessment practices. As teachers see the increase in assessment scores, there is the belief that the new things are working with the thought that "we are getting better at this." This thought process is encouraging because teachers continue to try new things and in turn, boost their own confidence because they are seeing results. Schools could also potentially use

Title funds to extend learning time which would enable students to have more direct time with the teachers and to work on areas of weakness that result from classroom assessments. Another possibility could be the attitudes of the teachers. Schools of poverty have a high turnover rate with new teachers coming in all the time. New teachers generally have the attitude that all students can learn without putting blame on outside influences.

The findings of this research show that as assessment composite scores increase, mindset composite scores also grow in schools of poverty. Teachers in schools of poverty could be teaching to the test, but using assessment data to make instructional changes. As teachers begin to see growth within their students, they begin to see have more of a growth mindset within themselves because they are starting to see results.

It is obvious that professional development was not a strong predictor for mindset in schools of poverty. With such a high turnover rate in schools with a high free and reduced rate, it is hard to keep consistency in schools' initiatives. Schools often times do not want to or have the funds to provide training to the few teachers who need it when everyone else had been trained previously. Sometimes schools will offer the next best thing in professional development without following through with initiatives and giving time to see the success of the initiative.

The null was rejected for Question 6 and it was concluded that instruction and professional development are predictors of the mindset composite score for schools of affluence. Composite scores in the areas of curriculum, assessment, and evaluation were not predictors in the overall mindset composite score for schools with low levels of poverty. One suggested reason for an increase in the instruction composite score might be that schools of affluence have a higher retention rate of teachers than schools of poverty. This retention rate leads to teachers who are more confident in their instructional practices since they have more time on the job

leading to an increase in growth mindset. Another reason could be that schools of affluence are not defined as being a "poverty" school; therefore, being poor is not something that has to be overcome. There are no low expectations about the success of students enabling teachers to have a more favorable attitude that all students can learn. There is not such a large socio-economic distribution in student clientele causing teachers to have a more favorable attitude about the work environment and the students that they are serving.

In schools of affluence, as professional development composite scores increase, the growth mindset composite scores also increase. This could involve a cyclical process in which principals are providing feedback to the teachers through walk-throughs or evaluations and then teachers are making changes to their instruction. As principals review the data, they can base professional development needs around the needs of the staff members. As teachers are exposed to more professional development and they become better teachers as referenced through the evaluation or conversations with the administrator, they realize that they can positively affect their students' learning.

Implications

After thorough review of the research, a number of things that can be done differently so that school leaders can promote a growth mindset within their teachers. Implications that would benefit all schools include removing labels, teacher retention, continued professional development for teachers, focus on instruction, coaching, and professional development. Schools would also benefit from making a pledge for high standards, encouraging teachers to take risks, and promoting school initiatives that focus on mindset.

Students very quickly pick up on how the adults feel about them by the interactions in the classroom. Every day, students are subjected into having some type of label placed upon them

whether it is ability, special education, or socio-economic status. This labeling can put students in a fixed mindset with no desire to work harder or achieve more. Students then have a self-fulfilling prophecy in which they feel they can never do better. Student performance is jeopardized if students feel that adults have stereotyped them. Eliminating labels will help promote a growth mindset. Teachers should be willing to make adjustments to what they think students can achieve as well as provide help and support to students so that they can be successful.

Schools of poverty struggle with teacher retention and teachers leave schools of affluence if the leader is not strong. It is important to think about strategies that will keep teachers in the building. Retaining teachers should allow for consistency in the areas of curriculum, instruction, and assessment. In addition, new hires require professional development in areas that the school district has deemed important. Retention of teachers will allow for the money to be spent on areas that will maximize student achievement such as research-based strategies.

Teachers are the biggest change agent in their classroom. A great deal of research emphasizes the importance of the classroom teacher on the academic achievement of the students. Instruction was the only area in this research study that fostered a growth mindset for schools of poverty and affluence. Teachers should continue to utilize research-based practices such as student engagement, differentiation, inquiry, purpose, and relevance. As teachers continue to work and develop these strategies with student success shown as evidence, a teacher's mindset should increase as evidenced through this quantitative research study. This will then have a positive effect on students.

Leaders should have the right type of mindset with the willingness to spend time helping teachers develop the type of mindset that will propel students in their learning. This could be

done through coaching. Teachers can develop a growth mindset with coaching practices such as providing reflective feedback and giving teachers time to have discourse about what is happening in the classroom with serious reflection on how things can be changed (Marillo-Shone, 2014). The biggest obstacle in accomplishing this is the time component. Coaching staff takes time and administrators can get stuck in their office doing more managerial types of tasks, but setting aside time to help teachers along the way to become better assures them that you do care and they are worth the effort.

Professional development, if done correctly, has the power to change what is happening in the building. Administrators should spend considerable time planning good quality professional development for teachers. From the research in this study, the results show that mindset composite scores increase as professional development increases for schools of affluence. Schools of poverty should consider focusing on professional development for teachers, which could result in learners having more of a growth mindset.

Educators should have high expectations for all types of learners and be willing to provide feedback for improvement. This would include the teachers who are not considered to be the strongest in the building. The evaluation tool serves as the model for what good teaching should look like but there should be a plan to help teachers attain goals so that they can reach the highest scores on the evaluation. The evaluation tool and walk-throughs have the capacity to serve as a means for teachers to see their growth along the way if administrators take the time to make instruction a top priority in the school.

Teachers should be encouraged to take risks and principals should support them when doing so. It is hard for teachers to encourage students to take risks in the classroom if the teachers are not comfortable tackling challenges themselves in instruction. Principals could

encourage teachers to try new ideas and then be there to offer suggestions for improvement or to give motivation to continue without fear of being judged. Another suggestion would be to encourage teachers to visit other teachers' classrooms to see the great things that are happening and then giving teachers time to reflect on what is working and what could be tweaked so that the lesson or activity could be even better.

Teachers who do not believe they can get any better have a fixed mindset, however, teachers can be taught to have a different mindset. This will take intentional planning and professional development in the area of mindset. Teachers who enter the profession with a fixed mindset can change if they are presented the right strategies. "What matters are conceptions of teaching, learning, assessment, and teachers having expectations that *all* students can progress, that achievement for *all* is changeable (not fixed), and that progress for *all* is understood and articulated" (Hattie, 2009, p. 35).

Principals should promote effort, motivation, and attitudes as teachable skills. Mindset is more than just being positive with staff and students and praising them for their efforts. It is a cultural change in which the significance of failure has a different implication (Dweck, 2006). When anyone goes from a fixed to a growth mindset, they transform from a "*judge-and-be-judged"* framework to a "*learn-and-help-learn"* framework (Dweck, 2006, p. 244). Ricci (2013) suggested six steps to start that will instill a growth mindset culture within a building. The first step is to find out if staff thinks that intelligence can be developed. The staff then needs to be educated on how the brain can change and then how to effectively use praise. Teachers then need to learn about how the brain can change and how it changes as one learns new things. Students are then educated about the brain. The next phase is to let parents know about mindset and how the brain works. Parents can then be taught some ways to promote a growth mindset

within their children at home. The last step is to monitor, evaluate, and review school protocols. These steps could be implemented to create an environment in which everyone associated directly with the students has the steps needed to facilitate a school-wide growth mindset.

Recommendations for Future Research

One of the reasons that I chose this topic was because there was not a great deal of information in the area of growth mindset especially from a leadership perspective. The qualitative design of this research was used to help the researcher better understand growth mindset. The purpose of the evaluation tool should be to measure the growth of a teacher. A logical step and it made sense to study the effects of the evaluation tool to determine if teachers would develop a growth mindset. I did not find any correlation between the evaluation practices of principal and the promotion of growth mindset within teachers, but as teachers start to incorporate growth mindset strategies into their classrooms, additional research is needed. Most of the research that was found was specific to promoting a growth mindset in students.

An additional area to research would be to examine the school grades of buildings to determine if the school grade correlated with the composite scores that were predictors of a growth mindset. For this study, this would have been fairly easy to do by the addition of one variable question on the existing survey asking participates to select the school grade for the last school year. Since principals were interviewed from four different states, the way school grades are computed may vary from state to state.

This research study could be easily replicated to include principals and administrators from all 50 states. An international study would be interesting to see how schools from abroad are integrating mindset into schools. In addition, it would be beneficial to find the specific strategies that are being used to promote a growth mindset in teachers and school leaders.

At times, it seemed like certain instructional practices were rated a bit high from the administrator. It would be interesting to see how teachers rated themselves within the classroom. A comparison would then be made between the principals and the teachers to see how similar their answers were. It is my belief that most people think that they are doing the right thing and with no one telling them any different, it might be a little easier to inflate answers.

In this research study, assessment composite scores only served as a predictor for mindset in schools of poverty. It is recommended that all schools continue to develop good strong authentic assessments that incorporate various levels of depth of knowledge. Additional research could determine if there is significance between assessment practices and mindset in schools of affluence.

Currently, mindset is one of the important topics in education and hopefully it is not just the latest fad in education that will be here for a short period of time and then educators will move on to something else. Researchers should to continue to study how mindset is taught to teachers. Dweck (2006) mentioned in her book that students were given specific strategies in a growth mindset workshop in which students were taught to think differently about their minds. She found that the students who attended the workshop were motivated to inspire and achieve. The non-participants did not show any gains. Additional research, specific to teachers and school leaders, would benefit the field of education so that educators can learn specific strategies that will help grow people who work in education.

Summary

In the areas of curriculum, instruction, and assessment, principals report that teachers are using solid research-based practices. For schools of poverty, instruction and assessment composite scores were predictors for mindset. In schools of affluence, as instruction and

professional composite scores increased, the mindset composite score increased. Teachers would benefit from getting specific feedback following walk-throughs and evaluations. Teachers need to continue to have strong instructional practices and have time to work together to talk about practices that are working in the classroom. Administrators need to take time to plan quality professional development. School leaders should embrace the idea of mindset and explicitly teach staff that intelligence can be changed with specific strategies that teachers could then use with their students. Mindset is currently a hot topic in education and additional research is needed to determine the benefits of teaching growth mindset to teachers and determining if they are growing as reflected by the evaluation tool.

REFERENCES

Abdi, A. (2014). The effect of inquiry-based learning method on students' academic achievement in science course. *Universal Journal of Educational Research, 2*(1), 37-41. Retrieved from http://files.eric.ed.gov/fulltext/EJ1053967.pdf

Aditomo, A. (2015). Students' response to academic setback: "Growth mindset" as a buffer against demotivation. *International Journal of Educational Psychology (4)*2, 198-222). Retrieved from http://eds.a.ebscohost.com.ezproxy.indstate.edu/eds/pdfviewer/pdfviewer?vid=3&sid=d83861fb-2366-4fbf-9a70-5301ab37be74%40sessionmgr4002&hid=4108

Ainsworth, L. (2003). *Power standards: Identifying the standards that matter the most.* Englewood, CO: Advanced Learning Press.

Anderson, S., Leithwood, K., & Strauss, T. (2010). Leading data use in schools: Organizational conditions and practices at the school and district levels. *Leadership and Policy in Schools, 9*(3), 292 – 327, DOI: 10.1080/15700761003731492.

Amrein, A., & Berliner, D. (2002). High-stakes testing, uncertainty, and student learning. *Education Policy Analysis Archives, 10*(1), 1-74. Retrieved from http://epaa.asu.edu/ojs/article/view/297/423

Andrade, H., & Valtcheva, A. (2009). Promoting learning and achievement through self-assessment. *Theory Into Practice, 48*(1), 12-19. doi: 10.1080/00405840802577544

Antonenko, P., Jahanzad, F., & Greenwood, C. (2014). Fostering collaborative problem solving and 21st century skills using the deeper scaffolding framework. *Journal of College Science Teaching, 43*(6), 79-88. Retrieved from http://www.jstor.org/stable/43631763

Anyon, J. (1980). Social class and the hidden curriculum of work. *Journal of Education*, *162*, 67-92. Retrieved from Anyon, J. (1980). Social class and the hidden curriculum of work. *Journal of Education*, *162*, 67-92.

Armstrong, J., & Anthes, K. (2001). How data can help. *American School Board Journal 188*(11), 38-41. Retrieved from http://datause.cse.ucla.edu/docs/HowDataCanHelp.pdf

Ary, D., Jacobs, L., & Sorensen, C. (2010). *Introduction to research in education.* Belmont, CA: Wadsworth.

Baecher, L., McCormack, B., & Kung, S. (2014). Supervisor use of video as a tool in teacher reflection. *The Electronic Journal of English as a Second Language, 18*(3). Retrieved from http://files.eric.ed.gov/fulltext/EJ1048625.pdf

Balch, R., & Koedel, C. (2014). Anticipating and incorporating stakeholder feedback when developing value-added models. *Education Policy Analysis Archives, 22*(97), 1-12. Retrieved from http://dx.doi.org/10.14507/epaa.v22.1701

Bard, R. (2014). Focus on learning: Reflective learners & feedback. *The Electronic Journal for Teaching English as a Second Language, 18*(3), 1-18. Retrieved from http://files.eric.ed.gov/fulltext/EJ1048632.pdf

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education, 5*(1), 7-74. doi: 10.1080/0969595980050102

Blackburn, B. (2008). *Rigor is not a four-letter word*. Larchmont, NY: Eye on Learning.

Blad, E. (2016). Teacher seize on 'growth mindset' but crave more training. *Education Week, 36*(5), 1.

Blase, J. & Blase, J. (1999). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration, 38*(2), 130-131. doi: 10.1177/0013161X99353003

Bloom, B., Engelhart, M., Furst, E., Hill, B., & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook 1: Cognitive domain.* NY: David McKay.

Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher, 33*(8), 3-15. Retrieved from https://cset.stanford.edu/sites/default/files/files/documents/publications/Borko-Professional%20Development%20and%20Teacher%20Learning.pdf

Brookhart, S. (2008). *How to give effective feedback to your students.* Alexandria, VA: Association of School and Curriculum Development.

Brookhart, S. (2010). *Assess higher-order thinking skills in your classroom*. Alexandria, VA: Association for School and Curriculum Development.

Brooks, R. (2004). To touch the hearts and minds of students with learning disabilities: The power of mindsets and expectations. *Learning Disabilities: A Contemporary Journal, 2*(1), 1-8.

Clay, M., Soldwedel, P, & Many, T.(2011). *Aligning school districts as PLCs*. Bloomington, IN: Solution Tree Press.

Cohen, D., & Ball, D. (1999). Instruction, capacity, and improvement. *Consortium for Policy Research in Education*. Retrieved from http://www.sii.soe.umich.edu/documents/instruction%20capacity%20improvement.pdf

Cohen, D., & Bhatt, M. (2012). The importance of infrastructure development to high-quality literacy instruction. *Future of Children, 22*(2)*,* 117-138. Retrieved from http://files.eric.ed.gov/fulltext/EJ996195.pdf

Coleman, D., & Pimentel, S. (2012). Revised publishers' criteria for the Common Core State Standards in English language arts and literacy, Grades 3-12. Retrieved from http://www.corestandards.org/assets/Publishers_Criteria_for_3-12.pdf

Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R.L. (1966). *Equality of educational opportunity*. Washington, DC: U.S. Government Printing Office.

Colwell, N. (2013). Test anxiety, computer-adaptive testing and the common core. *Journal of Education and Training Studies, 1*(2)*,* 50-60. Retrieved from http://files.eric.ed.gov/fulltext/EJ1054865.pdf

Common Core State Standards Initiative. (2010a). Common Core State Standards for English language arts & literacy in history/social studies, science, and technical subjects. Retrieved from http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf

Conley, D.T. (2015). A new era for educational assessment. *Education Policy Analysis Archives, 23*(8). Retrieved from http://dx.doi.org/10.14507/epaa.v23.1983

Corcoran, T., & Silander, M. (2009). Instruction in high schools: The evidence and the challenge. *Future of Children, 19*(1)*,* 157-183. Retrieved from http://files.eric.ed.gov/fulltext/EJ842067.pdf

Creemers, B. b., & Kyriakides, L. (2015). Process-product research: A cornerstone in educational effectiveness research. *Journal Of Classroom Interaction*, *50*(2), 107-119.

Crum, K. (2009). Building the foundation for data-based decision making: creating consensus on language and concepts. *International Electronic Journal for Leadership in Learning, 13*(5). Retrieved from http://files.eric.ed.gov/fulltext/EJ940626.pdf

Cunnington, M., Kantrowitz, A., Harnett, S., & Hill-Ries, A. (2014). Cultivating common ground: Integrating standards-based visual arts, math and literacy in high-poverty urban classrooms. *Journal for Learning Through the Arts, 10*(2)*,* 1-24. Retrieved from http://files.eric.ed.gov/fulltext/EJ1050589.pdf

Daniels, D., Pirayoff, R., & Bessant, S. (2013). Using peer observation and collaboration to improve teaching practices. *Universal Journal of Educational Research, 1*(3)*,* 268-274. doi: 10.13189/ujer.2013.010318

Danielson, C. (2010). Evaluations that help teachers learn. *Educational Leadership, 68*(4)*,* 35–39.

Darling-Hammond, L. (2012). *Creating a comprehensive system for evaluating and supporting effective teaching*. Stanford, CA: Stanford Center for Opportunity Policy in Education.

Darling-Hammond, L., Wilhoit, G., & Pittenger, L. (2014). Accountability for college and career readiness: Developing a new paradigm. *Education Policy Analysis Archives*, *22*(86)*,* 1-38. Retrieved from http://dx.doi.org/10.14507/epaa.v22n86.2014

Dean, C., Hubble, E., Pitler, H., & Stone, B. (2012). *Classroom instruction that works: Research-based strategies for increasing student achievement* (2nd ed.). Alexandria, VA: Association for School and Curriculum Development.

DeNisco, A. (2015). Prioritizing principal PD: Building leaders update skills to keep pace with learning standards and state accountability. *District Administration, 51*(10)*,* 36.

Derrington, M., & Campbell, J. (2015). Principal concerns and superintendent support during teacher evaluation changes. *AASA Journal of Scholarship & Practice, 12*(3)*,* 11-22.

Dorn, S., & Ydesen, C. (2015). Towards a comparative and international history of school testing and accountability. *Education Policy Analysis Archives, 22*(115)*,* 1-11. Retrieved from http://dx.doi.org/10.14507/epaa.v22.1913

DuFour, R. (2007). Professional learning communities: A bandwagon, an idea worth considering, or our best hope for high levels of learning. *Middle School Journal, 39*(1)*,* 4-8. Retrieved from http://files.eric.ed.gov/fulltext/EJ775771.pdf

DuFour, R. (2004). What is a "professional learning community"? *Educational Leadership, 61*(8)*,* 6-11. Retrieved from http://www.allthingsplc.info/files/uploads/DuFourWhatIsAProfessionalLearningCommunity.pdf

DuFour, R. (2002). The learning-centered principal. *Educational Leadership, 59(*8), 12-15.

Dweck, C. (2007). Messages that motivate and boost achievement. *Education Canada*, Spring, 6-10. Retrieved from http://www.lib.usf.edu/tutoring/files/2012/02/Boosting_Achievement_Spring07-Dweck.pdf

Dweck, C. (2006). Mindset: How we can learn to fulfill our potential. New York, NY: Random House.

Edwards, S. (2015). Active learning in the middle grades. *The Middle School Journal, 46*(5)*,* 26-32. Retrieved from http://files.eric.ed.gov/fulltext/EJ1053970.pdf

Elementary and Secondary Education Act of 1965 (P.L. 89-10). Pub. L. No. 89-10. Retrieved from https://www.gpo.gov/fdsys/pkg/STATUTE-79/pdf/STATUTE-79-Pg27.pdf

Elish-Piper, L. (2014). Growth mindset and grit: Building important foundations for literacy learning and success at home. *Illinois Reading Council Journal, 42*(4)*,* 59-63. Retrieved from http://www.illinoisreadingcouncil.org/images/IRCJFall2014.pdf

Emberger, M. (2006). Helping teachers "think like assessors". *Principal, 85*(4)*,* 38-40. Retrieved from https://www.naesp.org/sites/default/files/resources/2/Principal/2006/M-Ap38.pdf

Faulkner, J., & Latham, G. (2016). Adventurous lives: Teacher qualities for 21st century learning. *Australian Journal of Teacher Education*, 41(4). Retrieved from http://ro.ecu.edu.au/ajte/vol41/iss4/9

Field, A. (2013). *Discovering statistics ssing IBM SPSS statistics.* Los Angeles, CA: Sage Publications.

Fisher, D., & Frey, N. (2011). *The purposeful classroom.* Alexandria, VA: Association for School and Curriculum Development.

Fisher, D., & Frey, N. (2014a). *Better learning through structured teaching.* Alexandria, VA: Association for School and Curriculum Development.

Fisher, D., & Frey, N. (2014b). *Checking for understanding*. Alexandria, VA: Association for School and Curriculum Development.

Goatley, V., & Hinchman, K. (2013). Using research to make sensible literacy decisions within current educational initiatives. *Language and Litearcy Spectrum, 23,* 57-68. Retrieved from http://files.eric.ed.gov/fulltext/EJ1005286.pdf

Gordon, R., Kane, T., & Staiger, D. (2006). Identifying effective teachers using performance on the job. Washington, DC: The Brookings Institution. Retrieved from www.brookings.edu/views/Papers/200604hamilton_1.pdf

Graff, N. (2011). An effective and agonizing way to learn: Backwards design and new teachers' preparation for planning curriculum. *Teacher Education Quarterly, 38*(3)*,* 151-168. Retrieved from http://files.eric.ed.gov/fulltext/EJ940642.pdf

Gravetter, F. J., & Wallnau, L. B. (2013). *Statistics for the behavioral sciences* (9th ed.). Belmont, CA: Wadsworth.

Gray, D. (2009). A new look at instructional leadership. *International Journal of Educational Leadership Preparation, 1*(2). Retrieved from http://enx.org/content/m19557/1.2

Guskey, T. (1980). What is mastery learning? And why do educators have such high hopes for it? *Instructor, 90*(3), 80-82.

Gutshall, C. (2014). Pre-service teachers' mindset beliefs about student ability. Electronic Journal of Research in Educational Psychology, *12(*3*),* 785-802. Retrieved from - http://dx.doi.org/10.14204/ejrep.34.14030

Guvenc, H. (2015). The relationship between teachers' motivational support and engagement versus disaffection. *Educational Sciences: Theory And Practice*, *15*(3), 647-657.

Hail, C., Hurst, B., & Camp, D. (2011). Peer debriefing: Teachers' reflective practices for professional growth. *Critical Questions in Education, 2*(2)*,* 74-83. Retrieved from http://files.eric.ed.gov/fulltext/EJ1047573.pdf

Haladyna, T. (2006). Perils of standardized achievement testing. *Educational Horizons, 85*(1)*,* 30-43. Retrieved from http://files.eric.ed.gov/fulltext/EJ750641.pdf

Hall, C. (2013). Building a culture of growth and evaluation in schools. *Independent School, 73*(1)*,* 88-93. Retrieved from https://eric.ed.gov/?id=EJ1047998

Hall, G., Smith, C., & Nowinski, M. (2005). An organizing framework for using evidence-based assessments to improve teaching and learning in teacher education programs. *Teacher Education Quarterly, 32*(3)*,* 19-33. Retrieved from http://files.eric.ed.gov/fulltext/EJ795318.pdf

Hallgren, K., James-Burdumy, S., & Perez-Johnson, I. (2014-2016). State requirements for teacher evaluation policies promoted by race to the top. *National Center for Education Evaluation and Regional Assistance*. Retrieved from http://files.eric.ed.gov/fulltext/ED544794.pdf

Harrison, C. (2014). Assessment of inquiry skills in the SAILS project. *Science Education International, 25*(1)*,* 112-122. Retrieved from http://files.eric.ed.gov/fulltext/EJ1022890.pdf

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement.* England: Routledge.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1)*,* 81–112. doi: 10.3102/003465430298487

Haydn, T., Barton, R., & Oliver, A. (2013). An alternative model of continuing professional development for teachers: Giving teachers time. *International Education Studies. 1*(1)*,* 44-49. Retrieved from http://files.eric.ed.gov/fulltext/EJ1055335.pdf

Hess, K., Jones, B., Carlock, D., & Walkup, J. (2009). *Cognitive rigor: Blending the strengths of Bloom's taxonomy and Webb's depth of knowledge to enhance classroom level practice.* (Education Resources Information Center, ED517804). Retrieved from http://www.standardsco.com/PDF/Cognitive_Rigor_Paper.pdf

Indiana Department of Education. (2016). *ISTEP+ Grades 3-8.* Retrieved from http://www.doe.in.gov/assessment/istep-grades-3-8

Jacob, B.A., and Lefgren, L. (2007). Can principals identify effective teachers? Evidence on subject performance evaluation in education. *Journal of Labor Economics*, *26*(1)*,* 101-136. Retrieved from https://economics.byu.edu/Documents/Lars%20Lefgren/papers/principals.pdf

Jacobs, S. (2016). Improve tenure with better measures of teacher effectiveness. *Phi Delta Kappan*, *97*(6)*,* 33. doi:10.1177/0031721716636870

Jewett, A. (1964). NDEA now includes English and reading. *The English Journal, 53*(8)*,* 580-583. Retrieved from http://files.eric.ed.gov/fulltext/ED029908.pdf

Jiang, Y., Granja, M.R., & Koball, H. (2017). *Basic facts about low-income children: Children under 18 years*, 2015. New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health. Retrieved from http://www.nccp.org/publications/pdf/text_1170.pdf

Jolly, J. (2009). The National Defense Education Act, current STEM initiative, and gifted. *Gifted Child Today, 32*(2)*,* 50-53. Retrieved from http://files.eric.ed.gov/fulltext/EJ835843.pdf

Jones, K., Vernette, P., & Jones, J. (2009). An intergration of "backwards planning" unit design with the "two step" lesson planning framework. *Education 130*(2)*,* 357-360. Retrieved from http://utaedleadership.wikispaces.com/file/view/Module+4+Reading+2+-+Integration+of+Backwards+Planning.pdf

Jones, L. (2009). The implications of NCLB and A Nation At Risk for K-12 schools and higher education. *International Journal of Educational Leadership Preparation*, *4*(1). Retrieved from http://files.eric.ed.gov/fulltext/EJ1068512.pdf

Judson, E. (2012). When science counts as much as reading and mathematics: An examination of differing state accountability policies. *Education Policy Analysis Archives, 20*(26)*,* 1-21. Retrieved from http://epaa.asu.edu/ojs/article/view/987

Kastberg, S. (2003). Using Bloom's taxonomy as a framework for classroom assessment. *The Mathematics Teacher, 96*(6)*,* 402-405. Retrieved from http://www.jstor.org.ezproxy.indstate.edu/stable/pdf/20871367.pdf?acceptTC=true

Kawinkamolroj, M., Triwaranyu, C., & Thongthew, S. (2015). Coaching process on transformative learning theory for changing the instructional mindset of elementary school teachers. *BCES Conference Proceedings, 13*(1)*,* 153-160. Retrieved from files.eric.ed.gov/fulltext/ED568629.pdf

Kelting-Gibson, L. (2005). Comparison of curriculum development practices. *Educational Research Quarterly, 29*(1)*,* 26-36. Retrieved from http://files.eric.ed.gov/fulltext/EJ718116.pdf

Kereluik, K., Mishra, P., Fahnoe, C., & Terry, L. (2013). What knowledge is of most worth: Teacher knowledge for 21st century learning. *Journal of Digital Learning in Teacher Education, 29*(4)*,* 127-140. Retrieved from *http://files.eric.ed.gov/fulltext/EJ1010753.pdf*

Khan, M., & Law, L. (2014). An integrative approach to curriculum development in higher education in the USA: A theoretical framework. *International Education Studies, 8*(3)*,* 66-76. Retrieved from http://files.eric.ed.gov/fulltext/EJ1060861.pdf

Kinne, L., Hasenbank, J., & Coffey, D. (2014). Are we there yet? Using to support progress toward proficiency and model formative assessment. *AILACTE Journal, 11*(1), 109-128. Retrieved from http://files.eric.ed.gov/fulltext/EJ1052581.pdf

Kivunja, C. (2015). Teaching students to learn and to work well with 21st century skills: Unpacking the career and life skills domain of the new learning paradigm. *International Journal of Higher Education, 4*(1), 1-11. Retrieved from http://files.eric.ed.gov/fulltext/EJ1060566.pdf

Koretz, D. (2002). Limitations in the use of achievement tests as measures of educators' productivity. *Journal of Human Resources, 37*(4), 752–777. Retrieved from http://www.irp.wisc.edu/newsevents/other/symposia/koretz.pdf

Krathwohl, D. (2002). A revision of Bloom's taxonomy: An overview. *Theory Into Practice, 41*(3), 212-218. Retrieved from http://bcrc.bio.umass.edu/si/sites/bcrc.bio.umass.edu.si/files/Krathwohl_Revised_Taxonomy.pdf

Krovetz, M. (2016). Expecting all students and educators to use their hearts and minds well. *Educational Leadership and Administration: Teaching and Program Development, 37,* 231-242. Retrieved from http://files.eric.ed.gov.ezproxy.indstate.edu/fulltext/EJ1094429.pdf

Läänemets, U., & Kalamees-Ruubel, K. (2013). The Taba-Tyler Rationales. *Journal of the American Association for the Advancement of Curriculum Studies, 9.* Retrieved from http://www.uwstout.edu/soe/jaaacs/upload/2013-05-1-Urve.pdf

Langevin, M. (2010). *AdvancEd accreditation impact regarding the achievement gap between schools of poverty and schools of affluence for secondary education in a five-state region* (Unpublished doctoral dissertation). Indiana State University, Terre Haute, IN.

Latz, A., Speirs Neumeister, K., Adams, C., & Pierce (2008). Peer coaching to improve classroom differentiation: Perspectives form project CLUE. *Roeper Review, 31*(1), 27-39. doi: 10.1080/02783190802527356

Leana, C. R. (2010). The missing link in school reform. *Stanford Social Innovation Review, 9*(4). Retrieved from http://www.ssireview.org/articles/entry/the_missing_link_in_school_reform

Ledward, B. C., & Hirata, D. (2011). An overview of 21st century skills. Summary of 21st century skills for students and teachers, Pacific Policy Research Center. HI: Kamehameha Schools–Research & Evaluation. Retrieved from http://www.ksbe.edu/_assets/spi/pdfs/21st_Century_Skills_Brief.pdf

Lee, C. (2014). Fixed or growth: Does it matter? *Mathematics Teaching, 212,* 44-46. Retrieved from https://eric.ed.gov/?id=EJ859719

Lee, C., & Tan, S. (2010). Scaffolding writing using feedback in students' graphic organizers-novice writer's relevance of ideas and cognitive loads. *Educational Media International, 47*(2), 135-152.

Lee, L. (2011). What did the teachers think? Teachers' responses to the use of value-added modeling as a tool for evaluating teacher effectiveness. *Journal of Urban Learning, Teaching, and Research. 7,* 97-103. Retrieved from http://files.eric.ed.gov/fulltext/EJ952063.pdf

Leithwood, K., Louis, K., Anderson, S., & Walhstrom, K. (2004). *How leadership influences student learning: A review of research for the Learning from Leadership Project*. New York, NY: The Wallace Foundation. Retrieved from http://www.wallacefoundation.org/knowledge-center/Documents/How-Leadership-Influences-Student-Learning.pdf

Lemov, D. (2010). *Teach like a champion: 49 techniques that put students on the path to college.* San Francisco, CA: Jossey-Bass.

Liebtag, E. (2013). Moving forward with common core state standards implementation: Possibilities and potential problems. *Journal of Curriculum & Instruction, 7*(2)*,* 56-70. doi: 10.3776/joci.2013.v7n2p56-70

Lott, K., & Reed, S. (2015). Map it then write it. *Science & Children, 53*(3)*,* 46-52. Retrieved from http://eds.a.ebscohost.com.ezproxy.indstate.edu/eds/detail/detail?vid=23&sid=d6ed2040-d59a-4ecf-935c-3a06dae70171%40sessionmgr4002&hid=4203&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=110572797&db=eue

Lunenberg, F. (2011). Curriculum development: Inductive models. *Schooling, 2*(1)*.* Retrieved from http://files.eric.ed.gov/fulltext/EJ940642.pdf

Lyons, J., & Algozzine, B. (2006). Perceptions of the impact of accountability on the role of principals. *Education Policy Analysis Archives, 14*(16)*,* 1-19. Retrieved from http://epaa.asu.edu/ojs/article/view/87/213

Malone, B., & Nelson, J. (2006). Standards-based reform: Panacea for the twenty-first century? *Educational Horizons, 84*(2)*,* 121-128. Retrieved from http://files.eric.ed.gov/fulltext/EJ750617.pdf

Mann, M., & Smith, M. (2013). Promoting rigor-in-practice through school self-evaluation: A middle school's experience with model development, implementation, and evaluation. *Research in Middle Level Education, 37*(4). Retrieved from http://files.eric.ed.gov/fulltext/EJ1032361.pdf

Mantione, R., & Smead, S. (2003). *Weaving through words: Using the arts to teach reading comprehension strategies.* Newark, DE: International Reading Association.

Martin, S., Hill, S., & Lawrence, A. (2014). Who's afraid of the big bad core? The common core standards and out-of-school time programs. *Afterschool Matters, 20,* 1-8. Retrieved from http://files.eric.ed.gov/fulltext/EJ1047367.pdf

Marzano, R. (2003). *What works in schools: Translating research into action.* Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. (2012). The two purposes of teacher evaluation. *Educational Leadership*, *70*(3)*,*14-19.

Marzano, R., & Pickering, D. (2005). *Building academic vocabulary teacher's manual.* Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R., Pickering, D., & Heflebower, T. (2011). *The highly engaged classroom*. Bloomington, IN: Marzano Research Laboratory.

Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R., Warrick, P., & Simms, J. (2014). *A handbook for high reliability schools. The next step in school reform.* Bloomington, IN: Marzano Research Laboratory.

Mayotte, G., Wei, D., Lamphier, S., & Doyle, T. (2013). Enhancing capacity to improve student learning. *Catholic Education: A Journal of Inquiry and Practice, 16*(2)*,* 264-287. Retrieved from http://files.eric.ed.gov/fulltext/EJ1005656.pdf

McMurrey, A. (2014). Willful ignorance: The dropout crisis and United States public education policy. *Journal of At-Risk Issues, 18*(1)*,* 27-34. Retrieved from http://files.eric.ed.gov/fulltext/EJ1029758.pdf

McTighe, J., & Thomas, R. (2003). Backward design for forward action. *Educational Leadership, 60*(5)*,* 52-55. Retrieved from http://jaymctighe.com/wordpress/wp-content/uploads/2011/04/Backward-Design-for-Forward-Action.pdf

Merriam, S. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education, 89,* 3-14. Retrieved from http://umsl.edu/%7Ewilmarthp/modla-links-2011/Merriam_pillars%20of%20anrdagogy.pdf

Mizelle, T. (2010). The widget effect: A new educational term for an old educational problem. *Lutheran Education*, *143*(2), 87-97.

National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform: a report to the Nation and the Secretary of Education, United States Department of Education. Washington, D.C.: National Commission on Excellence in Education.

National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). Common core state standards for English, language arts, and literacy in history/social studies, science, and technical subjects. Washington, DC: Authors. Retrieved from http://www.corestandards.org/assets/CCSSI_Math%20Standards.pdf.

National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.

Nichol, D., & McFarlane-Dick, D. (2006). Formative assessment and self- regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education, 31*(2), 199-218. Retrieved from http://www.lyderiulaikas.smm.lt/Atsisiųsti%20failus:/article/1044/Formative%20assessment%20and%20self-regulated%20learning.pdf

Ornstein A. C., & Hunkins, F. P. (2009). *Curriculum foundations, principles and issues* (5th ed.). Boston, MA: Allyn and Bacon.

Papola-Ellis, A. (2014). Teaching under policy cascades: Common core and literacy instruction. *Journal of Language and Literacy Edcuation, 10*(1)*,* 166-187. Retrieved from http://files.eric.ed.gov/fulltext/EJ1030716.pdf

Peck, C. (2014). Paradigms, power and PR in New York City: Assessing two accountability implementation efforts. *Education Policy Analysis Archives, 22*(111)*,* 1-31. Retrieved from http://dx.doi.org/10.14507/epaa.v22.1466

Phillips, D., Foote, C., & Harper, L. (2008). Strategies for effective vocabulary instruction. *Reading Improvement, 45*(2)*,* 62-68. Retrieved from http://med.smumn.edu/sites/default/files/Strategies_For_Effective_ _Instruction.pdf

Pink, D. (2009). *Drive: The surprising truth about what motivates us*. [Kindle DX version]. Retrieved from http://Amazon.com

Piro, J., Wiemers, R., & Shutt, T. (2011). Using student achievement data in teacher a principal evaluations: A policy study. *International Journal of Educational Leadership Preparation, 6*(4). Retrieved from http://files.eric.ed.gov.ezproxy.indstate.edu/fulltext/EJ974317.pdf

Polikoff, M. (2014). *Common core state standards assessments: Challenges and opportunities*. Center for American Progress. Retrieved from http://eric.ed.gov.ezproxy.indstate.edu/?id=ED561091

Quigley, C., Marshall, J., Deaton, C., Cook, M., & Padilla, M. (2011). Challenges to inquiry teaching and suggestions for how to meet them. *Science Educator, 20*(1), 55-61.

Rattan, A., Good, C., & Dweck, C. (2012). It's ok-not everyone can be good at math: Instructors with an entity theory comfort (and de-motivate) students. Journal of Experimental Social Psychology, *48,*(3). doi:10.1016/j.jesp.2011.12.012.

Reeves, D. (2004a). *Accountability for learning.* Alexandria, VA: Association for Supervision and Curriculum Development.

Reeves, D. (2004b). *Making standards work: How to implement standards based assessments in the classroom, school, and district.* Englewood, CO: Advanced Learning Press.

Rhee, M. (2013). *Radical: Fighting to put students first*. New York, NY: Harper Collins Publishers.

Ricci, M. (2013). *Mindsets in the classroom.* Waco, TX: Prufrock Press.

Richardson, J. (2008). Evident of learning: A conversation with Jay McTighe. *Principal Leadership, 9*(1)*,* 30-34. Retrieved from https://eric.ed.gov/?id=EJ813587

Richerme, L. (2012). Remain or react: The music education profession's responses to "Sputnik" and "A Nation At Risk," *Arts Education Policy Review, 113*(1)*,* 35-44. doi: 10.1080/10632913.2012.626385

Rogier, D. (2014). Assessment literacy: Building a base for better teaching and learning. *English Teaching Forum, 52*(3)*,* 2-13. Retrieved from http://files.eric.ed.gov/fulltext/EJ1045594.pdf

Roscoe, K. (2013). Enhancing assessment in teacher education courses. *The Canadian Journal for the Scholarship of Teaching and Learning, 4*(1). doi: http://dx.doi.org/10.5206/cjsotl-rcacea.2013.1.5

Rotherham, A., & Willingham, D. (2009). 21st century skills: The challenge ahead. *Educational Leadership, 67*(1)*,*16-21. Retrieved from http://cesa7ita2009.pbworks.com/f/21st+Century+Skills+Curriculum+Teachers+Assessment.pdf

Ruiz-Primo, M., & Furtak, E. (2007). Exploring teachers' informal formative assessment practices and students' understanding in the conxtext of scientific inquiry. *Journal of Research in Science Teaching, 44*(1)*,* 57-84. doi: 10.1002/tea.20163

Schmoker, M. (2016). *Leading with focus.* Alexandria, VA: Association for School and Curriculum Development.

Schneider, C. (2015, September 24). New data shows 21% slide in initial licensed. *The Indianapolis Star.*

Sedita, J. (2005). Effective vocabulary instruction. *Insights on Learning Disabilities, 2*(1)*,* 33-45. Retrieved from https://keystoliteracy.com/wp-content/uploads/2012/08/effective-vocabulary-instruction.pdf

Shanahan, T. (2014). Educational policy and literacy instruction. *The Reading Teacher, 68*(1), 7-12.

Sharp, L. (2014). Literacy in the digital age. *Language and Literacy Spectrum, 24,* 74-85. Retrieved from http://files.eric.ed.gov/fulltext/EJ1034912.pdf

Singleton, S., & Filce, H. (2015). Graphic organizers for secondary students with learning disabilities. *Teaching Exceptional Children, 48*(2), 110-117. doi: 10.1177/0040059915605799.

Slater, L. (2004). Collaboration: A framework for school improvement. *International Electronic Journal for Leadership in Learning, 8*(5)*.* Retrieved from http://files.eric.ed.gov/fulltext/EJ984546.pdf

Slocombe, T., Miller, D., & Hite, N. (2011). A survey of student perspectives toward faculty evaluations. *American Journal of Business Education, 4*(2), 51-58. Retrieved from http://www.cluteinstitute.com/ojs/index.php/AJBE/article/view/4675/4764

Soljan, I., Stanghan, Y., & Henry, A. (2013). Looking at reflection within a community of practice of RTLBs. *Kairarange 14*(1)*,* 11-15. Retrieved from http://files.eric.ed.gov/fulltext/EJ1011402.pdf

Southworth, S. (2010). Examining the effects of school composition on North Carolina student achievement over time. *Education Policy Analysis Archives, 18*(29). Retrieved from http://epaa.asu.edu/ojs/article/view/848

Strachota, E., Conceição, S., & Schmidt, S. (2006). An instrument development model for online surveys in human resource development and adult education. *New Horizons in Adult Education and Human Resource Development, 20*(2). Retrieved from http://files.eric.ed.gov/fulltext/EJ983777.pdf

Stewart, C. (2014). Transforming professional development to professional learning. *Journal of Adult Education, 43*(1), 28-33. Retrieved from http://files.eric.ed.gov/fulltext/EJ1047338.pdf

Strong, R., Silver, H., & Perini, M. (2001). *Teaching what matters most: Standards and strategies for raising student achievement.* Alexandria: VA: Association for School and Curriculum Development.

Taylor, E. & Tyler, J. (2012). The effect of evaluation on teacher performance. *American Economic Review,102*(7), 3628-3651. Retrieved from http://dx.doi.org/10.1 257/aer.l02. 7.362

The New Teacher Project. (2012). *Greenhouse schools: How schools can build cultures where teachers and students thrive.* Retrieved from http://tntp.org/publications/view/retention-and-school-culture/greenhouse-schools-how-schools-can-build-cultures-where-teachers-thrive

The New Teacher Projectt. (2015). *The mirage: Confronting the hard truth about our quest for professional development.* Retrieved from http://tntp.org/assets/documents/TNTP-Mirage_2015.pdf

Tomlinson, C. (2014). *The differentiated classroom: Responding to the needs of all learner,* (2nd ed). Alexandria, VA: Association for School and Curriculum Development.

Truby, D. (2006). Motivation 3.0. Retrieved from http://www.scholastic.com/teachers/article/motivation-30

Tucker, S. (2014). Transforming pedagogies: Integrating 21st century skills and web 2.0 technology. *Turkish Online Journal of Distance Education*, *15*(1), 166-173. Retrieved from http://files.eric.ed.gov/fulltext/EJ1043020.pdf

Tyler, R. (1949). *Basic principles of curriculum and instruction.* Chicago, IL: University of Chicago Press.

Ullucci, K. & Howard, T. (2015). Pathologizing the poor: Implications for preparing teachers to work in high-poverty schools. *Urban Education, 50*(2), 170-193. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.943.9727&rep=rep1&type=pdf

U.S. Department of Education (2015). *Every Student Succeeds Act (ESSA).* Retrieved from http://www.ed.gov/ESSA.

Vandevoort, L. G., Amrein-Beardsley, A., & Berliner, D. C. (2004). Students of National Board Certified Teachers outperform peers on national test. *Education Policy Analysis Archives, 12*(46). Retrieved from http://epaa.asu.edu/epaa/v12n46/

Venables, D. (2014). *How teachers can turn data into action.* Alexandria, VA: Association for School and Curriculum Development.

Vogler, K. (2005). Improve your verbal questioning. *The Clearing House, 79*(2), 98-103. Retrieved from http://www.jstor.org/stable/20871367

Wagner, T. (2008). *The global achievement gap: Why even our best schools don't teach the new survival skills our children need--and what we can do about it*. New York, NY: Basic Books.

Walsh, J., & Sattes, B. (2011). *Thinking through quality questioning.* Thousand Oaks, CA: Corwin Press.

Walsh, J., & Sattes, B (2015). *Questioning for classroom discussion.* Thousand Oaks, CA: Corwin Press.

Wayman, J. C., Midgley, S., & Stringfield, S. (2006). Leadership for data-based decision-making: Collaborative educator teams. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Wegner, E., & Wegner-Trayner, B. (2015). Communities of practice: A brief introduction. Retrieved from http://wenger-trayner.com/wp-content/uploads/2015/04/07-Brief-introduction-to-communities-of-practice.pdf

Weisberg, D., Sexton, S., Mulhern, J., & Keeling, D. (2009). *The widget effect: Our national failure to acknowledge and act on differences in teacher effectiveness*. Retrieved from http://widgeteffect.org/

Wiersma, W. & Jurs, S. (2009). *Research methods in education.* Boston, MA: Pearson.

Wiggins, G., & McTighe, G. (1998). *Understanding by design.* Alexandria, VA: Association of School and Curriculum Development.

Wiggins, G., & McTighe, G. (2008). Put understading first. *Educational Leadership, 65*(8)*,* 36-41. Retrieved from http://www.ascd.org/publications/educational-leadership/may08/vol65/num08/Put-Understanding-First.aspx

Willingham, D. (2009). *Why don't students like school? A cognitive scientist answers questions about how the mind works and what it means for the classroom.* San Francisco, CA: Jossey-Bass.

Wissehr, C., Concannon, J., & Barrow, L. (2011). Looking back at the Sputnik era and its impact on science education. *School Science and Mathematics, 111*(7)*,* 368-375. doi:10.1111/j.1949-8594.2011.00099.x

Ydesen, C., & Andreasen, K. (2014). Accountability practices in the history of Danish primary public education from the 1660s to the present. *Education Policy Analysis Archives, 22*(120)*,* 1-31. Retrieved from http://dx.doi.org/10.14507/epaa.v22.1618

Yoshida, R., & Strong, L. (2014). Teachers' autonomy in today's educational climate: Current perceptions from an acceptable instrument. *Educational Studies*, *50*(2)*,* 123-145. doi:10.1080/00131946.2014.880922

Zhang, H., & Yin, J. (2014). K-5 literacy education: A comparison between American Common Core Standards and Chinese national curriculum standards. *Universal Journal of Education Research 2*(7,. Retrieved from http://files.eric.ed.gov/fulltext/EJ1053970.pdf

Zhao, Y. (2012). *World Class Learners: Educating creative and entrepreneurial students.* Thousand Oaks, CA: Corwin Press.

Zollman, A. (2009). Students use graphic organizers to improve mathematical problem-solving communications. *Middle School Journal, 41*(2)*,* 4-12. Retrieved from http://files.eric.ed.gov/fulltext/EJ868542.pd

APPENDIX A

SURVEY INSTRUMENT WITH CITATIONS

This survey will be taken by building principals based upon their perceptions in the areas of curriculum, assessment, and instruction who have evaluated classroom teachers for at least one year.

Curriculum (Standards, Relevance, Purposeful Planning)

1. Our teachers were actively involved in aligning all curriculum to current standards. (Marzano, Warrick, & Sims, 2014)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

2. We have prioritized power standards to help provide focus within our curriculum. (Schmoker, 2016)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

3. We currently track our progress on each of the power standards to ensure we have a guaranteed and viable curriculum. (Marzano, Warrick, & Sims, 2014)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

4. Teachers embed 21st century skills into the curriculum. (Marten, Hill, & Lawrence, 2014)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

5. Mathematical process and literacy standards are embedded into the curriculum if applicable. (Coleman & Pimental, 2012); (National Governors Association for Best Practices, 2010)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

Assessment (Rigor, Data, Feedback)

6. Teachers instructing the same content use common assessments in order to gather data to discuss collaboratively. (Reeves, 2004)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

7. Teachers have sufficient time to ensure that their assessments are aligned to the rigor of the standards by exploring proper Depth of Knowledge levels. (Haladyna, 2006); (Marzano, Warrick, & Sims, 2014)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

8. Teachers create action plans to shape their instruction based on student data. (Anderson, Leithwood, & Strauss, 2010)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

9. Teachers spend more time and energy providing feedback than grading assessments. (Brookhart, 2008)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

10. Teachers provide quality feedback that informs students where they are in the learning process and what they need to do next. (Brookhart, 2008)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

11. Teachers are given time to analyze student data. (Venables, 2014)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

12. Teams of teachers have clear protocols to analyze data in place. (Venables, 2014).
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

Evaluation

13. Our evaluation model reflects specific behaviors and instructional practices that raise student achievement. (Marzano, 2012)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

14. Teachers are given specific strategies for development following a performance evaluation. (Weisberg, Sexton, Mulhern, & Keeling, 2009)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

15. The teacher evaluation model has a development scale with a rubric that can be used to track teacher development. (Marzano, 2012); (Kinne, Hasenbank, & Coffey, 2014)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

16. Teacher growth is recognized through the evaluation model. (Marzano, 2012)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

17. Frequent and regular feedback is given to teachers following walk-throughs or observations. (Weisberg, Sexton, Mulhern, & Keeling, 2009)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

Professional Development

18. Following an evaluation, teachers receive support on areas needed for improvement. (Weisberg, Sexton, Mulbern, & Kaeling, 2009)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

19. Teachers receive formal professional development following evaluations. (Darling-Hammond, 2012)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

20. Professional development is differentiated for teachers. (Daniels, Pirayoff, & Bessant, 2014)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

21. I have time to develop strategies for teacher growth based on the criteria in the rubric. (Derrington, 2014)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

22. Teachers are given time to reflect on their professional practice. (Blasé and Blasé, 2009)
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

Instruction (Engagement, Differentiation, Inquiry)

23. Approximately what percentage of teachers demonstrate high levels of active engagement in virtually all lessons? (Marzano, Pickering, & Hefleblower, 2011)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

24. Approximately what percentage of teachers demonstrate an exceptional ability to differentiate lessons based on the individual needs of students? (Marzano et. al., 2014); (Tomlinson, 2014)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

25. Approximately what percentage of teachers demonstrate the capacity to promote inquiry within students frequently? (Abdi, 2014) (Edwards, 2016)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

26. Approximately what percentage of the classrooms have practices in place to ensure each lesson has a clear purpose that students are aware of?
(Fisher & Frey 2011); (Fisher & Frey, 2014); and (Schmoker, 2016)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

27. Approximately what percentage of teachers connect virtually all lessons to something relevant to their students? (Fisher & Frey, 2011)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

Mindset and Instructional Leadership

28. Approximately what percentage of teachers emphasize process and effort that result in learning over an end product? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

29. Approximately what percentage of teachers seek their own professional development? (Borko, 2004)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

30. Approximately what percentage of teachers display a passion for learning while teaching? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

31. Approximately what percentage of teachers are willing to use new ideas and resources in their instruction? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

32. Approximately what percentage of teachers demonstrate that they are open to change? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

33. Approximately what percentage of teachers continually help students find a way to learn? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

34. Approximately what percentage of teachers embed into their curriculum planning opportunities for students to take risks? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

35. Approximately what percentage of teachers teach students that intelligence and ability can be developed? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

36. Approximately what percentage of teachers have high expectations for all students? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

37. Approximately what percentage of teachers attribute student learning to effort instead of family genetics? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

38. Approximately what percentage of teachers have an exceptional desire to drive student learning success? (Dweck, 2006)
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

School Year 2016-2017

1. Was the 2015-2016 your first year as principal?
   _____ Yes
   _____ No

2. Are you a principal who has at least one-year experience evaluating classroom teachers?
   _____ Yes
   _____ No

3. Describe the type of configuration that best fits your building.
   _____ Elementary only
   _____ Middle School or Junior High only
   _____ High School only
   _____ Combination of Elementary and Middle School/Junior High School
   _____ Combination of Middle School/Junior High and High School

4. Describe the socio-economic status of the students in your building.
   _____ Free and reduced lunch status of 45% or greater
   _____ Free and reduced lunch status between 35.1% and 44.99%
   _____ Free and reduced lunch status below 35%

APPENDIX B
SURVEY INSTRUMENT WITH CITATIONS

This survey will be taken by building principals based upon their perceptions in the areas of curriculum, assessment, and instruction. Participants are asked to focus their responses on the 2016-2017 school year.

Curriculum (Standards, Relevance, Purposeful Planning)

1. Our teachers were actively involved in aligning all curriculum to current standards.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

2. We have prioritized power standards to help provide focus within our curriculum.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

3. We currently track our progress on each of the power standards to ensure we have a guaranteed andviable curriculum.
2. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

4. Teachers embed 21st century skills into the curriculum.
2. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

5. Mathematical process and literacy standards are embedded into the curriculum if applicable.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

Assessment (Rigor, Data, Feedback)

6. Teachers instructing the same content use common assessments in order to gather data to discuss collaboratively.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

7. Teachers have sufficient time to ensure that their assessments are aligned to the rigor of the standards by exploring proper Depth of Knowledge levels.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

8. Teachers create action plans to shape their instruction based on student data.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

9. Teachers spend more time and energy providing feedback than grading assessments.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

10. Teachers provide quality feedback that informs students where they are in the learning process and what they need to do next.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

11. Teachers are given time to analyze student data.
1. *STRONGLY DISAGREE* ***2.*** *DISAGREE* ***3.*** *NEITHER DISAGREE NOR AGREE* ***4.*** *AGREE* ***5.*** *STRONGLY AGREE*

12. Teams of teachers have clear protocols to analyze data in place.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

Evaluation

13. Our evaluation model reflects specific behaviors and instructional practices that raise student achievement.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

14. Teachers are given specific strategies for development following a performance evaluation.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

15. The teacher evaluation model has a development scale with a rubric that can be used to track teacher development.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

16. Teacher growth is recognized through the evaluation model.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

17. Frequent and regular feedback is given to teachers following walk-throughs or observations.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

Professional Development

18. Following an evaluation, teachers receive support on areas needed for improvement.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

19. Teachers receive formal professional development following evaluations.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

20. Professional development is differentiated for teachers.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

21. I have time to develop strategies for teacher growth based on the criteria in the rubric.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

22. Teachers are given time to reflect on their professional practice.
1. *STRONGLY DISAGREE* ***2****. DISAGREE* ***3****. NEITHER DISAGREE NOR AGREE* ***4****. AGREE* ***5****. STRONGLY AGREE*

Instruction (Engagement, Differentiation, Inquiry)

23. Approximately what percentage of teachers demonstrate high levels of active engagement in virtually all lessons?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

24. Approximately what percentage of teachers demonstrate an exceptional ability to differentiate lessons based on the individual needs of students?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

25. Approximately what percentage of teachers demonstrate the capacity to promote inquiry within students frequently?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

26. Approximately what percentage of the classrooms have practices in place to ensure each lesson has a clear purpose that students are aware of?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

27. Approximately what percentage of teachers connect virtually all lessons to something relevant to their students?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

Mindset and Instructional Leadership

28. Approximately what percentage of teachers emphasize process and effort that result in learning over an end product?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

29. Approximately what percentage of teachers seek their own professional development?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

30. Approximately what percentage of teachers display a passion for learning while teaching?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

31. Approximately what percentage of teachers are willing to use new ideas and resources in their instruction?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

32. Approximately what percentage of teachers demonstrate that they are open to change?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

33. Approximately what percentage of teachers continually help students find a way to learn?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

34. Approximately what percentage of teachers embed into their curriculum planning opportunities for students to take risks?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

35. Approximately what percentage of teachers teach students that intelligence and ability can be developed?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

36. Approximately what percentage of teachers have high expectations for all students?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

37. Approximately what percentage of teachers attribute student learning to effort instead of family genetics?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

38. Approximately what percentage of teachers have an exceptional desire to drive student learning success?
1. 0-10% 2. 11-20% 3. 21-30% 4. 31-40% 5. 41-50% 6. 51-60% 7. 61-70% 8. 71-80% 9. 81-90% 10. 91-100%

School Year 2016-2017

1. Was the 2016-2017 your first year as principal?
   _____ Yes
   _____ No

2. Are you a principal who completes teacher evaluations?
   _____ Yes
   _____ No

3. Describe the type of configuration that best fits your building.
   _____ Elementary only
   _____ Middle School or Junior High only
   _____ High School only
   _____ Combination of Elementary and Middle School/Junior High School
   _____ Combination of Middle School/Junior High and High School

4. Describe the socio-economic status of the students in your building.
   _____ Free and reduced lunch status of 45% or greater
   _____ Free and reduced lunch status between 35.1% and 44.99%
   _____ Free and reduced lunch status below 35%

APPENDIX C

CONSENT TO PARTICIPATE IN RESEARCH

INSTRUCTIONAL LEADERSHIP PRACTICES THAT DEVELOP A GROWTH MINDSET AND ENHANCED PEDAGOGICAL PRACTICES AS A RESULT OF THE EVALUATION MODEL

Dear Principal,

You are invited to participate in a research study on the instructional leadership practices that develop a growth mindset and enhanced pedagogical practices as a result of the evaluation model. Any principal who has had at least one-year experience evaluating classroom teachers is invited to participate. This study is being conducted by Chrystal Street as part of a doctoral dissertation with Dr. Terry McDaniel serving as the faculty sponsor from the department of Educational Leadership at Indiana State University.

You may participate in this study by responding to the survey located at https://indstate.qualtrics.com/SE/?SID=SV_9SOsS0ULXh6ho0J. To access this survey, please click on the survey link. If you have any questions, please contact me at (812) 528-4078 or cstreet3@sycamores.indstate.edu. The survey will be available upon IRB determination.

The online survey will take about five minutes to complete. There are no known risks if you decide to participate in this research study. There are no costs to you for participating in the study. The information you provide may support the development of future courses or programing for aspiring principals or assistant principals. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits.

Risks in this study are minimized because the procedures used are consistent with sound research design and do not unnecessarily expose any participants to risk. While an internet survey cannot entirely guarantee anonymity, no IP addresses will be collected, offering you as much protection as possible. All responses will remain confidential and individuals will not be identified, all data will be reported as group data. Participation in this research is voluntary, no penalty is involved for non-participation. By completing and submitting the survey, you are voluntarily agreeing to participate. You are free to decline to answer any particular questions you do not with to answer for any reason, and you can withdraw from participation at any time (by closing the window). As no personally identifiable information will be collected for participants, once the survey is completed and submitted, the data cannot be retrieved individually, and thus, the subject at that point cannot withdraw from the research.

The login is not unique and is being used by all study participants. The purpose for the login is strictly for the purpose of limiting access to the survey to study participants. Once your survey is electronically submitted, there will be no way to identify the individual who completed the survey.

If you have any questions about this study, please contact me or Dr. Terry McDaniel by e-mail at terry.mcdaniel@indstate.edu or by phone at (812) 237-2802. If you have any questions about your rights as a research subject, you may contact the Indiana State University Institutional Review Board (IRB) by mail at 114 Erickson Hall, Terre Haute, IN 47809, by phone at (812) 237-8217, or by e-mail at irb@indstate.edu. This study was determined to be exempt from continuing review. Thank you for your efforts and assistance.

Respectfully,

Chrystal Street
Doctoral Candidate
Indiana State University
(812) 528-4078

Dr. Terry McDaniel
Dissertation Chairperson
Indiana State University
(812)237-3862

APPENDIX D

E-MAIL SOLICITATION FOR SURVEY PARTICIPATION

Subject: Survey on Growth Mindset Through the Teacher Evaluation Model

Dear Principals,

I am writing to you to request your participation in a brief survey. All principals who have had at least one-year experience and have evaluated classroom teachers are invited to participate. I am interested in identifying the instructional leadership practices that develop a growth mindset in teachers and to determine if the evaluation model will lead to enhanced pedagogical practices.

The survey is very brief and will only take about 5 minutes to complete. The survey can be assessed by clicking on the following link:
https://indstate.qualtrics.com/SE/?SID=SV_9SOsS0ULXh6ho0J

Your participation in the survey is completely voluntary and all of your responses will be kept confidential. The access code is to remove you from the list once you have completed the survey. No personally identifiable information will be associated with your responses to any reports of these data. IRB has approved this survey. Should you have any comments or questions, please feel free to contact me at cstreet3@sycamores.indstate.edu or at (812)528-4078 or my faculty sponsor, Dr. Terry McDaniel at terry.mcdaniel@indstate.edu or at (812)237.3862.

Thank you very much for your time and cooperation. Feedback from you is important and appreciated.