2016

Teachers' Perceptions of Elementary School Principals' Leadership Attributes and Their Relationship to School Effectiveness

Dyana Ontai-Machado Ontai-Machado
Walden University

Walden University

COLLEGE OF EDUCATION

This is to certify that the doctoral study by

Dyana L. Ontai-Machado

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Philip Griswold, Committee Chairperson, Education Faculty
Dr. Michael Brophy, Committee Member, Education Faculty
Dr. Valerie Schmitz, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
2016

Abstract

Teachers' Perceptions of Elementary School Principals' Leadership Attributes and Their Relationship to School Effectiveness

by

Dyana Ontai-Machado

M.Ed., University of Phoenix, 2001

BA, University of San Francisco, 1988

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

October 2016

Abstract

Schools in Hawaii are continuing to struggle with low student performance on their state's mandated test. Principal leadership has been found to have a direct impact on school effectiveness and researchers have indicated that school effectiveness can also be predicted by teachers' perceptions of principal leadership. This quantitative study was an examination of the relationships between teachers' perceptions of their principals' leadership attributes and school effectiveness as measured by the Strive HI Index in the state of Hawaii. The theoretical framework was grounded in Leithwood's core effective principal practices. A 41-item questionnaire from Colorado Education Initiative with a Cronbach's alpha of .95 was given to 124 teachers from 15 elementary schools to rate leadership attributes of the principal. Multiple regression yielded several statistically significant predictors of school effectiveness. Positive predictors were (a) level of teachers' education, (b) teachers' years of experience, (c) prioritization of structured activities, (d) development and implementation of a process to analyze data to improve student learning, and (e) building a positive school climate. The negative predictors were (a) years principal served in the school, (b) years teachers served at the school, and (c) creation of structures for distributive leadership. The outcomes provide administrators with information about the relationship between teachers' views of leadership practices and the school effectiveness index. The potential for positive social change includes raising principals' awareness of teacher perceptions of leadership practices, which may increase efforts to improve practice and ultimately school effectiveness in the study district.

Teachers' Perceptions of Elementary School Principals' Leadership Attributes and Their Relationship to School Effectiveness

by

Dyana Ontai-Machado

M.Ed., University of Phoenix, 2001

BA, University of San Francisco, 1988

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

October 2016

Dedication

This journey is dedicated to those who were by my side and sacrificed time with me so that I could complete this study. First, I dedicate this journey to my six children Tehani, Amber, Jessy, Marlie, Laine, and Kaipo. You can accomplish anything with perseverance—Pa'ahana!. I also dedicate this journey to my faithful and loving husband Mack Machado who always believed that I could finish. To my chair Philip Griswold who told me that we all have our own journey and we won't be kapukahi! I also dedicate this journey to my parents Francine and Francis Ontai. You encouraged me to love learning. Last, but surely most important, this is dedicated to my Lord and Savior Jesus Christ.

Acknowledgments

First and foremost, I thank Jesus Christ my Lord and savior for providing me the fortitude to complete this study. All glory to God, because when He guides, He provides. I also would like to thank my husband Mack who encouraged me through these many years so that I could finish. I would also like to thank my Chair, Dr. Philip Griswold. He believed and encouraged me to complete my study and without him stepping up to guide me, I would have quit. I also want to thank all of the teachers, counselors, instructional coaches, and administrators who have assisted in this study.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

U.S. schools are struggling with low student performance on their state's mandated testing. Instead of using one measurement of school effectiveness, many states have opted to use multiple measures including student achievement, teacher evaluations, student growth, and closing the achievement gap of high need students.

According to Global Competitiveness Report (Schwab, 2012), the United States was ranked 33rd out of 144 countries in the quality of health and primary education. Furthermore, the state of Hawaii ranks lower in writing, science, reading, and mathematics both fourth grade and eighth grade National Assessment of Educational Progress (NAEP) scores as compared to other states. The 2011 mathematics NAEP results for Hawaii's fourth graders average scaled score of 239 was not significantly different from the national public scale Score of 240. However, the 2011 mathematic NAEP results for eighth graders average scale score of 278 was lower than the national public average scale score of 283. In the NAEP reading context, results for both fourth -grade and eighth -grade students have been consistently lower than the National public scale score for over a decade. The 2011 NAEP 4th -grade average scale score was 214 as compared to the National public average of 220. Eighth- grade average scale score was 257 compared to the national public average of 264 (U.S. Department of Education, n.d.).

In the state of Hawaii, on the Leeward Coast on the island of Oahu is a district that historically has the lowest achieving schools within the state's public school system. However within that school district there are schools that are meeting school effectiveness by increasing proficiency on the state's mandated test. The Hawaii

Department of Education (HIDOE) recognized two principals from that area as national distinguished principal candidates. These principals structured the school day to provide professional development, classroom walkthroughs, and structured data teams. A common attribute for both of these principals was that they focused on improving the test scores (Sinco Kelleher, 2013). These principals' practices helped each school dramatically increase student achievement percentages in reading and mathematics on the Hawaii State Assessment (Hawaii Department of Education, 2012c; Hawaii Department of Education, 2012d). According to Canales, Tejeda, Delgado, and Slate (2008), teachers' perceptions of effective principals are principals who represent the group's interest and have a tolerance for uncertainty.

The State of Hawaii's school system is a centralized single district and governed by a single appointed board of education (14 members). In 2011, the official enrollment was 178,208 students (Hawaii State Department of Education, 2012). The board of education hires a superintendent of the department of education to oversee the entire state's educational system. The school system is divided into 15 complex areas (CA) and is overseen a by a complex area superintendent (CAS). Unlike most states, Hawaii's educational agencies and local educational agencies are a single entity.

The local problem stems from HIDOE identifying a lack of principal leadership as a root cause of Hawaii's failing public schools (U.S Department of Education, 2009b). Recently, changes occurred with the school effectiveness measurement system in Hawaii public schools. Where school effectiveness was once measured through No Child Left Behind (NCLB) criteria, it is now being measured through Strive HI. In 2013, the Strive

HI index became the new measurement of school effectiveness. Data from four components are used to calculate the schools Strive HI index score. These scores are based on (a) student achievement, (b) student growth, (c) college and career readiness and (d) the "achievement gap between non-high needs and high-needs students" (Hawaii State Department of Education, n.d.a, para. 7). The Strive HI index scores range from 0 to 400. The Strive HI index scores are used to place schools in recognition, continuous improvement, focus, priority, or superintendent's zone status.

The Strive HI school effectiveness measurement shifts from schools being credited for the percentage of students reaching proficiency to schools focusing on student learning for all students. Some students will make gains on the mandated test but will not be proficient. Strive HI takes into account the tested students' gains and gives the school credit for those gains under the student growth measurement.

As a system, the Hawaii Department of Education (HIDOE) competed and was awarded $75,000,000 in Race to the Top (RTTT) funding. HIDOE assured improvement in four areas. First, HIDOE adopted the common core standards and assessments to prepare students to be college and career ready in order to compete in the global economy. Second, HIDOE committed to building a data system that may be used to measure teacher effectiveness through the student-growth model. Third, HIDOE "recruits, develops, and rewards effective teachers and principals" (U.S. Department of Education, 2011, para. 13). Last, HIDOE focused on turning around the states chronically lowest-performing schools (U.S. Department of Education, 2010; Hawaii State Department of Education, 2012a). The RTTT monetary award assisted HIDOE in

accelerating systems such as the educator effectiveness system (EES), data teams, instructional coaching, measuring school effectiveness through student growth percentiles, and closing the achievement "gap between high-needs students and non-high-needs students" (Hawaii State Department of Education, n.d.a, para. 7).

The goal of NCLB was that all U.S. students be 100% proficient in mathematics and reading as assessed through states' high-stake testing by the 2014 school year. Throughout the nation, many states still struggle to meet federally mandated criteria of annual yearly progress (AYP). Research suggested that educators and policymakers focus on ways that schools can successfully turn around chronically low- performing schools (Ferguson, Hackman, Hanna, & Ballentine, 2009; Leithwood, Harris, & Strauss, 2010; Kutash, Nico, Gorin, Rahmatullah, Tallant, 2010; Murphy, 2009a). The reauthorization of elementary and secondary education act focused on policies to turnaround the nation's lowest performing schools (U.S. Department of Education, 2010). However, the field of school turn around is in its early stage of understanding the specific practices of what is working (Kutash et al., 2010).

Calkins, Guenther, Belfore, and Lash (2007) defined school turn around as a dramatic change in the school that produced significant sustained student achievement gains in a short period. Turn around schools are (a) more than 20 % of the students fail to meet state standards of proficiency on reading or mathematics over two or more years, and (b) schools that showed substantial gains in student achievement within three years (Herman, Dawson, Dee, Greene, Maynard, Redding, & Darwin, 2008). School turn around is much more difficult to achieve than school improvement because turn around

schools are often those that are chronically low performing. Calkins et al. (2007) suggested acknowledgement of school turn around "as a distinct professional discipline that requires special experiences, training, and support" (p. 4). As part of comprehensive school turn around, Calkins et al. suggested that states designate a zone for failing schools that control and targets resources specifically for the zone.

Background

On September 6, 2012, HIDOE submitted an application for Elementary and Secondary Education Act (ESEA) flexibility waiver with the U.S. Department of Education (USDOE). Forty-five states requested ESEA flexibility and 34 states received ESEA flexibility (U.S. Department of Education, 2013b). HIDOE was granted a flexibility waiver in 2013 that included multiple measures to assess school performance. Hawaii's ESEA flexibility waiver's primary purpose in replacing NCLB's school accountability system was based on three principles: college and career ready expectations for all students; state developed differentiated recognition, accountability and support; and, supporting effective instruction and leadership" (Hawaii State Department of Education, 2012, p.2).

Unlike NCLB measurements that are solely based on proficiency in reading and mathematics, Strive HI includes various measurements to evaluate school effectiveness (Hawaii State Department of Education, n.d.a). Abbate (2010) suggested that educators need autonomy to build a culture that allows them to be innovative to pursue excellence and improve student learning without mandates and punishment. The state of Hawaii's intent of using Strive HI as a measurement of school effectiveness is to move away from

federal mandates and punishments to gain autonomy and empower schools to become innovative and pursue educational excellence.

Strive H is used to measure school effectiveness based on 25% student achievement (uses the state's high-stake assessment in reading and mathematics), student growth percentiles, college and career readiness (different criteria for each level), and closing the achievement gap. HIDOE's intent in applying for flexibility from ESEA was to redefine school accountability to support schools, educators and students (Hawaii State Department of Education, 2012).

As part of the new Strive HI school accountability and improvement system, the educator effectiveness system (EES) was developed. The EES is designed to use various measures to determine teachers' effectiveness: (a) core professionalism, (b) classroom observations, (c) tripod survey, (d) student growth model, and (e) student learning objectives. Nonclassroom teachers need to provide a working portfolio instead of classroom observations as part of their evaluation. The classroom observation and tripod survey (a survey that students take on their teacher) is designed to provide feedback and reflective conversations about instructional practices. Teachers' instructional practices are evaluated using a rating system: highly effective, effective, marginal, and unsatisfactory. In school year 2014-2015, teachers who were rated effective or highly effective received a pay increase. As part of this new teacher evaluation system, there is a need for administrators to understand pedagogy and curriculum.

HIDOE also implemented an evaluation system for principals in the 2013-2014 school year called the comprehensive evaluation system for school dministrators

(CESSA) . The role of the principal shifted from operational and managerial matters to instructional leader. To be rated as an effective, principals must show data to support that improvement was made in the targeted areas (a) achievement, (b) student growth percentiles, (c) college readiness, and (d) reduction of the achievement gap between high need students and non-high need students . The Wallace Foundation (2013) summarized five functions of effective principals as (a) shaping the vision of academic success for all school; (b) creating a climate hospitable to education; (c) cultivating leadership in others; (d) improving instruction, and;(e) managing people, data and processes to foster school improvement. Even though these specific functions are not mentioned in the CESSA, these functions are the foundation of effective principal leadership.

As part of HIDOE reform, the state joined 45 other states and the District of Colombia in adopting common core state standards (CCSS). The rationale of CCSS is to ensure that students in the U.S are college and career ready. College eligible and college ready differ in meaning. College eligible means a student meets the entrance criteria but may not have the skills to complete a degree. According to the Center for Postsecondary Success (2012), many students are eligible for college however many of them are not college ready. College ready means that students have the skill to succeed.

Reform efforts to close the achievement gap focused on school turn around for 5000 of the nation's lowest performing schools. Many of these schools are in the poorest communities. Turn around is an approach that the USDOE implemented to address chronically low-performing schools and has gained acceptance as a discipline of improving school systems (Kutash et al. 2010). In Hawaii, there are 86 schools under the

former accountability and improvement system NCLB restructuring status. Restructuring schools did not make AYP for 5 consecutive years as measured by the proficiency percentiles on the state's high-stake assessment. The new Strive HI accountability school improvement system has been in effect for almost two school years. There is not sufficient data to determine the effectiveness of this new accountability system.

The problem addressed in this study involved examining principal leadership attributes in elementary school levels. College completion rates over the past 30 years have not increased and will leave the United States short of 25 million college graduates. According to Carnevale, Smith and Strohl (2010), 65% of the job market in Hawaii by 2018 will require postsecondary education. Educational needs both nationally and locally indicate an imperative to examine what is working in schools and implementing those strategies to improve student learning. Many researchers concluded that the classroom teacher has the most influence on student learning and preparing the student for post-secondary career or college (Leithwood & Riehl, 2003). Moreover, leadership in the school plays the second most important role to ensure and promote student learning and college readiness (Leithwood et al. 2004).

Problem Statement

Across the United States, there are a small number of schools that serve high-poverty populations that achieved and sustained high academic performance (Calkins et al. 2007). These schools had an effective principal who had the ability to transform student outcomes from various demographics. Literature provides an understanding of effective principal practices (Leithwood et al., 2004; Marzano et al., 2005). However,

education reform evolved over the past 40 years and the principal's role has changed from a manager of operations to a charismatic motivator, and instructional leader (Marzano et al., 2004). Education reform efforts indicated that a principal's effectiveness is second only to teacher effectiveness when it relates to school effectiveness. Federal, state and district accountability of measuring teacher effectiveness has now become the role of the principal. The principal provides oversight and meaningful conversations to improve instructional practices. These changes in principal responsibility require new skills and attributes for school effectiveness. In 2009, the HIDOE school improvement grant application indicated that principal leadership was a root cause for failing schools (U.S Department of Education, 2009b). This school improvement grant application evolved into reforming teachers and leaders' evaluation system to improve student learning. As a part of that, effective principal practices became a focus.

The teacher evaluation system in Hawaii is called the educator effectiveness system (EES) and consists of (a) classroom observation, (b) core professionalism (includes a tripod survey), (c) student learning outcomes (SLO) and, (d) student growth percentile. As part of the classroom observation process, the teacher meets with the administrator (principal or vice principal) for a pre-meeting and follows up the observation with a post meeting. The establishment of the teacher evaluation required principals to have new skills including instructional practices, mentoring teachers and being an instructional coach (Childress, 2014). Administrators need to understand pedagogy and curriculum to provide meaningful feedback for teacher improvement. Teacher evaluations require the principal to model effective instructional strategies or

provide support to improve instructional strategies. Therefore, the principal's role as an instructional coach and mentor include the necessary skills to improve student learning.

This study addressed how teachers' perceptions of principal leadership attributes are associated with school effectiveness. The teachers' perceptions of nine principal leader attributes may be associated with student learning and overall school effectiveness. Principal leadership has a direct influence on teachers' instructional practices by providing data-driven collaboration time and content or skill specific professional development. Measuring the teachers' perceptions of these influences may indicate an association with the nine attributes and school effectiveness

Chenoweth and Theokas (2012) argued that principals are the catalyst to changing low-performing schools into high-performing ones. Currently, 41 states require or recommend teacher evaluation using multiple measures of teacher performance (Hull, 2013). Principal leadership can influence teachers to improve their instructional practices and display certain behaviors and attributes that ensure academic and student success.

Researchers have not documented occurrences of low-performing schools making significant improvement without a strong principal leader (Leithwood et al., 2004). Furthermore, school leadership accounts for 25 percent of school success. Lashway (2002) identified principals in chronically low-performing schools as having inadequate training, lacking leadership abilities, and having poor leadership abilities. U.S funding is focused on improving school outcomes by "providing an effective teacher in every classroom and an effective principal in every school" (U.S. Department of Education, 2009b, p. 3).

The U.S. Department of Education (2009) encouraged states to enact a turn around model through its RTTT and other federally funded programs. The following are theories of action to turn around chronically low-performing school:

> (a) Turn around Model, the principal is replaced with no more than 50% of the staff being rehired and adopt new governance structure and implement research-based vertically aligned instructional program, (b) Restart Model in which the control of the school is transferred and reopened under a School Management Organization, (c) School Closure in which the school will be closed and students are enrolled in high-achieving schools, and (d) Transformation Model in which the school adopts and implements a comprehensive school reform model which may replace principal and staff (Kutash et al, 2010, pp. 4-5).

HIDOE (2012) also addressed turning around chronically low-performing schools in the state through RTTT goals. The overall goals are to:

> raise K-12 student achievement, ensure college-and-career readiness, increase higher education enrollment and completion rates, ensure equity and effectiveness by closing achievement gaps, and emphasize Science, Technology, Engineering, and Mathematics (STEM) competencies essential for college and career success" (Hawaii State Department of Education, 2010, pp.1-2).

Comprehensive reform of the Hawaii public school system was achieved through the support of RTTT funding. The framework of HIDOE reform focused on adopting rigorous standards and assessments that prepare students to be college or career ready. Second, HIDOE builds data systems to improve instructional practices. Third, recruiting,

developing, and rewarding effective principals and teachers. Last, the turning around the lowest performing schools (USDOE, 2013a).

Similar to the EES, the CESSA evaluates principal leadership practices based on student and measurable school outcomes. The CESSA is used to rate each principal on a five-point scale. The six domains are: (a) student growth and learning, (b) professional growth and learning, (c) school planning and progress, (d) school culture, (e) professional qualities and instructional leadership, and (f) stakeholder support and engagement" (National Association of Elementary Principals, 2012). Half of the rating is based on Domain 1: student outcomes and the other half is based on Domains 2 through 6 which are based on principal leadership practices (Hawaii Department of Education, 2013). Principals can receive a rating of highly effective, meets, or does not meet.

HIDOE reform efforts link to USDOE reform efforts through the funding vehicles like RTTT and other U.S funding sources. The focus on principal leadership as a catalyst for school turn around focuses on measurable accountability. The Strive HI school effectiveness index continued the HIDOE RTTT scope of work that focused on providing the lowest performing schools with external supports. The Strive HI index focused supports on schools that were designated as focused, priority, and superintendent zone. The superintendent zone looked similar to that of RTTT Zone of School innovation. However, during the RTTT, the zones of school innovation (ZSI) were located in the Nanakuli-Waianae complex on the island of Oahu and the Ka'u-Kea'au-Pahoa (KKP)(Hawaii State Department of Education, n.d.b) complex on the island of Hawaii. These schools are located in rural or remote areas that are hard-to-staff. Like many

schools in the nation, these schools serve an economically-disadvantaged population as indicated by the percentage of students receiving free/reduced lunch program assistance.

The state of Hawaii received a waiver in 2013 from the United States Department of Education so that the state could measure school effectiveness in ways that are relevant to the state's stakeholders (i.e. lawmakers, teachers, administrators, and parents). According to the NCLB status 2012-2013, over half of the schools in the state did not meet the criteria of adequate yearly progress. However, there has been success in some of Hawaii's schools that serve students from low-income families, English as a second language learners or students with disabilities resulting from the leadership effective principals. This problem may be addressed through the examination of what teachers think about their principal leadership practices and the way they impact school effectiveness. Conducting a study to examine teachers' perceptions of their principals' leadership attributes at the local level is needed to address school effectiveness.

Rationale

Currently, schools in need of transformational improvement need skilled principals. Steiner and Hassel (2011) concluded that there is not a pool of skilled administrators to lead effective school turn around. In the state of Hawaii, like many other states, a focus on improving principal effectiveness is at the core of improving school effectiveness. In a school improvement grant application, the Hawaii Department of Education indicated that principal leadership was the root cause of failing schools in Hawaii (U.S Department of Education, 2009b).

In this study, the Strive HI measurement was used to determine school effectiveness. Prior to the implementation of Strive HI in the school year 2013-2014, NCLB measurement of school effectiveness was used to determine school effectiveness. Schools were considered to be effective if they made adequate yearly progress (AYP) through mandated state assessment proficiency scores. AYP scores would determine the school's NCLB status. HIDOE schools NCLB status was identified as in good standing, unconditional, in good standing, pending, corrective action, and restructuring. The school's status would be measured according to the annual measurable outcomes set by the NCLB for the tested year. In 2011-2012, 139 HIDOE schools (49%) met AYP out of 286. Data also indicated that 51% did not meet AYP.

Disadvantaged schools compared to schools that were considered non-high needs were disaggregated into Title I and non-Title I status. This provided insight into schools that served a larger number of socioeconomically disadvantaged students compared to those schools that do not serve socioeconomically disadvantaged populations. Title I schools are identified with 40% or more students qualifying for the free and reduced lunch program (qualifying percentages changed in school year 2012-2013 to 47%). In the school year 2011-2012, 89 schools out of 197 Title 1 schools met AYP. Schools that served disadvantaged students showed that 45% met AYP. In comparison, 55% of schools that served disadvantage students did not meet AYP. Non-Title 1 schools results in 2011-2012 were 39 schools out of 58 schools met AYP (67%) compared to 33% of non-Title I schools that did not meet AYP (Hawaii Department of Education, 2013a). The data also showed improvement in the era of NCLB. For example, mathematics

proficiency in 2005 was 24% statewide and in 2012 it was 60%. Reading proficiency in 2005 was 47% and in 2012 it was 71%. In an era of accountability and measurable outcomes, Hawaii has raised proficiency in both mathematics and reading.

There have been statewide improvements on student proficiency as measured through NCLB school effectiveness; however, many of the socioeconomically disadvantaged schools continued to struggle to meet proficiency. Under the Strive HI index the same schools were categorized as in continuous improvement due to student growth percentile. Schools were given credit for student learning rather than student proficiency.

Under the new Strive HI index, some schools that met NCLB status based on proficiency are now rated as a focus school (Hawaii Department of Education, 2014). Strive HI no longer define progress as proficiency scores but now includes student growth, attendance, and closing the gap among students from low-income families, English language learners, or students with disabilities. This shift of measuring school effectiveness also requires principals to shift focus to all students. The NCLB era, principals focused on student proficiency rather than student learning. A common practice in Hawaii schools was to focus on students who were close to proficiency to improve school effectiveness score. Today, under Strive HI, principal's leadership practices must address all students to show school effectiveness

Research Question and Hypotheses

U.S. funding focused on raising student achievement for all students. NCLB implementation required states to develop and implement student assessments to measure

student proficiency on state standards. Through the reauthorization of the secondary and elementary act, U.S. funding was made available to improve teacher and principal efficacy. RTTT funds were awarded to HIDOE in 2010 as a four year grant. RTTT funds were to ensure that every classroom had an effective teacher, and every school had an effective principal. The RTTT accelerated necessary change to the system to implement teacher and principal evaluations. As part of receiving RTTT funds, HIDOE identified the "state's lowest performing schools and placed those schools in the zone of innovation (ZSI)" (Hawaii State Department of Education, 2010, p. 5). The ZSI schools received targeted resources learning time that included professional development for teachers and administrators, updated technological resources, and extended learning time for students. Another component of HIDOE reformation consisted of obtaining a waiver from NCLB requirements that measured school effectiveness. In 2013, Strive HI replaced NCLB measurement of school effectiveness.

In this study, the Strive HI measurement of school effectiveness was used instead of NCLB status because HIDOE implemented a new school effectiveness index in 2013. Strive HI index consists of the following categories: (a) student proficiency as measured by the Hawaii State Assessment; (b) student growth percentile; (c) readiness (in elementary schools it is a measurement of chronic absenteeism) and; (d) reduction of the achievement gap between high-need students and non-high-need students. A school score will place them in the following categories: (a) recognition (top 5% of the schools), (b) continuous improvement (75-85% of schools), (c) focus (next lowest 10% of schools), (d) priority (lowest 5% of schools) and, (e) superintendent zone (deputy superintendent

designates a subset of priority schools). Principal “leadership is second only to the classroom teacher in impacting student learning” (Leithwood et al. 2004, p. 4). This researcher examined how principal leadership is related to school effectiveness as measured by the new Strive HI measurement of school effectiveness

Research Question

The following research question guided this study:

What principal leadership attributes did teachers associate with school effectiveness, as measured by Hawaii’s Strive HI index?

The association of certain principal leadership attributes as perceived by teachers may lead to how to address the four areas of the Strive HI school effectiveness measurement. Data from the teacher perception survey measured teachers’ perception of their principals’ leadership attributes. Since the implementation of the Strive HI school effectiveness measurement, principals need to shift focus on percentage of student proficiency to achievement of all students, attendance, student growth, and closing the achievement gap. Understanding teacher perception of the principal leadership attributes its association with Strive HI score will assist principals in the shifting their focus for all students. Finally, the collection of teacher perception of the attributes and association to Strive HI index may be used to predict future Strive HI results.

Hypotheses

For this quantitative study, the previous research question was tested with the following null and alternative hypotheses. The dependent variable is school effectiveness as measured by the Strive HI index in the school year 2014-2015. The Strive HI index is

a new Hawaii Department of Education measurement of school effectiveness. Schools scores are based on scale from 0-400 points. The predictor variables were teachers' perceptions of nine attributes. The hypothesis for RQ1 is the following:

H_0: There is no relationship between one or more of teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

H_a: There is a relationship between one or more teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

In this era of accountability of using student learning as the measure of school effectiveness, principals' responsibilities have grown to ensure that every child learns. Federal funding such as Race to the Top (RTTT) and school improvement grants (SIG) encouraged schools throughout the nation to turn around their chronically lowest performing schools. Effective school leadership directly related to teacher effectiveness and student learning. Schools that do not have effective leadership is due to the lack of supports for effective leadership (Darling-Hammond et al. 2010).

Theoretical Foundation

Effective Organizational Practices

In effective schools, the principal has created a clear vision and direction focused on student learning (Kurland, Peretz, &Hertz-Lazarowitz, 2010). The practice of having a clear understandable vision for school success facilitates school's stakeholders to move toward the vision (Fullan, 2003. The vision of the school provides a clear direction that

all work within the school attempts to obtain. Gurr, Drysdale, & Goode (2010) identified that principals who can communicate a clear and meaningful school vision are more successful in improving student outcomes by having an indirect impact on student learning. In the same study, a principal demonstrated an indirect form of instructional leadership by improving teachers' instructional practices through professional development and a clear communicated school-wide vision. Principals also have direct impact on student learning by modeling effective instructional practices (Gurr et al. 2010). Furthermore, challenging contextual conditions related to principals' leadership practices (Goldring, Huff, May, & Cambrum, 2008). Goldring et al. determined that the context of the school was a predictor of whether a principal was an eclectic, instructional or student leader and not individual attributes. However, Grissom and Loeb (2011) factor analysis of surveys done by principals, assistant principals, parents, and teachers determined that organizational management skills as a key predictor of student achievement growth. Grissom and Loeb argued that organizational management skills complement and support the focus on curriculum and instruction.

Louis et al.' (2010) study concluded that redesigning the organization is a core principal practice. To meet the system needs of the faculty and students, principals structure the school day to balance instructional time and dedicated time for dialogue, discussion, and professional development. Embedded in this core effective principal practice are the practices of: "(a) building a culture of collaboration; (b) restructuring the school structure to support collaboration; (c) building productive relationships with families; and (d) connecting with the wider community"(Louis et al, 2010, p 65). A

critical key component in redesigning the organization is the building of trust amongst the school's stakeholders in order to introduce change.

Cosner (2009) explored the impact of teachers' perception of trusting the principal and building school capacity. In her study, 10 out of the 11 principals interviewed mentioned that building trust was a critical practice of leadership. Summarizing Cosner's study, principals' practices that built trust amongst the teachers and principals were: increased department meeting time, created new interaction structure, setting and enforcing norms, and strengthening response to interpersonal conflict. Every interaction between the principal and teacher is an opportunity to build or destroy trust (Cosner, 2009). In the principal's practice of building a positive school climate and restructuring the organization to provide more collaboration between teachers, trust must be built in order to build capacity. The importance of trust may be overlooked by some principals.

In addition, Tschannen-Moran (2009) concluded that in order to foster teacher professionalism in schools there must be trust among various school stakeholders. Tschannen-Moran found that the amount of teacher professionalism was connected to the trust the teacher had of their principal. Principals that develop teacher professionalism "adopt practices that lead to strong trust between school leaders, students, and parents (p.218)". As a result, those principals that developed teacher professionalism also developed trust throughout the school culture. Principals built trust by structuring the school day to include time for teacher collaboration and articulation, provide peer coaching, and ensure effective means of communication between all stakeholders.

Principals that develop trust amongst their faculty can build on creating a positive school climate and one of professionalism (Mendels, 2012). School transformation focused on professional development that teachers received and often principals are not perceived as co-learners with teachers (Yager, Pedersen, Yager, & Noppe, 2012). It is clear from research (Louis, Leithwood, Wahlstrom, & Anderson, 2010) that in order for school turn around to occur and effectively close the achievement gap for all students, a working partnership must be in place between principal with teachers and teacher with other teachers. Moreover, Marzano et al. (2005) affirmed that it is impossible for one person to be proficient in all responsibilities. Therefore, effective principal leaders craft purposeful communities that support the 21 principal responsibilities by building a collaborative climate and professional learning communities that cannot be accomplished without trust.

As part of utilizing data, effective leadership practices include building teacher leadership teams and creating collaboration in order to utilize the data to assist in the decisions concerning student achievement. This collaboration utilized data that indicated student academic performance and assisted in identifying supports and interventions either for the teacher or student. The collaboration provided teachers within the leadership teams to reflect on instructional practices. These data provide the principal evidence of teaching and student learning. Schools that collaborate and focus on instruction are schools that make the most improvement (Allensworth, 2012). Furthermore, Mendels (2012) continued to suggest that principals do not lose influence when others gain influence. Teachers taking on leadership roles, providing instructional

expertise, and collaborating has shown higher student achievement than schools that teachers work individually (Louis et al. 2010).

Set High Expectations

An effective principal set the high expectations of using data to drive instructional decisions that lead to improved student performance (Mean, Padilla, DeBarger, & Bakia, 2009). Principal leaders find value in the use data to clarify decisions, identify problems and solutions, and target school's resources (Protheroe, 2010). Currently there are no easy answers in closing the achievement gap (Murphy, 2009b) however, schools that are high-performing have an effective plan on the way to use data (Van Barneveld, 2008).

Principals that collaborate with teachers to identify the type of and have an effective data plan are successful in improving student achievement (Van Barneveld, 2008; Protheroe, 2010). Some types of data used in effective school are (a) student achievement data, (b) student attendance/behavior, and (c) contextual information (i.e. ethnicity and socioeconomic status). These data are used to develop a plan of action to improve student performance. The principal practice of supporting the process of effective data analysis is crucial in developing collaboration amongst teachers (Protheroe, 2010). Student achievement, attendance, and other contextual data can be used to identify the group and individual needs of the student. Effective principals understand data and ways to use it to create collaborative environment to improve instructional practices and student outcomes (Mendels, 2012).

Teacher Development

Effective principals do not get the job done alone. They cultivate the knowledge and skills of the faculty (Mendels, 2012). Principals' practice that develops teachers is to "provide professional development, create structures and opportunities to collaborate, and monitor teacher's work in the classroom (Louis et al. 2010, p. 71)". The primary goal of developing teachers is to build capacity of effective instruction and at the core is student learning. Graczewski (2009) stated that in order to improve student achievement, the practices of the adults needed to improve. An idea of improving student outcomes cannot be achieved without improving instructional practices and developing the teacher through purposeful professional development is needed. The continual move towards student improvement begins with the efficacy of the teacher. The principal has influence by providing support to teacher development. A focus on instructional quality in the classroom is a key practice of an effective instructional leader (Mendels, 2012). Kochan, Kraska, and Reames (2011) examined professional development and student achievement in high poverty schools and found that professional development for teachers was most effective when they had an effective principal in the lead. Effective principals provided high quality professional development and communicated the benefits to the school community. Teachers gained an understanding of the importance of improving their instructional practices based ongoing support. Teachers were able to modify their practices by becoming masters of a new practice (Mendel, 2012).

In many school's professional development is focused on teacher development and not principals. However, in schools that the principals are co-learner, there is an

increase in teacher engagement (Yager, Pedersen, Yager, & Noppe, 2011). Studies have shown (Ferguson et al. 2009; Louis et al. 2010) that in order for school turn around to occur, an effective working partnership must be in place between principal with teachers and teacher with other teachers. Yager et al. suggested that principal leadership role as a co-learner during professional development is a crucial role. Teachers perceive that the principal is "in it" with them and builds trust to move forward. Another finding of Yager et al. work was that a teacher leadership team is a critical support mechanism for teacher development.

Principals that provide the adequate time for professional growth were also rated to be effective (Yager et al. 2012). These practices are similar to the ones Louis et al. examined in their study. Principals need to be an active participant in professional development and developing leaders, building trust, and structuring the organization in order to improve student learning. Moreover, principals need to focus on instruction.

Teacher Evaluation

Teacher evaluations have changed through the landscape of education. There is a need to seek evaluations that are meaningful and actionable for both teacher and administrator (Marzano & Toth, 2013). One concern of teacher evaluation was that it did not address quality of instruction and measured against student learning (Toch & Rothman, 2008).

Danielson (2011) asserted that a good system must to be implemented in order to conduct meaningful teacher evaluations. Characteristics of poor teacher evaluations are checklist, untrained evaluator, lack of differentiation, lack of consistency, and lack of

professional conversation. Tools that show greater success in measuring and improving teacher are those that examine teachers' practices in relation to professional teaching standards (Darling-Hammond, Amrein-Beardsley, Haertel, & Rothstein, 2012). The Council of Chief State School Officers developed a set of core teaching standards that outline what teachers should know and do to ensure that every student can be college and career ready (Assessment, I.T., & Support Consortium, 2011). These model standards are (a) learner development; (b) learning differences; (c) learning environment; (d) content knowledge; (e) application of content; (f) assessment; (g) planning for instruction; (h) instructional strategies; (i) professional learning and ethical practice, and; (j) leadership and collaboration. These standards are similar to Danielson's (2007) framework for effective teaching.

Effective teacher evaluation systems to ensure teacher quality is to have a consistent definition of good teaching, shared understanding of the definition, and skilled evaluators (Danielson, 2011). The purpose of teacher evaluations is to also promote professional development with the understanding that teaching is hard and that it can always be improved. Feedback is found to by Hattie (2009) to have an effect size of .72 when teachers provide it to students. Constructive and specific feedback given during an evaluation will assist teachers to improve their instructional practices. Childress (2014) described that teacher evaluation is a tool to indirectly improve teachers' instructional practice. The principal's influence on teachers is using the evaluation tool as a means to provide meaningful feedback, mentoring, and coaching. One of the challenges of teacher

evaluations is that principals need support to implement meaningful evaluations. One of the components required to be an effective evaluator is being an instructional coach.

Instructional Coaching

Instructional coaching to improve teacher efficacy in the classroom resulted in improved student outcomes. Shidler (2008) study identified a linkage between time spent coaching teachers in the classroom and student outcomes. In the first year of the study, teachers who were coached showed a significant correlation in improved student outcomes. The study found that effective instructional coaching components are (a) provide content specific coaching; (b) provide modeling of the instructional strategies; (c) observe teacher teaching, and (d) discuss and reflect with teacher to refine instructional practices.

Ikemoto et al. (2014) suggested that principal leaders provide meaningful feedback, mentoring, and instructional coaching to improve teacher instructional practices. This skill entails that principals understand research-based best instructional practices that provide rigor and relevance to college and career readiness.

Nature of the Study

In this quantitative study, I employed multiple regression design where the Strive HI score was the dependent variable and the predictors were the nine principal attributes along with four demographical statements. The data was collected using Teachers Perception of Principal Attributes Questionnaire (Appendix D). Fifty-Eight schools were identified and eighteen schools participated. One school had principal movement prior to their participation. The schools data were included in testing the hypotheses,

Anonymous surveys were administered to 124 teachers. The survey was available through a Google link. The following were the statistical test done to determine an association of teachers' perceptions of principal leadership attributes and the Strive HI score (a) descriptive analysis, (b) seven predictor regression model, (c) regression model parameters of Strive HI index on eight predictors, (d) correlation prediction (Appendix H), (e) test of normality of residuals (Appendix H), (f) model summary (Appendix J), and (g) ANOVA (appendix J). ANOVA showed no significant difference between the mean of the predictors.

The results of this study will add to the body of literature regarding teachers' perceptions of principal leadership attributes and the association to school effectiveness. Context of schools may be a condition of school success, for example, student demographics, parent involvement, and socioeconomic conditions of the families in attendance may be factors of school effectiveness. However, research shows that high-poverty schools have been successful with the principal leadership as a catalyst for change. In these schools, the principal structured the day to provide time for student data analysis that drove instructional improvement. This study examines the attributes of the turn around principals and how it is related to school effectiveness in schools that vary in its student population and socioeconomic status. This study will include schools that serve high-poverty and high-minority populations as well as schools that serve non-high-poverty and low-minority student populations.

Examining principal role in school effectiveness is a complex matter because every organization is different. Each organization has extra-and intra organizational

processes that represent a challenge when looking for causal relationships (Nettles & Herrington, 2007). The importance of principal leadership practice has direct influence on school-level effects (Hallinger & Heck, 1996). The significance of the study to be conducted is to examine teachers' perceptions of research-based effective principal attributes and to find any association to school effectiveness. This research is new in the examination of effective principal attributes because it uses a new school accountability and improvement measurement and addresses the evaluation movement across the United States.

Definitions

Adequate Yearly Progress (AYP): Measures progress to meet the State's student academic achievement standards and narrowing the achievement gap (NCLB, 2002).

Comprehensive Evaluation System for School Administrators (CESSA): The State of Hawaii's Department of Education implemented a principal/vice principal evaluation protocol based on six domains. These domains are "(a) Student Growth and Learning, (b) Professional Growth and Learning, (c) School Planning and Progress, (d) School Culture, (e) Professional Qualities and Instructional Leadership, and (f) Stakeholder Support and Engagement. The evaluation is weighted half on Student Outcomes (Domain one) and half on Principal Practice (Domains 2-6)" (Hawaii Department of Education, 2013b, para 5)

Data Teams: Team consisting of teachers either in the same grade level (horizontal) or instructs the same subject from different grade levels meet at a scheduled and structured time to examine student work data.

Data Team Process: Includes collection of data, analyze data, establish goals, select instructional strategy, determine results indicator, and monitor results.

Educator Effectiveness System (EES): Hawaii's Department of Education implemented an educator effectiveness system to evaluate teachers' effectiveness. Ratings range from Highly Effective, Effective, Satisfactory, and Marginal. EES measures are: (a) core professionalism; (b) classroom observations/working portfolios; (c) student growth, and; (d) student learning objectives/school-system improvement objectives (Hawaii Department of Education, 2013a).

Instructional Leadership: Principal leader that is deeply involved in "setting student achievement goals, allocating resources to instruction, knowledgeable in curriculum, monitors teachers' lesson plans and evaluates teachers" (Jenkins, 2009, p. 35).

Set Direction: Setting direction of the organization is often confused with the school's vision. However, setting the direction is providing the big picture of the purpose of the organization. It is the meaning for the work and focus the work of the organization to produce successful results.

Strive HI index: New school accountability and improvement measurements implemented in school year 2014-2015. Measurements include student achievement, student growth, college and career readiness, and closure of the achievement gap between high-needs and non-high-needs students.

*Student Achievement: S*tudent proficiency as measured by State Assessment that is used as a measure in determining school effectiveness index of Strive HI for 2013.

Teacher Perceptions: Teacher perceptions are the personal view of the individual teacher about school and classroom conditions (Leithwood & Jantzi, 2008).

Transformational Leadership: Principal leader that effectively establish a climate that inspires others to a higher level of performance (Kirby, Paradise, & King, 1992).

Turn around Schools: Is a term used to describe a dramatic change in the school that produced significant student achievement gains in a short period of time that is sustained. Also turn around schools meet the following criteria, (a) more than 20 % of the students failed to meet state standards of proficiency on reading and mathematics over two or more years prior to gains, and (b) schools that showed substantial gains in student achievement as measured by the state's high-stake assessments in reading and mathematics within three years (Calkins et al. 2007; Herman et al. 2008).

Assumptions

The assumption for this study is participants are honest. This study also assumes that there was no principal movement from the time information is collected and to when the survey is administered.

Limitations and Threat to Validity

The limitations of this study would be the number of principals that respond to the invitation to participate in this study and asking their staff to voluntarily participate. A threat to validity is not having a valid amount of participants from differing schools and teachers that participate to complete the survey instrument. Moreover, the number of schools that would participate in this study was limited to the number of voluntary responses from principals and also teachers.

This study is limited to elementary schools with a principal in place for a minimum of 5 years. Additionally, the population is limited to elementary schools on the island of Oahu in the state of Hawaii. The survey is limited to participation of those who are identified as teachers, counselors, student service coordinators, instructional coaches, curriculum coordinators, and technology coordinators

Scope and Delimitations

This study will focus only on the island of Oahu. Outer island schools will not be used due to its location and accessibility to the researcher. The scope of the study is focused on elementary schools on the island of Oahu. The researcher acknowledge that structure of secondary schools differ from that of an elementary school. The departmentalization of content in the secondary school setting is another attribute to be considered for another study. Therefore, secondary schools are delimited from this study. Also, elementary schools on the outer islands are delimited. Finally, the school this researcher is the administrator at is also delimited due to unforeseen risk factors to teachers that I am the administrator.

Significance

This quantitative study is to investigate the relationship between teacher's perceptions of principal attributes and the relationship to school effectiveness. Teacher effectiveness is a key factor in the education of students. Moreover, principals have an indirect impact on student learning through the way that they lead school improvement efforts and their influence on teachers. The context of education is rapidly changing and responsibilities, skills, and attributes principals' practice and the association to school

effectiveness needs to be continually examined. Possible significance of this study will provide data to identify areas of professional development needs in a school. It may also lead to the structuring of instructional and collaboration minutes within the school day. In the era of teacher evaluation, principals need professional development in order to strengthen feedback, mentoring, and coaching skills. This support would also include a roadmap on how to provide time for teachers to articulate students' learning needs by analyzing student data within the school day structure and providing structured articulation.

Leadership traits, styles, and behaviors and practices have been studied for over 30 years. Intrinsically, leadership may be understood as a key factor and motivator for successful outcomes. The literature review revealed that there is an established understanding that the principal leader is the second most important factor in improving student learning with the first being the classroom teacher. The literature review also provided national evidence of principals turning around low-performing schools and dramatically increased student learning; however there are no studies that address turn around schools at the Hawaii Department of Education level. Further implication of this study will bring value to HIDOE with leaders at the school level as scholar-practitioners influencing change at the school site. This study may serve as a resource in implementing effective school structures to support teacher effectiveness.

Principal leadership research established that the principal accounts for 25 percent of the school's impact on student achievement (Leithwood et al. 2004; Briggs, Cheney, Davis, & Moll, 2013). Transformational leadership originated in the business context.

Researchers examined transformational leadership qualities and linked those qualities to leaders in education. The transformational leader influenced the employee to do more than what was expected for the same goal. The instructional leader was an examination of leadership in educational contexts. The instructional leader was knowledgeable in pedagogy and curriculum theory.

Gap in Research

Today, it is suggested that a new type of leader provides school systems and structure to support teacher improvement to ensure student success (Ikemoto, Taliaferro, Fenton, & Davis,2014). Conditions for education is rapidly changing and there is a need to investigate principal attributes to determine an association to school effectiveness. This study addresses the state of Hawaii's school effectiveness Strive HI scores and its association to teachers' perceptions of the principals leadershiip attributes. This will add to the concept of teachers' perceptions of principals and how it is associated to school effectiveness. Furthermore, it is a study that focuses on schools on Oahu.

Implication for Social Change

Within the rapidly changing context of education (i.e., No Child Left Behind Race to the Top, and Every Student Succeeds Act), principal leadership is closely examined as to how does it impact school effectiveness. This study informs principals about effective principal practices as seen by teachers and the association to school effectiveness. This will allow principals to reflect and plan to become intentional with school improvement efforts and hopefully all students can become successful. A school that can reach all

students will positively impact the community. Social change can be achieved through improving principal leadership process that impact school effectiveness.

Summary

The state of education reform is consistently reforming. From No Child Left Behind (2001), Race to the Top (2009), and Every Student Succeed Act (2016), principals and teachers are being examined for effectiveness. In Hawaii, 65% of the job market by 2018 will require post-secondary education (Carnevale, Smith & Strohl 2010). Hawaii schools have an obligation to prepare students to be both college and career ready. Chapter 1 discussed the theoretical foundation of this study. Core effective practices of the principal are (a) setting direction, (b) developing people, (c) redesigning the organization, and (d) managing the instructional program. Furthermore an examination of the need for principals to focus on breaking organizational norms, hiring and allocating the right staff, partnering with home and community, using data to drive instructional decision, setting direction with attainable goals, and developing trust and mutual respect (Kowal, & Hassel, 2011; Leithwood et al. 2010).

Research has concluded that principal leadership is the second greatest influence on student achievement and school effectiveness (Leithwood et al. 2004). The research question that guides this study is: What principal leadership attributes did teachers associate with school effectiveness, as measured by Hawaii's Strive HI index?

Chapter 2: Literature Review

During the past four decades, instructional leadership practices have been investigated for their impact on student achievement. Hallinger and Heck (1996) noted that the principal is second only to the teacher in impacting student achievement. Researchers are continually investigating the role and practices of the principal and its impact on learning for both teachers and students (Hitt & Tucker, 2016). Whether principals focus on closing the achievement gap, improve teachers' instructional practices, managing daily operations, or using data to drive instruction, the principal needs to have a variety of leadership attributes to impact student learning and school effectiveness. In this literature review, I examine research addressing traits and practices of effective principal leadership.

Literature Search Strategy

This literature review included books, journals, dissertations, and scholarly presentations. Books were obtained through iTunes, bookstores, or Amazon. Online searches were conducted using the EBSCO, ERIC, and SAGE databases through the Walden Library. Some journals were located using Google Scholar. Terms used to search were: effective principals, principals; practices, school effectiveness, leadership traits, turn around schools, survey of principal effectiveness, achievement gap, instructional leadership, transformational leadership, shared leadership, teacher collaboration, data teams, instructional coaches, data for school improvement, and leadership theory.

Literature Review Related to Key Concepts and Variable

In an era of school reform, effective principal leadership practices have been explored as a critical factor in school's success. Nettles and Herrington (2007) agreed with the large body of research that "school principals make a positive impact on school performance" (p. 729). However, Nettles and Herrington stated that research does not clarify how leadership practice affects student learning. Nettles and Herrington hypothesized that the lack of clarity regarding leadership's effect on student learning is based on previous researchers significantly underestimating the effects.

The concept of an instructional leader has evolved over the 30 years from compartmentalizing principal activities and responsibilities to prioritizing classroom instruction (Deal & Peterson, 1990). Blasé and Blasé (2000) defined instructional leadership through behaviors including not practicing arbitrary decision-making, providing feedback to teachers about effective instructional practices and modeling effective instructional practices. Blasé and Blasé also identified behaviors such as supporting team collaboration and providing time for the collaboration.

The role of the principal in Blasé and Blasé's research aligns with Danielson's (2007) framework of teaching by including collaborating conversations between administrator and teacher that are focused on teacher practice to promote student learning.

Danielson (2007) designed a framework for effective teaching practices composed of four domains: "(a) planning and preparation, (b) the classroom environment, (c) instruction, and (e) professional responsibilities" (p.1). The interaction

between administrator and teacher consists of a pre-conversation, classroom observation, and post-conversation. The process requires the administrator to observe teacher practice during the classroom observation and rank the teacher using standardized rubrics. The intent of the conversation is to assist the teacher in reflecting on his or her professional practice and provide suggestions and professional development as needed. Principals are responsible for understanding effective pedagogy and curriculum and ensuring that conversations with teachers are meaningful and improve instructional practices. The practice of mentoring and coaching teachers is new to the principal role.

Dufour (2002) argued that effective leadership includes the principal participating in professional learning. Participating in professional learning may be seen as the principal continuing to increase his or her knowledge of current research and also being a learner alongside teachers during professional development opportunities. Today, the term instructional leader encompasses the definitions of Nettles and Herrington, and Blasé and Blasé (2007). The instructional leader needs to be knowledgeable in pedagogy and curriculum theory and focused on student learning. Researchers have summarized that effective instructional leader's impact school performance and student learning (Hallinger & Heck, 1996; Leithwood et al. 2004; Marzano, 2005). Gentilucci and Muto (2007) asserted that effective principals minimize their attention on managerial and operational issues and focus time and energy as being the principal leader that is a learning leader. Although these studies differ in some aspects, they are similar in many aspects. For example, Nettles and Herrington (2007) identified similar "critical factors of effective leadership to Hallinger and Heck's study such as: (a) safe and orderly

environment, (b) mission and vision, (c) stakeholder involvement, (d) monitoring school progress, and (e) instructional focus (, p. 726-728). Nettles and Herrington concluded that there is a need for more research to substantiate direct effects of principal leadership evidence by measured student achievement gains. Parsons and Beauchamp (2012) found that highly effective principals focused on developing teachers by improving instructional practices, providing instructional coaching, sharing decision on resources with teachers, and providing structures for teachers to engage in meaningful collaboration.

Hattie's (2009) meta-analysis on effective leadership eight effective instructional practices that improved schools and increased student learning

1. Knows, promotes, and participates in teacher learning and development with a 0.91 effect size.
2. Evaluates teaching and curriculum through regular classroom visits and by providing feedback to teachers with an effect size of 0.74.
3. Ensures teachers are intellectually stimulated on current theories and practices with an effect size of 0.64.
4. Provides strategic resourcing that is aligned with priority teaching and learning goals with a 0.60 effect size.
5. Systematically and consistently monitors the effectiveness of school practices and the impact on student learning with an effect size of 0.56.
6. Establishes clear goals and expectations of learning with a 0.54 effect size.
7. Operates from beliefs and strong ideals about learning with an effect size of 0.50.

8. Ensures a safe environment in and outside the classroom that reduces classroom interruptions, reduces external pressures and support teachers with an effect size of 0.49.

An effect size of 0.40 during one year's time indicates that students' growth of learning is equivalent to a year's worth of growth. Therefore an effect size that is 0.80 would indicate 2 years of growth.

In 2009, Hawaii applied for a school improvement grant (SIG) that cited the lack of principal leadership as a root cause for low-performing schools (U.S Department of Education, 2009b). Furthermore, the Reauthorization of the Elementary and Secondary Education Act outlines the urgent need for effective principal leadership in every school (U.S. Department of Education, 2010). Many studies have provided research-based best practices for effective leadership and principals that implemented these best practices have shown school success. Principal leadership is a critical factor in improving student learning and school success.

In the school context, school leadership is second only to the classroom teacher as a critical component to increase student learning (Leithwood et al., 2004). The search for existing literature involved examining educational publications, organizations that focused on effective school leadership practices, and case studies of successful turn around schools. The literature presented in this review resulted from searching the following databases: Academic Search Premier, Education Search Complete, Sage, Teacher College Record, ERIC, and ProQuest Central. I also used the Google Scholar search engine. The major terms searched for this study are as follows: principal

leadership, education, performance standards, school turn around, high poverty – high performance, closing the achievement gap, collaborative cultures, decision-making, leadership behavior, instructional leadership, school turn around and transformational leadership. The search focused on the practices of the principal leader and the impact it had on student achievement.

Closing the Achievement Gap

The achievement gap between advantaged and disadvantaged households is still a consistent focus in education. Reardon (2011) compared test scores and income data over 55-year period. Reardon concluded the gap has doubled. To combat the widening of the achievement gap, Murphy's (2009a) meta-analysis of district studies that improved student learning focused on the efforts that closed the achievement gap. The achievement gap refers to academic performance between groups and subgroups. For example, the difference between students in Group A are race/ethnicity, economical status, English language proficiency, and disabilities compared to Group B students who are White, middle-class students (Murphy 2009a; Leithwood, 2010). Murphy suggested that educators and policymakers should understand the complexities within each subgroup when addressing the achievement gap. Educators and policymakers should focus on improving the achievement gap by improving each subgroup's attainment of proficiency of the state's high-stake assessments. Murphy suggested that this strategy may lead to an over generalization of reducing the achievement gap and individual conditions may be overlooked. Murphy's suggested that educators need a broader definition of student success by using multiple success measures or value-added. Some in which students may

not meet the state's proficiency standards but make great educational growth are often overlooked. States are using the ESEA flexibility waiver to show that there are different ways to measure student achievement and gains. HIDOE was to create an accountability system that would work in the Hawaii public school system. HIDOE intent was to provide more supports fot struggling schools through the Strive HI index (U.S. Department of Education, 2013b).

An initial goal of NCLB was to close the achievement gap between different demographic groups. These demographic include race/ethnicity, socioeconomic status (determined by students receiving free or reduced lunch), English language proficiency, and disabilities (NCLB, 2002). NCLB required states to test and report designated population groups' proficiency on the states' standard-based assessments in mathematics and reading. NCLB's annual measurable outcome (AMO) percentiles increased every year in Hawaii until year 2014 when 100% of students should be proficient in reading and mathematics as measured by high-stake assessments. Critics of NCLB have stated that these goals are unrealistic. However, the initial goal of NCLB was to close the achievement gap for socially and economically disadvantaged students to those who are advantaged.

Research has shown that since the inception of NCLB, most states made significant gains in reducing the gap even though it persists for economically disadvantaged students. An analysis "shows significant gains in achievement on state grade 8 math assessments in over three-fourths of the reporting states, and one-third of the states closed the achievement gap for the target population" (Blank, 2011, p. 7).

Blank (2011) study provided evidence about closing the gap between economically advantaged and disadvantaged students. The schools that have small gaps of learning include a principal who provides instructional feedback to teachers, expects excellence from teachers and students, and encourages academic achievement (Brown, Benkovitz, Mutillo, & Urban, 2011). These attributes are important to lead schools of excellence.

Chenoweth (2009) also examined schools with high poverty and high minority students and found that every successful school had a highly effective principal. Schools that are successful in closing the achievement gap, have principals who support teachers to become proficient in their instructional practices through data teams, collaboration, and professional development (Chenoweth & Theokas, 2011).

The Strive HI school effectiveness index is used as the new measurement of school effectiveness including closing the achievement gap. School effectiveness is measured by student proficiency on the state's testing, student growth percentile, "college and career readiness, and closing the achievement gap between high-need students and non-high-need students" (Hawaii State Department of Education, n.d.a, para. 7). High need students are identified as qualifying for at least one category in special education, English language learners, free/reduced lunch program, or Section 504.

Closing the achievement gap between non-high need students and high-needs students continues to be the focus of educational reform. Schools that have shown growth in closing the achievement gap have been found to have an effective principal as the leader for systemic and structural changes.

Turnaround Schools

Turnaround schools are successful at rapidly closing the achievement gap. An example of closing the gaps in whole school systems occurred in the largest school district in Maryland, Montgomery County Public Schools (MCPS) serves about 139,000 students in 199 schools. MCPS is typically a wealthy district that had a growing number of minority students and qualifying for the free and reduced lunch Program (FRLP). The superintendent of the district in 2007 assigned schools to either a red zone or a green zone (Ferguson, Hackman, Hanna, & Ballantine, 2008). Schools in the red zone had 80% minority students with 50% or more of the students qualifying for FRLP and 28% English language learners (ELL). The green zone contained more affluent students with 44% minority, 13 % qualifying for FRLP, and 10% ELL students. The idea of splitting the schools into two zones supports the earlier findings of Calkins et al. (2007) who suggested that states should designate a zone for schools with similar struggles so that resources can be targeted to fill specific needs for that area.

MCPS created a strategic-planning process that developed goals and benchmarks for student achievement, analyze data, and develop initiatives. For instance, in the red zone, a time change occurred where kindergartens moved from a half day of school to a full day. In 1999, the red zone established a benchmark that all kindergarteners were to be taught how to read. In 2007, 93% of all kindergarteners could read as compared to 59% in 1999. Furthermore, percentile of African American kindergarteners that read in 2002 was 52% compared to 90 % of African American kindergarteners were able to reading (Ferguson et al. 2008).

A part of the turnaround efforts in MCPS included using data as a tool for analysis. The district developed a tool called the M-Stat that was developed by Tuft and Harvard Universities. This tool allowed the district to determine areas of success and areas that need improvement, created opportunities to dialogue, use disaggregated data to dialogue about race and equity, and implement change to increase student learning (Ferguson et al. 2008). MCPS was able to increase student performance and close the achievement gap by using, analyzing, and personalizing data, supporting teachers, and providing teacher development. Chenoweth (2009) also defined that schools that made dramatic and significant gains in turning around schools and closing the achievement gap, focused on what needed to be taught and how it was taught.

Another example of district support to turn around schools occurred in Richmond, Virginia. Richmond public schools were predominantly African American schools that were decentralized. Many of the schools in the district implemented different curriculum for reading that resulted in 12 different reading programs and caused problems for students that moved within the district. After reviewing a district academic audit, the district identified areas for future reform (Ferguson et al. 2008). At the district level, professional development was provided to principals and assistant principals to have a common understanding of effective teaching, practices to look for, and how to conduct conversations with teachers about teaching practices.

In Ferguson et al. (2008) examination of how schools were turning around student learning, common practices emerged. These practices were increasing principal's knowledge and skills about effective teaching, implementing the use of data cycles,

gathering, and analyzing, personalizing, and adjusting instruction to meet students learning needs. Many of these schools also had professional development, leadership teams, common language between stakeholders, and dedicated time for articulation.

Harvard University Achievement Gap Initiative (AGI) continued to investigate how leadership in 15 high schools raised student achievement and narrowed the achievement gap by improving instruction. In each instances, the schools had an effective principal leading the change. The leaders in these schools took five steps to becoming exemplary that are "(a) Accepted accountability and responsibility to lead the change process, (b) Declared and set the direction and purpose of work in mission statement that focused on a few priorities, (c) Designed strategies, plans, capacity, to develop teachers, (d) Developed and refined quality standards to judge teacher and student work, and (e) Implemented plans and monitored progress that identified areas to provide supports and interventions" (Ferguson et al, 2009, p. 4). These five steps represent a continued cycle of improvement. Lessons learned from turnaround schools are schools needed principals who were able to stabilize the crisis and build structures of support for teachers (Leithwood & Strauss, 2009).

The work of closing the achievement gap and turn around schools have similarities because many of the schools that are rapidly improving student achievement are most often in high-minority populated schools. Turn around schools often serve students that are minority ethnicities, economically-disadvantaged, English Language Learners, and students with disabilities. National Center for Education Evaluation (NCEE) analyzed teacher effectiveness in 10 districts and seven states and concluded that

there were more ineffective teachers in schools that served a high economically disadvantaged clientele (NCEE, 2011). Researchers suggest that a laser-like focus on, access to, and meaningful participation in rigorous high-quality instruction identified the need to for teacher development (Equity Alliance, 2012). Leithwood et al. (2004) further concluded that the most important factor of student learning is the classroom teacher. The second most important factor of student learning is the principal.

There is no evidence of schools turning around with an ineffective principal. The principal is the visionary that provides the system in which teachers can improve their instructional effectiveness.

Turnaround Leaders

Two perspectives of principal effectiveness emerged from federal initiatives such as RTTT. “The first is the practice perspective in which principal effectiveness is defined by the quality of the principal’s leadership or administrative practices. Secondly, principal effectiveness is defined by the impact to his or her school” (Clifford, Behrstock-Sherratt & Fetters, 2012, p.4). Turnaround principals are those who impact the school quickly by improving instructional practices that results in increased student learning. Turn around principal behaviors differ from principals working effectively. For instance, a turnaround principal’s context is a school that is entrenched in failure and demands dramatic leadership to revive the school. Research suggested that leaders who would otherwise succeed as an effective principal would often fall short in a turnaround situation (Stein & Hassel, 2011). Principal effectiveness definition emerged as a response to the federal initiative of RTTT.

Policymakers, state, district and school leaders need to develop a clear understanding about the characteristics needed of principals to turn around a failing school. These characteristics or competencies would allow internal selection and development of high-potential candidates from among current teachers and principals and evaluation of their performance. In the past, educational leadership competency-based performance management was rare. However, many states are implementing teacher and principal evaluations. Competency-based evaluation to hire and retain effective leadership is not a common assessment in education as it is in business. Competency describes the behavioral characteristics that can predict performance (McClelland, 1998). Two competencies were found critical in research, achievement and impact and influence (Stein & Hassel, 2011). These translate into behaviors that have been identified as practices of effective principals (Letihwood et al. 2004; Marzano et al. 2005; Murphy, 2009b). Setting high performance goals for the organization and prioritize activities in order to meet goals with the available resources. Stein and Hassel (2011) concluded that evaluating teacher and principals' performance accurately would need to include multiple measurable results. In many states, turn around principals is hired to dramatically and rapidly increase achievement in low-performing schools. Duke and Salmonowicz (2010) examined a principal's decisions in her first year as a turn around specialist in a low-performing urban school. Three areas of focus emerged for the principal: (a) eliminating ineffective instructional programs; (b) creating a culture of teacher accountability; and (c) developing an effective reading program.

Through the literature review, a profile of an effective principal included these attributes for school effectiveness:

- set a clear direction with high performance goals for the school that is focused on instruction;
- prioritize and structure activities to support the success of achieving the goals;
- create clear structures for distributive leadership (i.e., leadership teams, data teams);
- provide protected time for teachers to collaborate on the goal;
- provides professional development and feedback to improve instructional practices;
- develop teacher leaders;
- develop and implement a process to analyze and utilize data to improve student learning;
- use a cycle of inquiry to review and revise instructional strategies within school teams (i.e., collect data, analyze data, set goal, select strategy, and determine result indicator); and
- build positive school culture.

Lessons Learned Through Turnaround Schools

Turnaround schools are successful at rapidly closing the achievement gap. An example of closing the gaps in whole school systems occurred in the largest school district in Maryland, Montgomery County Public Schools (MCPS). As part MCPS

addressing schools that needed assistance, the district developed a tool called the M-Stat that was developed by Tuft and Harvard Universities.This tool allowed the district to determine areas of success and areas that need improvement, created opportunities to dialogue, use disaggregated data to dialogue about race and equity, and affect change with a school, a cluster, or the system (Ferguson et al. 2008). MCPS was able to increase student performance and close the achievement gap by gathering, analyzing, and personalizing data, supporting teachers, and providing teacher development. Chenoweth (2009) also defined that schools that made dramatic and significant gains in turning around schools and closing the achievement gap, focused on using data to determine the needs of the school, teacher, and student.

Summarizing how MCPS increased student performance is that schools within that district examined, collaborated, articulated, identified, and acted upon individualized students' strengths and misconceptions of the skill, task, or learning. The principal created the structure within the school day for these discussions to take place. Without the structure for articulation, some of these gains may not have been achieved. As teacher evaluation becomes the new norm across the nation, principals must once again shift their practices.

Another example of district support to turn around schools occurred in Richmond, Virginia. Richmond public schools were predominantly African American schools that were decentralized. Many of the schools in the district implemented different curriculum for reading that resulted in 12 different reading programs and caused problems for students that moved within the district. After reviewing a district academic audit, the

district identified areas for future reform (Ferguson et al. 2008). At the district level, professional development was provided to principals and assistant principals to have a common understanding of effective teaching, practices to look for, and how to conduct conversations with teachers about teaching practices.

Effective principal set high expectations for learning. This expectation is for both student and adults within the school. The use of data needs to drive instructional strategies that lead to improved student performance (Mean, Padilla, DeBarger, & Bakia, 2009). Principal leaders found value in the use data to clarify decisions, identify problems and solutions, and target school's resources (Protheroe, 2010). Currently, there are no easy answers in closing the achievement gap (Murphy, 2009a) however, schools that are high-performing have an effective plan on the way to use data (Van Barneveld, 2008). Implementations of data teams have been found to improve teacher practices that lead to increased learning for students.

Turn around principal practices are driven to improve teachers' instructional practices. The turn around principal provides support and resources to directly and indirectly impact student learning. Principals in turn around schools provided time for collaboration, articulation of student learning data, and professional development. A turn around principal is an instructional leader because of the laser-like focus on improving teacher efficacy to improve student learning.

Transformational Leadership

Marzano et al. (2005) discussed two types of change. First order-change is one that is gradual and second-order change is one that is drastic. Today, transformational

leadership has evolved in its definition to encompass second-order change. Transformational leadership is a leadership style that influences the workers to accomplish more than the expected (Avolio, 2007). Also, transformational leadership is a principal leader that effectively establishes a climate that inspires others to a higher level of performance (Kirby, Paradise, & King, 1992). In education, transformational leadership and instructional leadership are becoming interchangeable (Leithwood et al. 2004).

A study on transactional, transformational, or laissez-faire leadership conducted by Jones (2008) used the Multifactor Leadership Questionnaire Form 5x-Short to determine the style of academic leadership in the College of Agriculture. Jones' study indicated that academic leaders in the college of agriculture used transformational leadership style. Academic leaders were identified for the study because during a time of change that required strong leadership.

Humphrey (2012) conducted a study on transformational leadership and organizational citizenship behaviors. Humphrey's study the Multifactor Leadership Questionnaire Form 5x-Short was used to identify leaders that where transformational and predict organizational citizenship behaviors. There are many theories of leadership; however, Humphrey affirmed that transformational is the most used theory in understanding leadership**.**

Instructional Leadership

Contingent leadership, participative leadership, transformational, and instructional leadership are identified to be some but not all models of leadership in both non-school

context and school context (Louis, Leithwood, Wahlstrom, & Anderson, 2010). According to Louis et al. instructional leadership is the leadership that occurs within the educational content. Instructional leadership is the direct participation in pedagogy and curriculum understanding. The instructional leader is one who promotes and supports effective instruction by providing professional development, time, structure and processes to review and analyze ongoing data to inform instructional practices. Blasé and Blasé (1999) conceptualized instructional leadership as the principal assumes a facilitator role in instruction. This vision of the role of an instructional leader is emphasized in Leithwood et al. (2004) concluded that the principal needs to have a deep understanding of pedagogy and curriculum theory in order to lead school improvement. Hattie (2009) also summarized the effect size of principal practices on student learning and school improvement.

Policies and mandates transformed the educational landscape and the responsibilities of a principal leader as exemplified through increased accountability from NCLB (2001) and the Race to the Top Grant (2010). Reform efforts and resultant mandates accentuated accountability for principals to improve student achievement outcomes. Accountability is linked to principal effectiveness to student growth as defined in the Race to the Top (2010). These mandates require principals to center on instruction and to become an instructional leader (Mendels, 2012). A definition of instructional leadership is those principals who lead the academic program of the school by setting goals, examining curriculum, evaluating teachers, and assessing the results (Valentine & Prater, 2011).

Throughout the years, the idea of the instructional leader has evolved. Instructional leadership introduced in the early 1980's through the effective school movement evolved from a hierarchical chain of command to one of shared leadership. In order to have meaningful data analysis it was found that most principals did not have content knowledge in literacy leadership and needed to rely on coaches (Dowell, Bickmore, & Hoewing, 2012). In the current climate of education, principals need to be in a position to supervise instruction, provide professional development, and create other data driven processes in order to develop teaching to improve student learning (Zepeda, 2014). Teachers and principals are in the position to improve student learning and it is necessary for the principal to lead teachers in this era of accountability. Zepeda (2014) summarized 12 leadership attributes of successful schools:

- leadership roles are carried out through a team of leaders to include teachers, students, and community members;
- school makes decisions based on positive student results and goals rather than maintaining the status quo;
- uses technology as a communication and educational tool;
- recognizes individual differences in staff and provides support or opportunities to focus on learning with higher standards;
- facilitates and builds consensus rather than mandate processes;
- uses an effective decision making process to include top-down and bottom-up processes;

- leadership has an attitude and actions that promotes and inspires faculty to reach a high set of standards;
- the leader is current of educational research and trends and disseminates information to all stakeholders;
- the leader is culturally respectful and responds appropriately to the diverse student population;
- the leader remains focus on the positive outcome and goals rather than the barriers; and
- cultivates support of the school through its community partnerships.

Principals understand that shared leadership does not exempt them of being ultimately responsible for the schools successes and failures. However, teachers perceive principals to be effective when they share leadership (Leech & Fulton, 2008). Principals create a school culture built on respect in order to develop other leaders within the school. Marzano et al. (2005) 21 Responsibilities concluded that the principal could not do all responsibilities at once and that it is imperative that the principal built teams that assist in those effective practices. Instructional leaders promote responsibility and leadership with teachers. As an instructional leader, the principal is responsible to provide teachers the opportunity to improve their instructional practices and be engaged in activities that are connected to the classroom (Robinson, Lloyd, & Rowe, 2008). Gracewski et al. (2009) also concurred that the need for principals to become instructional leaders began when standards-based accountability became a critical component of principal leadership. Leadership is second only to classroom instruction as an influence on student learning

(Louis, Leithwood, Wahlstrom, & Anderson, 2010). Printy (2010) concluded that principal leadership in terms of an instructional leader is important to improve students learning and they have influence on teacher's implementation of effective instructional practices. Additionally, Darling-Hammond et al. (2007) found that exemplary principal preparation programs prepared leaders that engaged in effective practices spent more time on instructionally focused work.

Other contributions to the study of effective core principal practices are similar to Leithwood and Jantzi. For instance, Gurr, Drysdale, and Goode (2010) identified the principal's vision as an important factor in setting the direction of the school. This is similar to McClelland's (1998) examination of competencies of high-functioning leaders. As education is transforming, so is the definition of an instructional leader. The definition of an instructional leader is steeped in past research and currently researchers are refining it with new inquiry.

Marzano, Waters, and McNulty (2005) conducted a meta-analysis of more than 5000 articles that studied school leadership in the school. Out of the 5000 articles, only 69 studies examined the quantitative relationship between principal leadership and student academic achievement. The meta-analysis was conducted using studies from 1970-2004. The 69 studies were selected based on criteria of leadership styles. Marzano et al. indicated a Pearson's correlation coefficient of 0.25 between the 21 Responsibilities and student achievement. It was also shown that when there was an increase in leadership behavior it resulted in a significant increase in student achievement.

Marzano et al. broadly categorized leadership behaviors under 21 responsibilities of a school leader. The study also recognized that one person could not implement all responsibilities with the same fidelity and proposed a plan for effective school leadership. Marzano et al. (2005) plan for effective school leadership are "(a) developed a strong school leadership team, (b) distributed some of the responsibilities to the leadership team, (c) select the right work, (d) identify the work that would have the greatest impact, and (e) deciding if the work is first order change or second order change" (p. 98).

The Wallace Foundation (2013) identified five effective principal instructional leadership practices as (a) shaping a vision of academic success for all students, (b) creating a climate hospitable to education, (c) cultivating leadership in others, (d) improving instruction, and (e) managing people, data and processes to foster school improvement. Nor, Pihie, and Ali (2008) found that principals in Malaysia had three main instructional practices that improved student learning were (a) improving teaching and learning programs, (b) enhancing school climate, and (c) networking. instructional leadership practices are common across country context by using their positional authority to influence learning in the classroom. Briggs et al. (2013) found:

"Only 27 states reported including in their standards five key elements that current research has shown important to principal effectiveness today: (a) recruiting and selecting teachers, (b) developing and supporting teachers (c) assessing and rewarding teachers, (d) implementing data-driven instruction, and (e) developing a positive school culture (p. 13)."

Additionally, Louis et al. (2010, p. 66) key findings of leadership practices that were instructionally helpful (Instructional Leadership) by high-performing principals and teachers were

> (a) principals enact four core effective instructional practices of setting direction, developing people, redesigning the organization, and managing the instructional program, (b) teachers reported practices that they considered instructionally helpful, (c) teachers and principal were in agreement on what practices were considered instructionally helpful, (d) teachers from different backgrounds and experience agreed with each other that these four practices were instructionally helpful, (e) school level found certain practices more helpful but all agreed the four were helpful, and (f) teachers and principals agreed that the most instructionally helpful leadership practices were: Focusing the school on goals and expectations based on student achievement; Monitoring teachers professional development needs; and Creating a structure that teachers can collaborate.

Finally, the scope of the principals' instructional efforts to improve instruction varies from school to school. However, principals that were frequently involved in supporting instructional practices of individual teachers and exerted influence on the teacher had the greatest impact in improving teaching practices (May & Supovitz, 2011). Jenkins (2009) summarized principal instructional leadership practice focus efforts on improving teaching and learning. This would include monitoring and evaluating instructional practices and having sufficient knowledge of pedagogy and curriculum theory. However, principals are faced with school management issues and often are not

trained to be master teachers. Research indicated that principals who role modeled effective teaching often resulted in improving teacher efficacy (Gurr et al. 2010). Chenoweth and Theokas (2011) identified that principals that improved student learning came from the classroom and had an average of 11 years of classroom experience and were deeply committed to instruction.

The role of the principal has evolved from of managerial approach to one of an instructional approach. An instructional leader is knowledgeable in pedagogy and curriculum. Furthermore, states that embraced the Danielson Framework for Effective Teaching as part of the teacher evaluation have found that principals that had knowledge of pedagogy and curriculum were able to have conversations that improved instruction (Sartain, Stoelinga, Brown, Consortium on Chicago School, 2011). They have an understanding of effective instructional practices and are able to identify instructional strategies that increase student engagement. Marzano et al. proposed that the responsibilities of improving student achievement are difficult for one person to achieve. Instructional coaching is a new hat the principal can wear, however effective principals work with to improve student learning.

Instructional Coaching

Instructional coaching has had great impact on student achievement. Williamson (2011) recognized that the principal's most important role is the instructional leader. As part of being an instructional leader, the principal needs to be knowledgeable in pedagogy and curriculum. According to Williamson, "coaching has emerged as one of the most effective professional development options for adult learners (p.1). The idea of

instructional coaching support principals' working with teachers and serving as a mentor to create meaningful collaboration and build a culture of trust (Education Partnership, Inc, 2012).

Instructional coaching begins with the use of student assessment data. This is a key component for instructional coaching. Instructional coaching design engages teachers in collaborative problem-solving process to modify instructional strategies to improve student learning. Assessments, either formative or summative, can provide the information to begin the discussion of student learning. The conversation would include discussion related to the assessment, suggest and implement a specific instructional strategy, and together examine assessment results. Instructional coaching provides feedback based on students' progress (Denton, Swanson, & Mathes, 2007).

The National Institute for Excellence in Teaching (NIET) (2012) suggested that in order for professional development of teachers to be effective, they incorporated collaborative learning and instructional coaching strategies to positively impact both teacher and student. NIET concluded that the school needed to create an infrastructure to support high quality coaching and professional development.

Chicago Public Schools launched an Excellence in Teaching Pilot in 2008 that indicated that teacher evaluation "conferences were more reflective than in the past" (Sartain et al 2011, p. 22), but deep discussions about instructional practices did not occur when principals lacked the instructional coaching skills (Sartain et al. 2011). Instructional coaching involves "in-class coaching and modeling, facilitate peer collaboration, lead data-driven assessments, and promote teacher leadership" (Brown, Reumann-Moore,

Hugh, Christman, & Riffer, 2009, p.2). The role of instructional coaching cannot remain only with the principal; however, principal support in developing instructional coaches and including them in leadership is vital to improve student achievement (Brown et al. 2009). Fullan and Knight (2011) discussed the use of instructional coaching for teacher improvement to be effective only if it is supported on a system-wide basis. This basis includes that the principal takes an active role on leading the direction of the instructional coach.

The Danielson Framework (2007) observation model is conducted through a pre-conference, an observation, and a post-conference. A goal of the Danielson Framework was to establish a shared language about instructional improvement. The Danielson Framework is divided into four domains (Danielson, 2007, p. 1), "(a) planning and preparation, (b) classroom environment, (c) instruction, and (4) professional Responsibilities". Domains 1 and 4 are aspects of teaching that occur outside of the classroom. Domains 2 and 3 are aspects of teaching that are observable classroom practices. Moreover, ratings of unsatisfactory, basic, proficient, and distinguished is assigned to the observable practices. A study conducted in Chicago (Sartain et al. 2011) found that there is a strong relationship between teachers that are highly rated showing greater student growth than teachers that were not highly rated. Furthermore, teachers that were lowly rated showed the least amount of student growth. The use of the Danielson Framework in rating teachers requires the principal to understand effective instructional practice. The purpose behind involving administrators in evaluating

teachers' practice is to make positive changes in instructional practices (Sartain et al. 2011).

Principals need to be able to identify observable effective instructional practices because many states are implementing teacher observations as part of the teacher's educator effectiveness. The Danielson Framework provides opportunities to discuss components of instructional best practices. The intent behind the conversation between administrator and teacher is to build a collaborative relationship that improves student learning by improving instructional practices. An integral part of improving student learning is that the principal has an effective organizational structure.

Review of Survey Instruments for this Study

The Teacher Perceptions of Principal Attributes Questionnaire (TPPAQ) was developed to specifically address the nine attributes of effective principals. Other developed surveys were considered but they did not measure fully the attributes in this study. The initial survey examined was the Multi-Factor Leadership Analysis (MLQ 5X-Short). The 45 question survey addressed the nine attributes as the following: (a) set a clear direction with high performance goals for the school that is focused on instruction-four questions; (b) prioritize and structure activities to support the success of achieving the goals-one question; (c) create clear structures for distributive leadership (i.e., leadership teams, data teams)- 3 questions; (d) provide protected time for teachers to collaborate on the goal- two questions; (e) provides professional development and feedback to improve instructional practices- two questions; (f) develop teacher leaders-one question; (g) develop and implement a process to analyze and utilize data to improve

student learning- zero questions; (h) use a cycle of inquiry to review and revise instructional strategies within school teams (i.e., collect data, analyze data, set goal, select strategy, and determine result indicator)- three questions, and; (i) build positive school culture- 13 questions. The MLQ 5X-Short is designed to examine the qualities of transformational leadership from leaders in business context (Avolio & Bass, 2004). It is not specific to the educational leader.

Another survey considered was the Vanderbilt Assessment of Leadership in Education survey (VAL-ED) (Orr, King, & LaPointe, 2010). The survey is based on six components and six key processes. The Core components of the VAL-Ed are (a) high standards for student Learning; (b) Rigorous Curriculum; (c) Quality Instruction; (d) Culture of Learning and Professional Behavior; (e) Connections to External Communities; and (f) Performance Accountability. The survey consists of 72 questions. The VAL-ED aligned its questions with the principal attribute High expectations/Focus on Instruction 24 times. Whereas, five out of the nine principal attributes were inadequately addressed in the VAL-ED survey. Therefore, it was determined that for the quantity of questions and the direct validity to the nine attributes that the VAL-ED was eliminated as a choice to conduct this survey.

The Teacher Perceptions Survey created by Colorado Legacy Foundation (2013) to align with Colorado's principal quality standards was examined as an option for this study. The Teacher Perceptions Survey was piloted in two districts with N = 483. Teachers were given two weeks to complete survey with a 70.3 response rate. The Cronbach's Alpha used to measure reliability was Alpha = .988. The p-values for the

individual items ranged from 0.191 to 0.824 (Colorado Education Initiative, 2014). The standards addressed in this 84-question survey were (a) distributive Leadership; (b) professional growth; student learning & expectations; (c) problem solving, conflict management, and disciplinary leadership; (d) vision and goal setting; (e) instructional leadership; (f) school community, and; (g) school culture and teaching conditions. This survey was eliminated because out of the 84 questions, principal attributes of Prioritize and Structure Activities, Develop Teacher Leaders yielded 5 items that loosely connected to the nine principal leadership attributes identified as factors of school effectiveness.

The last established survey investigated was the Principal Instructional Management Rating Scale (Hallinger, Wang, & Chen, 2013). This survey was eliminated because it had no items that addressed Develop Teacher Leaders. The literature review revealed that an attribute of an effective principal is to develop teacher leaders.

Summary and Conclusions

In this literature review, I examined the need of an effective principal leader order to lead school improvement. The literature review examined multiple attributes an effective principal. However, the research determined that one attribute cannot stand alone to improve school effectiveness. Principals need to have an understanding of the attributes that improve school effectiveness and create a system to run a school efficiently and effectively. Anderson, Leithwood, and Strauss (2010) examined the use of data by principal and teachers and the influence it made on student achievement. Anderson et al. found that the principal needed to establish the purpose and expectations of the data used by teachers. For example, without the guidance of the principal, data discussion becomes

a session of presenting the data and nothing else is done with it. Anderson et al. study further explained that without a direction of analyzing data to improve learning there is weak statistical evidence between data use and student achievement and that other principal attributes provides direction of data use.

Whether principals focus on closing the achievement gap, improve teachers' instructional practices, managing school every day operations, or use data to drive instruction, the principal needs to have a variety of leadership attributes in order to impact student learning and school effectiveness. This study will examine nine attributes of an effective principal and its relationship to school effectiveness. Chapter 1 presented descriptions of a successful turnaround school, principals as instructional leaders, and a framework of effective practices. Additionally, effective principal attributes were identified as a result of the literature review:

- set a clear direction with high performance goals for the school that is focused on instruction;
- prioritize and structure activities to support the success of achieving the goals;
- create clear structures for distributive leadership (i.e., leadership teams, data teams);
- provide protected time for teachers to collaborate on the goal;
- provides professional development and feedback to improve instructional practices;
- develop teacher leaders;

- develop and implement a process to analyze and utilize data to improve student learning;
- use a cycle of inquiry to review and revise instructional strategies within school teams (i.e., collect data, analyze data, set goal, select strategy, and determine result indicator); and
- build positive school culture.

In Chapter 3, I explain the methodology that was used for this study and provide the process for data collection and analysis.

Chapter 3: Research Methodology

In this quantitative study, I investigated the relationship between teacher perceived principal leadership attributes and school effectiveness as measured by Strive HI. I used multiple regression to examine the association between each attribute (categorical variables) and school effectiveness (quantitative variable). Principal leadership influences student learning through the teachers. Effective teachers enhance higher student learning more than ineffective teachers (Rivkin, Hanushek, & Kain, 2005). Principals influence teachers' effectiveness through the principals' leadership attributes. Effective principal leadership practices have been shown to enhance student achievement, especially in schools that serve high-need student populations (Ferguson et al. 2009). Leithwood et al. (2004) combined both transformational and instructional leader practices as a framework for four core effective principal practices that include the nine attributes of an effective principal. In the literature review, I identified nine leadership traits and or attributes that impacts school effectiveness:

- set a clear direction with high performance goals for the school that is focused on instruction;
- prioritize and structure activities to support the success of achieving the goals;
- create clear structures for distributive leadership (i.e., leadership teams, data teams);
- provide protected time for teachers to collaborate on the goal;

- provides professional development and feedback to improve instructional practices;
- develop teacher leaders;
- develop and implement a process to analyze and utilize data to improve student learning;
- use a cycle of inquiry to review and revise instructional strategies within school teams (i.e., collect data, analyze data, set goal, select strategy, and determine result indicator); and
- build positive school culture.

The guiding question for this quantitative study is "What principal leadership attributes did teachers associate with school effectiveness, as measured by Hawaii's Strive HI index?"

Setting

The state of Hawaii consists of 172 public elementary schools on the islands of Oahu, Kauai, Molokai, Maui, and Hawaii. Most of the public schools are on the island of Oahu, which has 118 elementary public schools not including public charter schools. The selection criteria included elementary schools that had a principal who for at least 5 years. The School Accountability: School Status and Improvement Reports (SSIR) for Oahu's Honolulu, Central, Leeward and Windward district were used to gather the information about the schools on the island of Oahu. The SSIR information had the number one in the area to identify the number of principals at the school in the last 5 years. Out of the 118 elementary schools, 58 schools had the number one. Schools

considered for this study included at least five grade levels to ensure a valid number of teachers to respond to the survey. One school was removed from the possible list because it served preschool, kindergarten, and first grade resulting in 58 schools in the final study.

Research Design and Rationale Approach

Teachers in elementary schools were asked to complete a 41-item survey measuring principal effective attributes. Teachers from the 58 elementary schools located on the island of Oahu were asked to take Teachers Perceptions of Principal Attributes Questionnaire (TPPAQ). The survey had 36 items rated on a Likert scale of 1-5 and five demographic questions. The TPPAQ was adapted from The Colorado Education Initiative (2014) Teacher Perception Survey (TPS). The TPS contained 82-items and addressed the nine attributes of this study. However, the survey was found to be too long. The survey tool was vetted through an advisory panel consisting of professors from the College of Education Administration Division at University of Hawaii, Manoa, a current complex area superintendent who was formerly a principal and two members of Hawaii's Certification Institute for School Leaders (CISL). The advisory panel was chosen because of their work in developing principal leaders and their research on effective leadership. Feedback was provided from the advisory panel and questions from the TPS were chosen to address the nine principal attributes of the survey. Permission was given to modify the TPS (Appendix C) and the TPPAQ did not rely on the validity of the TPS.

Research Question

Creswell (2009) stated that the quantitative research survey design “provides a numeric description of trends, attitudes, or opinions of a population by studying a sample

of that population" (p. 145). The survey design was used to collect teacher perception data from 58 schools that met the criteria of having a principal in place for 5 or more years.

This study answered the following research question:

What principal leadership attributes did teachers associate with school effectiveness, as measured by Hawaii's Strive HI index?

Hypotheses

For this quantitative study, research questions included the following null (H_0) and alternative (H_a) hypotheses. The dependent variable was the Strive HI performance index score for 2014-2015.

H_0: There is no relationship between one or more teachers' perceived principal attributes and school effectiveness score, as measured by Hawaii's Strive HI index.

H_α: There is a relationship between one or more teachers' perceived principal attributes and school effectiveness score, as measured by Hawaii's Strive HI index.

Assumptions, Limitations, and Threats to Validity

The assumption for this study was that participants were honest. The limitations of this study were the availability of the principals, teachers' agreement to participate, and complete the survey, the return rate of the surveys, and limited to the elementary schools with principals that served a minimum of 5 years in the school on the island of Oahu. Only schools on Oahu were chosen due to their accessibility. Another assumption was principals would not have moved or left the school site by the time the survey was administered.

Scope and Delimitations

This study focused only on the island of Oahu. Outer island schools were not used due to their location and accessibility. The study focused on elementary schools on the island of Oahu. The departmentalization of content in the secondary school setting is another attribute to be considered for another study. Finally, the school where I am the school administrator was also excluded from the study.

Role of the Researcher

I am currently a vice-principal at an elementary school in the Campbell-Kapolei complex. Teachers in this school did not participate in the survey. For the purpose of this study, I was an educational investigator gathering data to examine teachers' perceptions of principal leadership attributes and how they are associated with school effectiveness as measured through the Strive HI Performance Index.

Methodology

Quantitative research is used to determine the relationship or association between variables. Each of the nine attributes was scored on a Likert scale from 1 to 5 that indicated never, sometimes, neutral, most of the time, and always. The ordinal values were used as predictors of the effectiveness index. The Strive HI index score was the dependent variable that the independent variable data may predict. The data gathered show a linear relationship between the variables. The best design for this study was a multiple regression comparison to answer the research question.

Strive HI Performance Index

For this study the dependent variable was the Strive HI index score (Appendix A). The score ranges was zero to 400. Each school was given a numerical value that defines the school's effectiveness. According to Hawaii Department of Education (2013c), Strive HI performance system was designed to meet the needs of students and educators by aligning policies and initiatives to strive for school, student, and educator success. Index scores were based on achievement, growth readiness, and achievement gaps between high-needs and non-high needs students.

In September of 2012, the Hawaii Department of Education applied for a waiver from the requirements of the federal No Child Left Behind Act (NCLB). The waiver was approved in May 2013 and the Hawaii Department of Education replaced NCLB requirements with the Strive HI Performance System. In the school year 2013-2014, all Hawaii public schools' received their first Strive HI index score which was based on a total of 400 points.

The Strive HI index provided each school with a rating in four categories: (a) achievement, (b) Hawaii growth percentile, (c) readiness, and (d) achievement gap. This system is designed to measure and understand school performance to assist schools. There are five steps in the Strive HI performance system. Schools are placed on one of the steps based on their index score. These steps are: (a) recognition, (b) continuous improvement, (c) focus, (d) priority, and (e) superintendent's zone. Schools that earned recognition received monetary rewards and administrative flexibility to maintain their success. School's that were identified as focus or priority received complex level

supports. According to Hawaii Department of Education (2013c), the lowest performing schools will receive supports based on the lessons learned from Hawaii's successful school turnarounds. However, HIDOE does not provide information from those successful Hawaii school turnarounds.

Procedures for Recruitment, Participation, and Data Collection

Muijs (2004) defined the population as the group that the researcher refers to generalizing study findings. There are 181 public elementary schools in the state of Hawaii with 57 located on other islands and 124 schools located on Oahu. This study removed 57 schools from this study due to lack of accessibility. In the state of Hawaii, the island of Oahu is the main island and has 124 public elementary schools. Out of the 124 public elementary schools, 58 schools were identified through public data from the HIDOE School Status and Improvement Reports (SSIR). For the purpose of studying teachers' perceptions of principals' leadership attributes, principal stability was an important factor. I identified, through SSIR, 58 schools on Oahu had principals at least 5 years. Each school identified had a 1 in the area "principal at the school in the past 5 years" on the SSIR. On the TPPAQ, Question 37 asked "How long has the principal been at the school." This question did not address the one year lag in SSIR information. An assumption of this study was principals would not have moved or left the school site by the time the survey was administered. However, during data collection, one school had a principal change within a few months of administration of the survey. It was decided to use this information for data analysis. The participant schools were located on the island of Oahu in the districts of Honolulu, Central, Leeward, and Windward. Excluded from

this study were schools in the Hawaii, Maui, Kauai, and Charter school districts due to lack of researcher accessibility to the schools.

Elementary schools are those that serve kindergarten to fifth or sixth grades. The reasons for selecting elementary schools were that the structures in elementary schools are similar to each other in that they do not departmentalize by content area and multiple grades participate on the state's mandated assessment. In the elementary school, Grades 3 to 6 are tested on the state's mandated test.

The study included 58 elementary schools on the island of Oahu identified from the School Status and Improvement Report (Hawaii Department of Education, 2015) of having a principal in place for a minimum of 5 years. All 58 schools were invited to participate in the survey to ensure that the study had a workable sample size to identify associations with the attributes. From the time the 58 schools were identified to the time of data collection, principals at some identified schools left and a new principal was in place during the survey time period. This indicated that some participants identified having a principal in place for less than a year

Ethical Issues and Informed Consent

This study was completely voluntary for all participants. Teachers were asked to take a survey via a Google link. No compensation was provided to participants. Participants' identity was anonymous. My name and the purpose of study were provided through the informed consent. If participants had questions or concerns they were asked to contact me through email or a Walden University representative.

As part of the process, I will disclose that I am an administrator with HIDOE will not have any means to individually identify participants. I will know the school that they are reporting from; however, their identity was unknown to me. I informed all participants that they were unnamed in the doctoral study. Data collected was through the 41-item TPPAQ survey delivered through Google. An email to the principals of the identified 58 schools was sent via Walden university assigned email. In the email I included a copy of the informed consent letter that contained information about the study and the researcher's role. The hyperlink was also included. Principals forwarded my email to their staff and teachers were able to access the survey. The survey had no personal identifying information. All surveys are anonymous and teacher responses were confidential. For non-responsive principals, additional emails were sent as a reminder. Attempts stopped after a fourth attempt. The request to principals was a two week period. Teachers had a two week window to participate in the survey.

Instrumentation

Teacher Perceptions of Principal Attributes Questionnaire

Teacher Perceptions of Principal Attributes Questionnaire (TPPAQ) was designed to measure nine specific principal attributes that are associated to school improvement. These attributes are the following:

- set a clear direction with high performance goals for the school that is focused on instruction;
- prioritize and structure activities to support the success of achieving the goals;

- create clear structures for distributive leadership (i.e., leadership teams, data teams);
- provide protected time for teachers to collaborate on the goal;
- provides professional development and feedback to improve instructional practices;
- develop teacher leaders;
- develop and implement a process to analyze and utilize data to improve student learning;
- use a cycle of inquiry to review and revise instructional strategies within school teams (i.e., collect data, analyze data, set goal, select strategy, and determine result indicator); and
- build positive school culture.

The TPPAQ addressed the 9 effective principal attributes. Questions one, five, 12 and 14 were categorized as Setting High Expectations that focused on learning. Questions two, 23, 25, and 33 addressed Prioritize and structure activities to support the success of achieving the goals. Create clear structures for distributive leadership (i.e , leadership teams, data teams) principal practice was addressed in questions 19, 29, and 31. Questions 10, 13, 21, 34, and 36 addressed the practice of providing protected time for teachers to collaborate on the goal. Provides professional development and feedback to improve instructional practices was addressed through questions four, nine, 17, 15, 16, and 20. Questions 3, 11, 15, and 16 addressed develop teacher leaders. Develop and implement a process to analyze and utilize data to improve student learning was

addressed in questions 6, 27, and 28. Use a cycle of inquiry to review and revise instructional strategies within school teams (i.e., collect data, analyze data, set goal, select strategy, and determine result indicator) was addressed in questions 7, 26, and 30. Lastly, build positive school culture was addressed in questions 18, 32, and 35.

Frequency of questions that measured an attribute ranged from three to six occurrences. The attribute of Provides professional development and feedback to improve instructional practices had 6opportunities for teachers to respond. The attributes that had three opportunities to respond were Create clear structures for distributive leadership (i.e , leadership teams, data teams), develop and implement a process to analyze and utilize data to improve student learning, Use a cycle of inquiry to review and revise instructional strategies within school teams (i.e., collect data, analyze data, set goal, select strategy, and determine result indicator), and build a positive school culture. The number of opportunities to address the attributes did not imply more or less importance of the attribute. The responses for each attribute were averaged to reduce any type of weight of importance.

Some of the TPPAQ statements also measure other attributes. For example, statement four: “Our schoolwide improvement goals drive teachers’ professional development”, measure attributes (a) High Expectations/focus on instruction, (b) Provide Development/Feedback to Improve Instruction, and (c) Build Positive School Culture.

Construct Validity and Reliability

An advisory panel was assembled to review the Teacher Perceptions of Principal Attributes Questionnaire (TPPAQ) for construct validity. Panel included a professor at

University of Hawaii at Manoa College of Education (COE), who is responsible for the Educational Administration program. A member from Hawaii Certification Institute for School Leaders (CISL) that is the program director of selecting and training administrators for Hawaii's public schools. Lastly, a Complex Superintendent and former principal reviewed the construct validity of survey. The members of the advisory panel reviewed and provided feedback to establish that the survey measured what the study intends to measure. Research indicated surveys to be a valid instrument to assess principal leadership practices (Camburn, Huff, Goldring, & May, 2010). The panel reviewed the Teacher Perceptions Survey that was developed by the Colorado Education Initiative (2014). The TPS is an 82-item survey and addressed the nine principal leadership attributes of this study. However, it was felt that 82-items would limit participation and therefore only a few survey items were chosen for the TPPAQ. The TPPAQ does not rely on the original validity of the TPS.

The Cronbach's alpha is a common measure of reliability for an instrument, i.e., "the scale should consistently reflect the construct it is measuring" (Field, 20015, p.666). It is a way to show the uni-dimensionality of the instrument i.e., the degree to which the instrument measures a single construct. In this case it is teacher perceptions of leadership in principals.

The analysis was done with all 124 teachers 9 subscale scores. "An alpha between .7 to .8 is considered acceptable" (Kline, reported by Field, 2005, p, 668). Hence, the resulting alpha for TPPAQ instrument equal to .95 is quite good.

Data Analysis Plan

The schools identified for this study are elementary schools on the island of Oahu. Hawaii Department of Education (HIDOE) is structured as one district. The State Education Agent (SEA) and the Local Education Agent (LEA) are the same. HIDOE comprises of 286 schools with 166 elementary schools. Secondary schools will not be used in this study. The rationale of excluding secondary schools is that in Hawaii, secondary teachers teach content specific content unlike elementary school teachers which teach all subjects.

The HIDOE accountability records are available for the public through the website hawaiipublicschools.org. The HIDOE provides information on individual schools through a School Status Improvement Report (SSIR). The SSIR report provides a information on the school setting, school improvement, school resources, and vital signs. The SSIR reports were used to identify schools that have only one principal in the last 5 years. This study seeks to understand teachers' perceptions of principals that have been in a school for at least 5 years and associate the school's Strive HI score to teachers' perceptions.

Fifty-eight schools were identified as having one principal in the last 5 years. All of these schools are located on the island of Oahu and covers Honolulu, Central, Windward, and the Leeward Districts.

When investigating a new phenomenon, it is advisable to avoid Type II error (Dunn, 2001). This is the statistical decision error that occurs when we should have rejected the null hypothesis because it is true, but failed to do so, the chance is referred to

as β. The probability of correctly rejecting the null is power and is equal to 1-β. It is generally set at .8, i.e., we would make a rejection correctly 80% of the time (Cohen, 1992). In order to achieve this level of power, three steps should be taken. 1) One can increase the error probability of rejecting the null hypothesis when it was true. The Type I error probability, commonly reported as the α level, from p< .05 to p< .1. 2) Next one can increase the expected effect size to .5, the "medium" level suggested by Cohen (1992). 3) Finally, can ensure that the sample sized, given the planned statistical test, is of an adequate size to ensure (1) and (2) are met. A common way to estimate an appropriate sample size is to apply a computational tool. One such estimation tool is G*Power3 created by Faul, Erdfelder, Lang, and Buchner (2007) which can be used for a number of statistical tests. For multiple linear regression with 9 predictors, a modest effect size of .15, with α level of .05, and power value of .8, a sample size of 43 was acceptable. See Figure 1

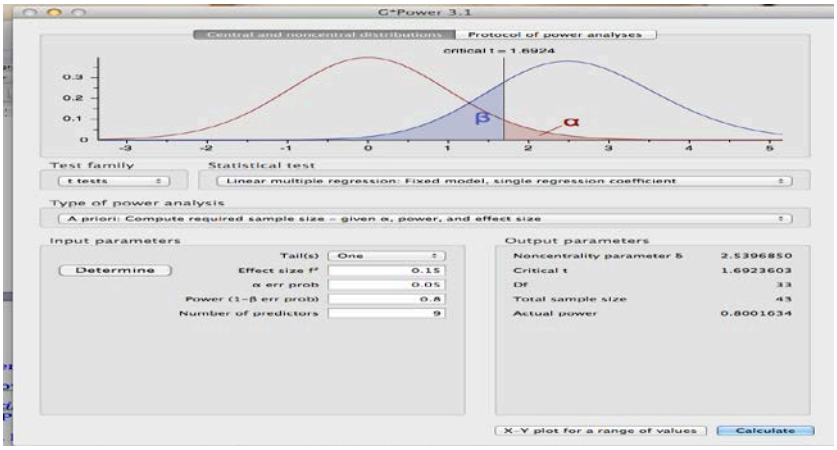


Figure 1. Screen shot of G*Power sample size estimation

Chapter 4: Reflections and Conclusions

The purpose of this study was to examine teachers' perceptions on their principal's attributes of leadership. The research question that guided this study was the following: "What principal leadership attributes did teachers associate with school effectiveness, as measured by Hawaii's Strive HI index? The dependent variable was school effectiveness as measured by the Strive HI index in the school year 2014-2015. The Strive HI index is the Hawaii Department of Education's measurement of school effectiveness. Schools scores were based on scale from 0 to 400 points. The predictor variables were teachers' perceptions of nine attributes. The research question included the following null and alternative hypotheses:

H_0: There is no relationship between one or more of teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

H_a: There is a relationship between one or more teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

This chapter presents the results of the quantitative study addressing the association between teachers' perceptions of elementary principal's attributes and school effectiveness. Data from the Teachers' Perceptions of Principal Attribute Questionnaire (TPPAQ) were analyzed to identify predictors that impacted the Strive HI score. This chapter includes data collection, data and results of the study.

Data Collection

Data for this were collected using the 41-item TPPAQ survey tool delivered through Google. I emailed the principals of the identified 58 schools. In the email I included a copy of the informed consent letter that contained information about the study and the researcher's role. The hyperlink was also included. Principals forwarded my email to their staff and teachers were able to access the survey. The survey had no personal identifying information. All surveys were anonymous and teacher responses were confidential. An email was sent to non-responsive principals up to the fourth request. HIDOE data collection was granted from March 1, 20016 to April 29, 2016.

Once approval was obtained from IRB (#2015.12.04 17:22:02-06 '00') that included approval from community partner (Hawaii Department of Education), I was able to contact 58 principals by email. Nineteen principals responded with three principals requesting to opt out of the study. One principal who positively responded emailed the consent to participate to faculty; however, none of the faculty participated. The remaining 39 principals were emailed with a fourth request but no response was received.

Data Analysis

Data analysis for this study included multiple regression models. According to Field (2006), variables in a correlational research do not have the capacity for an independent variable to cause a change in a dependent variable. Field used the terminology of predictor for the independent variable and outcome for the dependent variable. For the purpose of this data analysis, the predictors were the teachers' response to principal attributes and the outcome was the Strive HI index. A multiple regression

was used for the nine attributes. The equation for this statistical measurement was $Y=X_1+X_2+X_3+X_4+X_5+X_6+X_7+X_8+X_9+e$. Y represented the Strive HI index scores ranging from 0-400. X represents the mean of teachers' perceptions on the given attribute. C represents the constant and e represents the error term. I averaged teachers' responses on questions related to individual. Further analysis indicated any association to school effectiveness as measured by the Strive HI index.

When preparing the data. I organized the 41 items from the survey to *a priori* groups (Colorado Education Initiative, 2014) The responses for each item in the appropriate group were summed in Statistical Package for the Social Science (SPSS) to form a trait score (Appendix D for survey questions). Preliminary analysis included a check for spurious data or missing values. Spurious data were either corrected or deleted. All missing values were replaced with the variable mean to maintain Ns. The variable principal years had eight missing values. In addition, there was one school which a principal had not been place for 5 years. Principal movement at this school occurred a few months prior to survey administration.

Teacher education had three missing values and Question 36 had one. Missing values were replaced with the mean for that variable. Descriptive statistics were calculated using SPSS to provide an overview of the four demographic and nine leadership trait scores, which were the predictor variables. The descriptive statistics of the nine principal leadership attributes along with demographic information provided a brief descriptive coefficient of the variable. The standard deviation was relative to the mean of each attribute. Each attribute and demographic input in this analysis included a numerical

value for comparison of each data set. Table 1 presents a list of the predictors, their mean, and standard deviation.

Table 1

Descriptive Statistics of Nine Attributes

Attribute	*N*	Minimum	Maximum	Mean	*St*. Deviation
T_SETHEX	124	5	20	14.96	4.139
T_PANDS	124	5	20	13.93	3.692
T_DISTLD	124	4	15	11.03	2.877
T_PCOLLT	124	5	20	12.95	4.118
T_PD2II	124	6	25	16.45	5.101
T_DTLEAD	124	5	24	16.33	5.246
T_DProdAC	124	4	15	11.30	2.703
T_COIIP	124	6	15	12.56	2.271
T_BPSC	124	3	15	10.75	3.925
PrincYrs	124	.5	15.0	5.955	3.7880
YrsatSchool	124	.0	28	8.297	6.4879
YrsTeach	123	1.0	30.0	13.467	8.3883
Educa	123	1.0	4.0	2.508	.7918
Strive HI	124	97	369	213.49	83.205

Next, I created a correlation matrix of all 13 predictors using the Spearman computation because the predictors were predominantly ordinal scales. This step helped me identify any multicollinearity among predictors to avoid making a type II error. Field (2005) stated that "multicollinearity at high levels ($r > .9$) increases the chances of making a type II error (p. 174). The result makes it more likely that the multiple R, an estimate of the soundness of the overall model, will be rejected or that one or more predictors are rejected as statistically significant coefficients. Only one pair of predictors had a correlation barely exceeding 0.9, T_PD2II with T_DTLEAD. (Appendix F).

Checks of assumptions were made to ensure a sound model and to improve the ability to generalize to the population. Field (2005) stated, "with VIF below 10 and tolerance values well above 0.2, it is safe to conclude that there is no collinearity within the data" (p.196). Subsequent tests confirmed the presence of minimal collinearity (variance inflation factor [VIF] and tolerance). For the current model, the variance inflation factors (VIF) for each predictors and the tolerance values are reported in Table 2.

Table 2

Seven Predictor Regression Model Collinearity Statistics

	VIF	Tolerance
Constant		
Principal years at this school	1.12	.889
Education	1.18	.851
Years teaching	1.98	.504
Years teaching at this school	2.05	.488
Create structures	2.780	.360
Prioritize Activities	2.642	.378
Develop & implement a process of data analysis	2.18	.458
Build positive school culture	3.30	.303

Note. *VIF* (Variance influence factor) values are well below 10 and the tolerance values are well above 0.2.

I tested the normality of the residuals (i.e., the error scores from the analysis), and a histogram of standardized residuals and normal P_P plots are displayed in Appendix H. The dependent variable SHI was plotted against the expected values. The frequency distribution was reasonably normal in shape when the frequency bars were compared to the theoretical plot, suggesting little non-normal data. The mean was close to 0.0 and the standard deviation was close to 1.0 as would be expected in a standardized distribution. Furthermore, the points on the probability plot of the observed residuals were reasonably

close to the diagonal line. According to Field (2005), “were they to lie on the line that would be evidence of a perfect normally distributed data set” (p. 2050..

The primary analysis was a “backward stepwise regression that is best used for exploratory model building” (Field, 2005, p.161). The purpose was to identify which demographic and leadership traits made a contribution to the Strive HI index (SHI) prediction. In the backward method all predictors were entered into the exploratory model. Each predictor was tested for its statistical contribution. If it met the removal criterion (set at the default of $p > .10$), not making a statistically significant contribution, it was deleted from the model. The model was recomputed with the remaining predictors. The process was repeated until only statistically significant predictors remained.

The results of the backward regression analysis yielded in the final model seven variables that made a statistically significant contribution to the prediction of the Strive HI index. See Appendix G and Appendix I for detailed supporting statistics. The final seven predictor model yielded a multiple correlation coefficient of $R = .63$. The model accounted for 40% of the variance in Strive HI, which was a strong fit of the data overall, $F(8,111) = 9.45$, $p < .001$, as shown in Table 3.

Table 3

Regression Model Parameters of Strive HI Index on Eight Predictors

	B	*SE B*	*β*
Constant	175.08	34.34	----
Principal years at this school	-6.23	1.71	-.28**
Education	22.02	8.27	.21*
Years teaching	2.70	1.02	.27*
Years teach at this school	-2.40	1.34	-.19
Prioritize activities	6.55	2.91	.29*
Develop & implement a process of data analysis	4.15	2.54	.18
Create structures	-21.79	4.27	-.75**
Build positive school culture	8.65	283	.40**

Note. $R = .63$, $R^2 = .40$, 7th and final step; $F(8, 111) = 9.54$, $p < .001$; *$p < .05$, **p< .01 for *t*-tests of *beta* coefficient

The eight predictors for the Strive HI score were:

- TDProcAD, develop & implement a process to analyze data to improve student learning
- 37PrincYrs, number of years the principal was at the school,
- 39YrsTeach, years teaching
- 40Educa, level of teacher's education,
- TBPSC, build positive school culture,
- 38YrsatSchool, teacher's years at that school,

- TPANDS, prioritize and structure activities, and
- TDISTLD, create structures for distributive leadership.

The parameters of the model provided more detail as to each predictor's contribution to the model. See Table 3. The *B* weights indicated the strength and direction of the relationship with the dependent variable (Strive HI). From these, the standardized coefficients, β weights, are converted to standard units.

Using a *t*-statistic, each predictor was tested estimated to see if they make a significant contribution, i.e., that they were significantly different from zero. The sign indicated either a positive or a negative relationship with the dependent variable. A positive sign indicates that as the value of the predictor increases by on unit, the dependent variable increases by the value of the coefficient. Conversely, if negative, as the value of the predictor increases by one unit, the dependent value decreases by the value of the coefficient.

The *B*-weight for Years as Principal was -6.23, $p < .01$. This predicted that for every additional one year of being the principal, Strive HI score decreases was by 6.23. The *B* for Teacher's Education was 22.02, $p < .05$. This predicted that for every additional one jump in teacher education category, the Strive HI score increases by 22. 02. The *B* for Years Teaching was 2.70, $p < .05$. This predicted that for every additional one year of teaching, the Strive HI score increases by 2.70. The *B* for Years Teaching at This School was -2.40, $p < .01$. This predicted that for every additional one year teaching at the same school, the Strive HI score decreased by 2.40. the *B* weigh for Prioritize Activities was 6.55, $p < .05$. This predicted that for every additional unit, the Strive HI

score increased by 6.55. The *B* weight for Develop & Implement a Process of Data Analysis was 4.15, $p < .05$. This predicted that for every unit that increased, the Strive HI score increased by 4.15. The *B* for Creates Structures was -21.79, $p < .01$. This predicted that for every additional unit, the Strive HI score decreased by 21.79. Finally, the *B* weight for Build Positive School Culture was 8.65, $p < .05$. This predicted that for every unit that increased, the Strive HI score would increase by 8.65.

Results

The question that guided this study was "What principal leadership attributes did teachers associate with school effectiveness, as measured by Hawaii's Strive HI index?" The dependent variable is school effectiveness as measured by the Strive HI score. In 2013, the state of Hawaii implemented the Strive HI index as the measurement of school effectiveness. Strive HI schools scores are on scale from 0-400 points. This study used the predictor variables as the teachers' perceptions of nine attributes. For this quantitative study, the research question tested the following null and alternative hypotheses. The hypotheses are the following:

H_0: There is no relationship between one or more of teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

H_a: There is a relationship between one or more teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

The data from this study led to the rejection of the Null Hypothesis and accepted the Alternative. Four out of nine principal leadership attributes were found to be associated with the Strive HI score.

These attributes that predicted Strive HI scores were (a) develop and implement a process to analyze data to improve student learning, (b) building a positive school culture, (c) prioritize and structure activities, and (d) create structures for distributive leadership. There were also four demographic predictors of the Strive HI score, they were (a) number of years principal was at school, (b) teachers' years of teaching, (c) number of years teachers were at school, and (d) teachers' level of education.

Out of eight predictors, I identified three that negatively impacted Strive HI scores. The first negative predictor was the number of years the principal served in one school. For each additional year of principal serving at one school, the Strive HI score would decrease by 6.23 points. This may be explained by Ikemoto et al. (2014) that principal leadership requires a new type of leader. The conditions of education are rapidly changing and there is a need for principals to adapt to the changing landscape of education. The change of measuring school effectiveness by Adequate Yearly Progress that was held by No Child Left Behind in which principals' efforts were focused on student proficiency levels to a measurement that focuses on achievement, attendance, student growth, and closing the achievement gap (Strive HI).

The second negative impact on Strive HI scores was the leadership attribute that created structures for distributive leadership. The questions on the survey that addressed create structures for distributive leadership were (a) my principal promotes leadership

development among teachers, (b) at our school our leadership team has representation from all grade levels, and (c) at our school we have a clear structure and process for decision-making. This meant that as teachers' rated principals high in this attribute, the Strive HI score decreased 21.79 points. All three questions had a mean as 3.26, 3.31, and 3.32 out of a possible 5. These results contradict shared or distributive leadership research. According to Printy (2010), "She (principal) emphasized shared leadership responsibilities for meeting the targets of reform and encouraged collective responsibility for improvement on grade level teams. This action encouraged trust by reducing the vulnerability felt by individual teachers (p. 122)." Furthermore, in the current climate of education, principals need to create structures to share leadership in order to supervise instruction, provide professional development, and create other data driven processes in order to develop teaching to improve student learning (Zepeda, 2014). Principals cannot accomplish school improvement alone and therefore need to develop distributive leadership (Marzano et al., 2004). Furthermore, distributive leadership is the way many principals can effectively accomplish school goals (Hitt & Tucker, 2016)

Reflecting on these results, perhaps there was a flaw in the way the questioned was positioned. However, these results do imply that perhaps the teachers themselves may not have the skill to impact school effectiveness and they are also experiencing a shift to focus on all students than to focus on those students who are close to proficiency.

The third predictor that had a negative impact on Strive HI was teachers' years at the school site. For every additional unit a teacher taught at the same school, the Strive HI index decreased by 2.41. Leithwood et al. (2010) discussed the importance of teacher

development. Moreover, Gentilucci and Muto (2007) asserted that effective principals minimize their attention on managerial and operational issues and focus time and energy as being the principal leader that is the lead learner. The idea that principals are learning alongside the teachers will make professional development meaningful and collaborative.

Five predictors had positive impact on school effectiveness Strive HI scores. They were (a) Teachers' level of education (*B*=22.02), (b) Teachers' years of teaching (*B*=2.70), (c) Prioritize and structure activities (*B* =6.55), (d) Develop and implement a process to analyze data to improve student learning (*B*=4.15), and (e) Build a positive school culture (*B=8.65).*

The highest impact on the Strive HI score is the level of teacher education. This predictor is not in the control of the principal. However, it is statistically significant (0.897) predictor of the Strive HI score. Research has supported that teachers with advanced degrees have a positive impact on student achievement (Rice, 2003). Another predictor is the number of years a teacher has taught. Research identified teachers as the most important influence for student achievement (Wahlstrom et al., 2010).

The next positive impact on Strive HI score was a principal who built a positive school culture. A school culture built on trust and respect will improve student learning. Abbate (2010) suggested that educators need autonomy to build a culture that passionately allows them to be innovated and without mandates and punishment to pursue excellence to improve student learning. Additionally, Tschannen-Moran (2009) found that the amount of teacher professionalism was connected to the trust the teacher had of their principal. Principals that build a positive culture would have

teachers that trusted their principal and collaborated in improving school effectiveness (Printy, 2010).

Next, principals who develop and implement a process to analyze data to improve student learning positively influenced school effectiveness. The processes of data analysis include actionable steps. An effective principal has processes that collect multiple sources of student learning data to develop and implement learning goals (Hitt & Tucker, 20150. Direct involvement of the principal in collaborating with teachers during data analysis assists teachers to identify school improvement goals and address student learning (Van Barneveld, 2008; Protheroe, 2010). The results of this study predicted principals who have a process of data analysis in their school has a positive impact on school effectiveness.

Lastly, the principal practice of prioritizing and structuring activities had a positive impact on the Strive HI score. Louis et al.' (2010) study concluded that redesigning the organization is a core principal practice where the principal has clear priorities and structure to meet the school goal. Providing time during the work day for teachers to articulate and make decisions about student learning is an example how the principal prioritize and structures the day to assist teachers to be able to improve their instructional practices. Furthermore, principal leadership attributes are documented in the research of school turn arounds (Leithwood & Strauss, 2009). In these turn around schools, principals have clear priorities to improve teaching and learning and creates strutures in order to implement these priortities. Additionally, effective principals employ

a combination of effective practices to demonstrate concern for the teacher and yet steering the outcomes to benefit both teacher and the school (Hitt & Tucker, 2016).

Summary

The purpose of this quantitative study was to examine teachers' perceptions of elementary principals' leadership attributes and its association to school effectiveness as measured by Hawaii's Strive HI. One research question guided this study to find an association between teachers' perceptions of principal attributes and school effectiveness. Multiple regression models were used and the dependent variable was the Strive HI score and the predictors were the nine attributes and four demographical questions. Out of the 19 principals that responded out of 58 identified schools, 18 schools participated. One school that participated had a principal change within a few months prior to the administration of the survey. A 41-item Likert scale survey was given through email and teachers accessed the survey through a Google link. The results of the research question led to the rejection of the Null hypothesis and the acceptance of the Alternative.

The data revealed that there was an association to (a) Develop and implement a process to analyze data to improve student learning, (b) Building a positive school culture, (c) Prioritize and structure activities, and (d) Create structures for distributive leadership, (e) number of years principal was at school, (f) teachers' years of teaching, (g) number of years teachers were at school, and (h) teachers' level of education.

Data from the teacher perception survey measured teachers' perceptions of their principals' leadership attributes. The results of the prediction suggest that the less time a principal is at a school, the more education of a teacher, the more years of experience of a

teacher and the fewer years teachers have at a school predict higher school improvement scores. In other words, shorter tenure at a school by both principal and teacher predicts higher school improvement. Conversely, the greater the teaching experience and the more education are associated with higher school improvement.

Eight predictors were associated to Strive HI scores were found in this study. In chapter 5, I will interpret findings, discuss the limitations of the study, make recommendations, discuss the implication for social change, and draw a conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

In this quantitative study, I investigated the association of teachers' perceptions between elementary principals' leadership attributes and school effectiveness. The rationale for this study was that Hawaii shifted to a new school measurement system called the Strive HI index in 2013. Since Strive HI implementation, school effectiveness measurement shifted from a student proficiency percentile to student achievement, attendance, student growth, and closing the achievement gap. Measuring school effectiveness shifted from focusing on students close to proficiency to all students. During this time, principals also needed to shift school improvement plans to address the multiple measurements of Strive HI.

I employed multiple regression analysis in which the Strive HI score was the dependent variable and the predictors were the nine principal attributes along with four demographic items. Data were collected using the Teachers Perceptions of Principal Attributes Questionnaire (Appendix D). Fifty-eight schools were identified and 18 schools participated. One school had principal movement prior to its participation. The schools data were included in testing the hypotheses.

Anonymous surveys were administered to 124 teachers. The survey was available through a Google link. I conducted the following analyses to evaluate the association between teachers' perceptions of principal leadership attributes and the Strive HI score (a) descriptive analysis, (b) seven predictor regression model, (c) regression model parameters of Strive HI index on eight predictors, (d) correlation prediction (Appendix G), (e) test of normality of residuals (Appendix I), (f) model summary (Appendix I), and

(g) ANOVA (appendix J). The ANOVA showed no significant difference between the mean of the predictors. This study included the following hypotheses:

H_0: There is no relationship between one or more of teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

H_a: There is a relationship between one or more teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

I rejected the null hypothesis and accepted the alternative hypothesis that there are relationships between the following predictors to the Strive HI: (a) develop and implement a process to analyze data to improve student learning, (b) build a positive school culture, (c) prioritize and structure activities, and (d) create structures for distributive leadership, (e) number of years principal was at school, (f) teachers' years of teaching, (g) number of years teachers were at school, and (h) teachers' level of education. I concluded that school-improvement can be predicted by teacher perceptions of principal leadership.

Previous studies have indicated that principal leadership practices have an indirect influence on student achievement and directly influence the school organization (Leithwood et al., 2004). Teachers' perceptions of principals need to be understood because principals are in the position to improve school effectiveness and it is necessary for them to lead teachers in this era of accountability (Zepeda, 2014). Leithwood and Sun (2012) idnetified core practices of an effective principal as (a) setting direction, (b)

developing people, (c) redesigning the organization, and (d) improving the instructional program.

Interpretation of the Findings

This study was designed to investigate the association of teachers' perceptions between elementary principals' leadership attributes and school effectiveness. The interpretations of principal attributes that positively impact school effectiveness are as follows: (a) a process of data analysis, (b) a positive school culture, and (c) prioritizing and structuring school activities. Conversely the interpretations of principal attributes that negatively impact school effectiveness were: create structures for distributive leadership. Other predictors that had a positive impact on school effectiveness scores were teacher education level and years of teaching experience. Two predictors had a negative impact on school effectiveness and they were principal's years at the school and teacher's years at the school.

A Process of Data Analysis

Effective principals understand the difference between data analysis and data autopsy. Effective leaders collect student learning data from multiple sources to reach the school improvement goals (Hitt & Tucker, 2016). Principals collaborate with teachers to identify the type of student and have an effective data plan to be successful in improving student achievement (Hansen & Choi, 2012; Protheroe, 2010; Van Barneveld, 2008). Principals collaborate with teacher to develop a plan of action to improve student performance. The principal practice of supporting the process of effective data analysis is crucial in developing collaboration among teachers (Protheroe, 2010). Effective

principals understand data and ways to use them to create a collaborative environment to improve instructional practices and student outcomes (Mendels, 2012).

Anderson, Leithwood, and Strauss (2010) examined the use of data by principal and teachers and the influence it made on student achievement. Anderson et al. found that the principal needed to establish the purpose and expectations of the data used by teachers. Without the guidance of the principal, data discussion became a session of presenting the data and nothing else being done with it.

Data analysis at the school level is not successful if done alone. Collaboration with a structure and focus is embedded in this principal attribute. As part of data analysis, principals need to provide the time for teachers to collaborate. The questions that measured the attribute of protective collaboration time had a descriptive statistical mean of 12.95 which would indicate a high association in that area. Also, principals who engaged in collaboration alongside the teachers built positive school cultures.

Positive School Culture

Briggs et al. (2013) identified five elements that were important to principal effectiveness. These key elements are (a) recruiting and selecting teachers, (b) developing and supporting teachers (c) assessing and rewarding teachers, (d) implementing data-driven instruction, and (e) developing a positive school culture. Briggs research supports the findings of this study in two areas, building a positive school culture and implementing a process for data analysis.

In this study, teachers who reported to have a principal who built a positive school culture were associated with an increase of 8.65 in the Strive HI score. This was the

largest predictor of a positive impact on Strive HI scores when compared to the nine effective principal attributes. This would indicate that schools with a positive school culture predict higher Strive HI results.

Trust building among colleagues' impacts school effectiveness. When there is trust in the school community, it enhances stakeholders' perceptions of the support they receive from the principal (Cosner, 2009). "Developing and maintaining a positive school culture cultivates a professional learning community, the learning and success of all students and the professional growth of the faculty (Lunenburg & Irby, 2014, p. 13)".

Prioritizing and Structuring School Activities

Prioritizing and structuring activities to support the success of achieving the school goals is another principal leadership attribute. Louis et al. (2010) concluded that redesigning the organization is a core principal practice in which the principal has clear priorities and structure to meet the school's goal. To meet the needs of the faculty and students, principals structure the school day to balance instruction, allow time for collaborative dialogue and discussion, and encourage professional development

The principal practice of prioritizing and structuring activities had a positive impact on the Strive HI score. Providing time during the work day for teachers to articulate and make decisions about student learning is an example how the principal prioritizes and structures the day to assist teachers in improving their instructional practices. Furthermore, principal leadership attributes are documented in the research of school turn arounds (Leithwood & Strauss, 2009). In these turn around schools,

principals had clear priorities to improve teaching and learning and created structures to implement these priortities

This attribute may also be linked to setting clear directions. The descriptive statistical analysis mean of setting high expectations around student learning mean was 14.95. These data also indicated a correlation of .755 between setting high expectations and prioritizing and structing activites. The practice of prioritizing and structuring activities must also be aligned with the school's overall improvement goals to ensure success for all students.

Create Structures for Distributive Leadership

Create structures for distributive leadership was negatively associated with increased Strive HI scores. For every unit in which teachers perceived principals practicing this attribute, the Strive HI score was reduced by 21.79 points. This finding contradicts current research on principal's shared/distributive leadership practices. Perhaps the reason for the negative association with the Strive HI index could be accounted for by the rapidly changing landscape of education and that principals are placing teachers in leadership roles that require skills or knowledge that have not been developed. In addition, the Strive HI index is a new measurement system that many principals need to understand. Perhaps, additional time to understand how Strive HI measured school effectiveness and how leadership teams may address school effectiveness needs to be reviewed.

Research on distributive leadership indicated shared leadership responsibilities to meet the schools goals and encourage collective accountability (Printy, 2010).

Furthermore, in the current climate of education, principals need to create structures to share leadership to supervise instruction, provide professional development, and create other data driven processes in order to develop teaching and improve student learning (Zepeda, 2014). Principals cannot accomplish school improvement alone and therefore need to develop distributive leadership (Marzano et al., 2004). However, in cases of effective school turnaround, principal need to distribute school leadership sparingly (Leithwood & Sun, 2012). Leithwood and Sun indicated that during a time of stabilization, the principal is the most important leader.

Reflecting on these results of my study, perhaps there was a flaw in the way the questioned was framed. These results imply that teachers may not have the skill to impact school effectiveness and they are also experiencing a shift to focus on all students rather than focus on those students who are close to proficiency.

Demographic Predictors

Principals' and teachers' years at the school were associated with lower school effectiveness scores. However, teacher education and teaching experience were associated with higher school effectiveness scores. Data from the teacher perception survey indicated teachers' perceptions of their principals' leadership attributes. The results of the study indicate that the less time a principal is at a school, the more education of a teacher, the more years of experience of a teacher and the fewer years teachers have at a school are associated with higher school improvement scores. In other words, shorter tenure at a school by both principal and teacher is associated with higher

school effectiveness score. More teaching experience and more education are also associated with higher school effectiveness scores.

Summary of Interpretation of Findings

Analysis of data from the teacher perceptions survey indicated that a principal who develops and implements a data process, builds a positive school culture, and prioritizes and structures activity is associated with higher school effectiveness. In addition, teachers with advanced degrees and greater years of teaching experience are associated with higher school effectiveness. Conversely, principals and teachers years at the same school are associated with lower school effectiveness.

Limitations and Threats to Validity

Findings were limited by the number of principals who agreed to participate and teachers who responded and agreed to participate. There were a total of 124 respondents. Results may have been different if more schools and more teachers had responded to the request to participate.

The threat to validity came from the assumption that only schools with a principal in place for 5 years were to respond. I discovered that one school recently had principal movement and that the principal was in place for less than a year.

Implications for Social Change

Social change can be achieved through improving principals' leadership practices associated with school effectiveness. Schools should prepare students to become college and career ready. Carnevale et al. (2010) determined that 65% of the Hawaii's job market will require postsecondary education. The results of this study suggested that higher

school effectiveness can be achieved through specific leadership attributes. Research on turnaround schools also indicated the importance of principal leadership in turning around low- achieving and chronically failing schools (Ferguson et al, 2009; Kutash et al., 2010; Leithwood et al., 2010; Murphy, 2009a).

The results of the Research Question revealed the following as predictors for school effectiveness: (a) a process of data analysis, (b) a positive school culture, and (c) prioritizing and structuring school activities. Conversely the interpretations of principal attributes that negatively impact school effectiveness was create structures for distributive leadership. Other predictors that had positive impact on school effectiveness scores were teacher education level and years of teaching experience. Two predictors had a negative impact on school effectiveness and they were principal's years at the school and teacher's years at the school. This researcher suggest that the department of education review these results to provide principal professional development.

Recommendations for Action

The results of this study showed specific attributes that would account for higher school effectiveness scores and attributes that would decrease school effectiveness scores. The recommendation for action would be a presentation of these results to principals, assistant principals, and aspiring educational officers. Printy (2010) concluded that principal leadership in terms of an instructional leader is important to improve students learning and they have influence on teacher's implementation of effective instructional practices. Thus, it is valuable to understand teachers' perceptions of

principal leadership. Principal leadership is only second to the classroom teacher in its influence of student achievement (Leithwood et al., 2010).

The presentation could take place at the State's Educational Leadership Institute where all of State of Hawaii's educational officers are scheduled to attend. The presentation would share and disseminate the findings and create opportunity for principals to discuss and brainstorm areas of need in their own schools. The focus of the presentation will be the attributes and the demographical predictors that impact school effectiveness. As part of the presentation, principals will discuss how they practice the positive predictors at their school and develop areas to be strengthened with their school team.

Another recommendation is to provide districts the Teacher Perceptions of Principal Attribute survey so that they can have it available to gather teacher perception information that may improve teacher buy-in for school improvement. Providing this tool to gather information may assist principals in identifying teachers' perceptions about their leadership practices.

Recommendations for Future Study

Three recommendations or future research are offered as a result of this study: (a) study teachers' perceptions on elementary principals' leadership attributes using three years of Strive HI scores, (b) study teachers' perceptions on secondary principals' leadership attributes, and (c) study both school level results and find if principal leadership in the elementary setting is same to those in the secondary setting.

Use Three Years of Strive HI Scores

The first recommendation is to use three years of data of the Strive HI scores. The Strive HI system is new and in its first few years of implementation. Using three years of scores may provide additional understanding of effective principal attributes rather than using one score for one year. The study may find the mean of the three year score and then approach the study using the same research question and hypotheses.

Study Secondary Principals

The second recommendation is to conduct this study using secondary level schools. Secondary schools consist of middle and high school. This study will use the same methodology, research question, and hypotheses to find an association between teachers' perceptions on principal leadership attributes and the Strive HI score. This study could also be expanded to include three years of Strive HI data.

Compare Results of Elementary and Secondary

The last recommendation could be done in one study. All levels could be asked to participate. The data would be disaggregated to indicate elementary level or secondary level. The findings would be able to find if elementary schools and secondary schools have the same predictors for school effectiveness. This study would be able to provide specific focus for principals at either level.

Conclusion

The purpose of this study examined teachers' perceptions on principals' leadership attributes. The research question that guided this study was, "What principal leadership attributes did teachers associate with school effectiveness, as measured by

Hawaii's Strive HI index. The dependent variable was the Strive HI score and the predictor variables were teachers' perceptions of nine attributes. The hypothesis for research question was the following:

H_0: There is no relationship between one or more of teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

H_a: There is a relationship between one or more teachers' perceived principal attributes and school effectiveness, as measured by Hawaii's Strive HI index.

The results of this study led to the rejection of the Null hypothesis and the acceptance of the Alternative. There were eight predictors that impacted the Strive HI scores. These predictors were (a) the number of years principal served in a school, (b), the level of teacher's education, (c) teacher years of teaching experience, (d) teacher's years teaching at the school,(e) prioritize and structure activities, (f) create structures for distributive leadership, (g) the development and implementation of a process to analyze data to improve student learning, and (h) build a positive school climate.

The goal of education is to ensure that students are prepared for college entry or entry into a career. Schools are the key factor in preparing students for the future. The principal is second only to teacher influence to improve student achievement (Leithwood et al., 2010). School effectiveness is measured by students' outcomes. The landscape of education has been changing consistently from No Child Left Behind (2001) to Every Student Succeed Act (2016). Effective principals make a difference in school effectiveness ((Ferguson et al., 2009; Leithwood et al., 2010; Kutash et al., 2010;

Murphy, 2009a). This study has shown that there is an association between teacher perceived leadership attributes and Strive HI scores. As a result, districts need to be aware of the specific attributes that are needed in principals in order to have successful schools. Also at the district level, principals may be provided professional development to address areas to improve in their own practices. These actions may result in school effectiveness.

References

Abbate, F. (2010). Education leadership in a culture of compliance. *Phi Delta Kappan,* 91(6), 35-37.

Allensworth, E. (2012). Want to improve seaching? Create Collaborative, Supportive Schools. *American Educator, 36*(3), 30-31.

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

Assessment, I. T., & Support Consortium. (2011). InTASC model core teaching standards: A resource for state dialogue. Washington, DC: Council of Chief State School Officers.

Aud, S., Fox, M., & KewalRamani, A. (2010. *Status and trends in the education of racial and ethic groups*, NCES 2010-1050. US. Department of Eduaction, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Aud, S., Hussar, W., Kena, G., Blanco, K., Frohlich, L., Kemp, J., & Tahan, K. (2011). The condition of education 2011. U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. *American Psychologist, 62*(1), 25-33. doi:10.1037/0003-066X.62.1.25

Avolio, B. J. & Bass, B. M. (2004). *Multifactor leadership questionnaire third edition manual and sampler set.* Menlo Park, CA Mindgarden Inc.

Barnes, C. A., Camburn. E., Sanders, B.R., & Sebastian, J. (2010). Developing instructional leaders: Using mixed methods to explore the black box of planned change in principals' professional practice. *Educational Administration Quarterly, 80,* 241-279. doi:10.1177/1094670510361748.

Blank, R.K., & Council of Chief State School. (2011). Closing the achievement gap for economically disadvantaged students: Analyzing change since using state assessments and the national assessment of educational progress. *Council of Chief State School Officers.* Retrieved from ERIC database (EDS518986)

Blase, J., & Blase, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Administration Quarterly,35*(3), 349-378. doi:10.1177/0013161X99353003

Briggs, K., Cheney, G. R., Davis, J., & Moll, K. (2013). Operating in the dark: What outdated state policies and data gaps mean for effective school leadership. Dallas, TX: The George W. Bush Institute.

Brown, D., Reumann-Moore, R., Hugh, R., Christman, J., Riffer, M. (2009). Links to learning and sustainability: Year three report of the Pennsylvania high school coaching initiative. Philadelphia, PA: Research for Action.

Brown, K.M., Benkovit, J., Muttillo, A.J., & Urban, T. (2011). Leading schools of excellence and equity: Documenting effective strategies in closing achievement gaps. *Teachers College Record,* 113(1), 57-96. Retrieved from http://eric.ed.gov/?id=ED504284

Calkins, A., Guenther, W., Belfiore, G., & Lash, D. (2007). *The turn around challenge:*

Why America's best opportunity to dramatically improve student achievement lies in our aworst-performing schools. Retrieved from http://eric.ed.gov/?id=ED538298

Camburn, E.M., Huff, J.T., Goldring, E.G., & May, H. (2010). Assessing the validity of an annual survey for measuring principal leadership practice. *Elementary School Journal. 111*(2), 314-335. doi:10.1086/656302

Canales, M.T., Tejeda-Degaldo, C., & Slate, J.R. (2008). Leadership behaviors of superintendent/principals in a small, rural school districts in Texas, *The Rural Educator, 29*(3), 1-7. Retrieved from http://epubs.library.msstate.edu/index.php/ruraleducator/article/view/188

Carnevale, A.P., Smith, N., & Strohl, J. (2010). *State-level analysis, Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University, Center on Education and the Workforce. Retrieved from https://repository.library.georgetown.edu/bitstream/handle/10822/559303/FullReport.pdf?sequence=1

Cavanagh, S. (2009). The black-whiteachievement gap. *Education Week*, *28*(30), 4. Retrieved from http://sfxhosted.exlibrisgroup.com/waldenu?sid=google&auinit=S&aulast=Cavanagh&atitle=The+black-white+achievement+gap+narrows+on+NAEP&title=Education+Week&volume=28&date=2009&spage=37&issn=0277-4232

Center for Postsecondary and Economic Success. (2012, April). The credential

differential: The public return to increasing postsecondary credential attainment. Retrieved from www.clasp.org/admin/site/publications/files/Exec-Summary-The-Credential-Differential.pdf

Chenoweth, K. (2009). It can be done, it's being done, and here's how. *Phi Delta Kappan*, 91(1), 38-43. Retrieved from: http://sfxhosted.exlibrisgroup.com/waldenu?sid=google&auinit=K&aulast=Chenoweth&atitle=It+can+be+done,+it%27s+being+done,+and+here%27s+how&title=Phi+Delta+Kappan&volume=91&issue=1&date=2009&spage=38&issn=0031-7217

Chenoweth, K., & Theokas, C. (2011). *Getting It Done: Leading Academic Success in Unexpected Schools*. Harvard Education Press. 8 Story Street First Floor, Cambridge, MA 02138.

Childress, M. (2014). Building teacher capacity: Tools to strengthen instruction through multiple measures of evaluation. *Principal, 93*(5). 8-12.

Clifford, M., Behrstock-Sherratt, E., & Fetters, J. (2012). *The Ripple Effect: A Research-based Framework for Understanding Principal Impact*. Washington, DC: American Institutes

Colorado Education Initiative. (2014, October 21). Teacher perception survey technical report. Retrieved from http://www.muhlenberg.edu/library/reshelp/apa_example.pdf

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159.

Cosner, S. (2009). Building organizational capacity through trust. *Educational*

Admnistration Quarterly, 45(2), 248-291.Creswell, J.W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: Sage.

Crum, K. S., Sherman, W. H., & Myran, S. (2010). Best practices of successful elementary school leaders. Journal of Educational Administration, 48(1), 48-63. doi:10.1108/09578231011015412.

Daly, A. (2009). Rigid Response in an Age of Accountability: The Potential of Leadership and Trust. Educational Administration Quarterly, 45(2), 168-216. doi: 10.1177/0013161X08330499

Danielson, C. (2007). Enhancing professional practice: A framework for teaching (2nd ed.). Alexandria, Virginia: ASCD.

Danielson, C. (2011). Evaluations that help teachers learn. *Educational Leadership*, *68*(4), 35-39.

Darling-Hammond, L., Amrein-Beardsley, A., Haertel, E., & Rothstein, J. (2012). Evaluating teacher evaluation. *Phi Delta Kappan, 93*(6), 8-15.

Darling-Hammond, L., Meyerson, D., LaPointe, M., Orr., M.T. (2010). *Preparing principals for a changing world: Lessons from effective school leadership programs.*San Francisco, CA. Jossey Bass. [IPAD version].

Day, C. (2009). Building and sustaining successful principalship in England: the importance of trust. Journal of Educational Administration, 47(6), 719-730. doi:10.1108/09578230910993104.

Denton, C., Swanson, E., & Mathes, P. (2007). Assessment-based instructional coaching

provided to reading intervention teachers. *Reading & Writing, 20*(6), 569-590. doi:10.1007/s11145-007-9055-0Devos, G., Tuytens, M., & Hulpia, H. (2014). Teachers' organizational commitment: Examining the mediating effects of distributed leadership. *American Journal of Education*, 120, 205–231. doi:10.1086/674370

Donaldson, G., Marnik, G., Mackenzie, S., & Ackerman, R. (2009). What makes or breaks a principal. *Educational Leadership*, 67(2), 8-14. doi: 10.1177/194277511000501401

Dowell, S., Bickmore., D., & Hoewing, B. (2012). A framework for defining literacy leadership. *Journal of Reading Education*, *37*(2), 7-15. Retrieved from: http://web.a.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=08865701&AN=74099109&h=HmibK31uwDAMH6GX1PQdXKEb6bEUGjvIu8wsDTZn2hKOZU25BgIazxfsiKY%2fu8MA0RkNvViVuqi0o4jSM3qysA%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d08865701%26AN%3d74099109

Drysdale, L., Goode, H., & Gurr, D. (2009). An Australian model of successful school leadership: Moving from success to sustainability. *Journal of Educational Administration*, *47*(6), 697-708. doi:10.1108/09578230910993087.

Duke, D., & Salmonowicz, M. (2010). Key decisions of a first-year "turnaround" principal. *Educational Management Administration & Leadership*, 38(1), 33-58. doi: 10.1177/1741143209345

Dunn, D. (2001). *Statistics and data analysis for the behavioral sciences.* New York: McGraw Hill. Pp. 349-353.

Equity Alliance. (2012). Examining policies and practices through an equity lens. Retrieved from http:/www.icontact-archive.com/PZ_Es_uxaix-LvczYhRWhs-fyHhC9ol_?w=1.

Faul. F., Erdfelder, E., Lang, A_G, and Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39* (2), 175-191. For download of program: http://www.gpower.hhu.de/

Ferguson, R.F., Hackman, S., Hanna, R., & Ballantine, A. (2008). Getting it done: Raising achievement and closing gaps in whole school systems: Recent advances in research and practice. *Achievement Gap Initiate at Harvard University*. Retrieved from http://agi.harvard.edu/events/2008Conference/GETTING_IT_DONE_02_24_09.pdf

Ferguson, R.F., Hackman, S., Hanna, R., & Ballantine, A. (June, 2009). How high schools become exemplary: Ways that leadership raises achievement and narrows gaps by improving instruction in 15 public high schools. *Report on the 2009 Annual Conference of the Achievement Gap Initiative at Harvard University*. Retrieved from http://www.agi.harvard.edu.

Field, A. (2005). *Discovering statistics using SPSS*. (2nd ed.). Thousand Oaks, CA: Sage.

Fredericks, J.A., Blumenfeld, P.C. & Paris, A.H. (2004). School engagement: Potential of

the oncept, state of evidence. *Reviews of Educational Research, 74*(1), 59-109

Fullan, M. (2003). *The moral imperative of school leadership*. Thousand Oaks, CA: Corwin Press.

Fullan, M., & Knight, J. (2011). COACHES AS SYSTEM LEADERS. Educational Leadership, 69(2), 50.

Gardiner, M., Canfield-Davis, K., & Anderson, K. (2009). Urban school principals and the 'No Child Left Behind' Act. *Urban Review*, 41(2), 141-160. doi:10.1007/s11256-008-0102-1

Gentilucci, J.L. & Muto, C.C. (2007). Principals' influence on academic achievement: The student perspective. *National Association of Secondary School Principals. NASSP Bulletin*, 91(3), 219 – 236. Retrieved from ProQuest Central.

Goldring, E., Huff, J., May, H., & Camburn, E. (2008). School context and individual charateristics: what influences principal practice? *Journal of Educational Administration*, 46(3), 332-352. Retrieved September 11, 2011, from ProQuest Central. (Document ID: 1550198141).

Graczewski, C., Knudson, J., & Holtzman, D.J. (2009). Instructional leadership in practice: What does it look like, and what influence does it have?. *Journal of Education for Students Placed at Risk,* 14(1), 72-96.

Grissom, J.A. & Loeb, S. (2011). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals indentify the central importance of managerial skills. *American Educational Research Journal,* 48. 1091-1123. doi: 10.3102/0002831211402663

Gurr, D., Drysdale, L., & Goode, H. (2010). Successful school leadership in Australia: A research agenda. *International Journal of Learning*, 17(4), 113-129.

Hallinger, P. (2014). Reviewing reviews of research in educational leadership: An empirical assessment. Educational Administration Quarterly, 50, 539. doi:10. 1177/0013161X13506594

Hallinger, P., & Heck, R. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-95. *Educational Administration Quarterly, 32*(1), 5-44. Retrieved from: http://eaq.sagepub.com/content/32/1/5.short

Hallinger, P., & Heck, R. (1998). Exploring the principals' role in school effectiveness, 1980–1995. School Effectiveness and School Improvement, 9, 157–191. doi:10.1080/0924345980090203

Hallinger, P., & Heck, R. H. (2010). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. *School Leadership and Management*, *30*(2), 95-110. doi: 10.1080/13632431003663214

Hallinger, P., Wang, W. C., & Chen, C. W. (2013). Assessing the Measurement Properties of the Principal Instructional Management Rating Scale A Meta-Analysis of Reliability Studies. *Educational Administration Quarterly, 49*(2), 272-309. Retrieved from: http://www.eduhk.hk/apclc/dowloadables/monographs/Monograph2012-4_Philip_Hallinger.pdf

Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). Using student achievement data to support instructional decision making

(NCEE 2009-4067). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/publications/practiceguides/.

Hansen, M., & Choi, K. (2012). Chronically low-performing schools and turnaround: Evidence from three states. *Society for Research on Educational Effectiveness.*

Hattie, J. C. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement.* Routledge, New York: Taylor &Francis.

Hawaii State Department of Education (n.d.a). Educator Effectiveness. Retrieved from: http://www.hawaiipublicschools.org/TeachingAndLearning/EducatorEffectiveness/Pages/Home.aspx

Hawaii State Department of Education (n.d.b). Zones of school innovation.Transforming Hawaii's Public Schools: Hawaii's 5-Point Plan. Retrieved from http://hawaiidoereform.org/Zones-of-School-Innovation.

Hawaii State Department of Education. (2009). *State of Hawaii NCLB School Report SY 2008-2009* Retrieved from htpp://arch.k12.hi.us/PDFs/nclb/2009/PreliminaryAYPallSch37Pub20090720.pdf

Hawaii State Department of Education State of Hawaii, Office of the Superintendent/Planning and Evaluation Office. (2009a). *AYP Report: State Summary.* Retrieved from http://arch.k12.hi.us/PDFs/nclb/2009/FinalAYPStateSummaryRptPub20090826.pdf

Hawaii State Department of Education, Office of the Superintendent/Planning and Evaluation Office. (2009b). *AYP determination and school sanction status by complex.* Retrieved from http://arch.k12.hi.us/PDFs/nclb/2009/FinalAYPPubSchList20090826.pdf

Hawaii State Department of Education. (2010) *Hawaii's race to the top: Executive Summary.*Retrieved from http://www.hcps.k12.hi.us/STATE/COMM/DOEPRESS.NSF/a1d7af052e94dd120a2561f7000a037c/c8994103050d7c680a25776d0064bf00/$FILE/HI%20RTTT%20Executive%20Summary%20July%2027%202010%20FINAL-HI.pdf

Hawaii State Department of Education. (2011a). *State of Hawaii NCLB school report sy 2010-11* (Publication No. 20110705).

Hawaii State Department of Education. (2011b). Overcoming challenges: 2010 superintendent's 21st annual report. *Systems Accountability Office* (RS 11-0713).

Hawaii State Department of Education, Office of the Superintendent. (2013). Superintendents' 23rd annual report. *Systems Accountability Office* (RS13-1271). Retrieved from http://www.hawaiipublicschools.org/DOE%20Forms/School%

Hawaii State Department of Education. (2011c). Leeward district: School year 2010-2011. School Accountability: School status & Improvement Report. *Systems Accountability Office.*

Hawaii State Department of Education (2012a). ESEA flexibility request for window 3. Retrieved from https://www2.ed.gov/policy/eseaflex/hi.pdf

Hawaii State Department of Education. (2012b). Race to the Top State Scope of Work.

Retrieved from: http://www2.ed.gov/programs/racetothetop/state-scope-of-work/hawaii.pdf.

Hawaii State Department of Education. (2012c). *Final School Year 2011-12 AYP Results and Corresponding School Year 2012-13 Accountability Status by Complex.* Retrieved from: http://arch.k12.hi.us/PDFs/nclb/2012/FinalAYPPubSchList20120928.pdf

Hawaii Department of Education. (2013a). *Educator Effectiveness System.* Retrieved on May 5, 2013 from: http://doe.k12.hi.us/personnel/educatoreffectiveness/EESSummary041713final.pdf

Hawaii Department of Education. (2013b). *Comprehensive Evaluation System for School Administrators (CESSA).* Retrieved on May 5, 2013 from http://doe.k12.hi.us/cessa/CESSA_Fact_Sheet.pdf

Hawaii Department of Education. (2013c). Strive HI School Classification List: SY12-13 results. Retrieved on January 31, 2014 from http://www.hawaiipublicschools.org/DOE%20Forms/StriveHIIndexReports/StriveHIClassificationList_Adjusted2013.10.30.pdf

Hawaii Department of Education. (2014). Strive HI school comparisons: 2013 & 2014. Retrieved from: http://www.hawaiipublicschools.org/DOE%20Forms/StriveHI2014/StriveComparisons.pdf

Hawaii Department of Education, Accountability Resource Center Hawaii (2015). School

Status & Improvement Report. Retrieved from http:// http://arch.k12.hi.us/school/ssir/ssir.html.

Herman, R., Dawson, P., Dee, T., Greene, J., Maynard, R., Redding, S. & Darwin, M. (2008). *Turning around chronically low-performing schools*. Washington, DC: U.S. Department of Education.

Hitt, D. H. and Tucker, P. D. (2016, June). Systematic review of key leader practices found to influence student achievement: A unified framework. *Review of Educational Research, 86* (2), 532-569. do: 10.3102/0034654315614911

Hull, J. (2013). Trends in teacher evaluation: How states are measuring teacher performance. Retrieved from: http://www.centerforpubliceducation.org/Main-Menu/Evaluating-performance/Trends-in-Teacher-Evaluation-At-A-Glance/Trends-in-Teacher-Evaluation-Full-Report-PDF.pdf

Humphrey, A. (2012). Transformational leadership and organizational citizenship behaviors: The role of organizational identification. *The Psychologist-Manager Journal, 15*(4), 247-268. doi:10.1080/10887156.2012.731831

Ikemoto, G., Taliaferro, L., Fenton, B., & Davis, J. (2014). Great principals at scale: Creating district conditions that enable all principals to be effective. New Leaders & The Bush Institute. Retrieved from http://www.bushcenter.org/sites/default/files/gwbi-greatprincipalsatscale.pdf.

Jenkins, B. (2009). What it takes to be an instructional leader. *Principal, 88*(3), 34-37.

Jones, D., & Rudd, R. (2008). Transactional, Transformational, or Laissez-Faire Leadership: Assessment of College of Agriculture Academic Program Leaders'

(Deans) Leadership Styles. *Journal Of Agricultural Education*, *49*(2), 88-97. Retrieved from: http://files.eric.ed.gov/fulltext/EJ839885.pdf

Kirby, P.C., Paradise, L.V. & King, M.I. (1992). Extraordinary leaders in education: Understanding transformational leadership. *Journal of Educational Research*, *85*(5), 303. doi: 10.1080/00220671.1992.9941130

Kowal, J., Hassel, E., Hassel, B.C., & Center for Comprehensive School Reform and, I. (2009). Successful school turnarounds: Seven steps for district leaders. Issue Brief. *Center for Comprehensive School Reform and Improvement.*Retrieved from: http://files.eric.ed.gov/fulltext/ED507589.pdf

Kowal, J., & Hassel, E.A. (Public Impact).(2011). *Importing leaders for school turnaround:Lessons and opportunities.* Charlottesville: University of Virginia's Darden/Curry Partnership for Leaders n Education. Retrieved from www.dardencurry.org*18*(1), 1-20. doi:10.1080/09243450600797638.

Kutash, J., Nico, E., Gorin, E., Rahmatullah, S., Tallant, K. (2010). *The school turnaround field guide*. Boston: FSG Social Impact Advisors. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/district-policy-and-practice/Documents/The-School-Turnaround-Field-Guide.pdf

Kurland, H., Peretz, H., & Hertz-Lazarowitz, R. (2010). Leadership style and organizational learning: the mediate effect of school vision. Journal of Educational Administration, 48(1), 7-30. doi:10.1108/09578231011015395.

Lashway, L. (2002). *Developing instructional leaders*. Washington, DC: ERIC Digest.

Leech, D. & Fulton, C.R. (2008, Summer). Faculty perceptions of shared decision

making and the principal's leadership behaviors in secondary schools in a large urban district. *Education, 128*(4), 630-644.

Letihwood, K., Louis, K.S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning.* New York: The Wallace Foundation.

Leithwood, K. (2010). Charactericstics of school districts that are exeptionally effective in closing the achievement gap. *Leadership & Policy in Schools, 9*(3), 254-291. doi:101080/15700761003731500.

Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership and Management, 28*(1), 27 – 42. doi: 10.1080/13632430701800060

Leithwood, K., Harris, A., & Strauss, T. (2010). *Leading school turnaround: How successful leaders transform low-performing schools.* CA: San Francisco, Jossey-Bass. Retrieved from www.ibooks.com.

Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contribution of leader efficacy. *Educational Administration Quarterly, 44*(4), 496-528. Retrieved from: http://myfirstwikipage.wiki.westga.edu/file/view/researchsourceleadershipefficacy.pdf

Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness & School Improvement,* 17(2), 201-227. Retrieved from: http://myfirstwikipage.wiki.westga.edu/file/view/ResearchsourceLeadershipTrans

formation.pdf

Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a conception of how school leadership influences student learning. Educational Administration Quarterly, 46(5), 671-706. Retrieved July 10, 2011 from Teacher Reference Center.

Leithwood, K.A., & Riehl, C. (2003). What we know about successful school leadership. *National College for School Leadership*. Retrieved from http://dcbsimpson.com/randd-leithwood-successful-leadership.pdf.

Leithwood, K. & Strauss, T. (2009). Turnaround schools: leadership lessons. *Education* Canada, 49(2), 26-29.

Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. Educational Administration Quarterly, 48, 387–423. doi:10.1177/0013161X11436268

Leithwood, K. & Wahlstrom, K. L. (2008, October). Linking leadership to student learning: Introduction. *Educational Administration Quarterly, 44*(4), 455-457. doi: 10.1177/0013161X08321501

Louis, K.S., Leithwood, K., Wahlstrom, K.L., & Anderson, S.E. (2010). Investigating the links to improved student learning: Final report of research findings. Wallace Foundation, Learning from Leadership Project. Retrieved from http://www.cehd.un.edu/carei/Leadership/Learning-from-Leadership_Final-Research-Report_July-2010.pdf

Lunenburg, F.C., & Irby, B.J. (2014) Strengthening the principal's toolbox strategies to boost learning. National Forum of Educational Administration & Supervision

Journal, 32(1),4-17. Retrieved from: http://www.nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg,%20Fred%20C%20IJOBE%20V1%20N1%202013.pdf

Marzano, R.J., Waters, J.T., & McNulty, B.A. (2005). *School leadership that works: From research to results*. Aurora, CO: Mid-continent Research for Education and Learning.

May, H. & Supovitz, J.A. (2011). The scope of principal efforts to improve instruction. *Educational Administration Quaterly*, 47(2), 332-352. doi:10.1177/001316X10383411.

McClelland, D.C.(1998). Identifying competencies with behavioral-event interviews. *Psychological Science (Wiley-Blackwel), 9*(5), 331. Retrieved from: http://pss.sagepub.com/content/9/5/331.short

Means, B., Padilla, C., DeBarger, A., & Bakia, M. (2009). *Implementing data-informed decision making in schools: Teacher access, supports and use*. Washington, DC: U.S. Department of Education, Office of Planning, Evaluation and Policy Development. Retrieved from http://eric.ed.gov/PDFS/ED504191.pdf

Mendels, P. (2012). The effective principal: 5 pivotal practices that shape instructional leadership. Journal of Staff Development, 33(1), 54-56,58. Retrieved from: http://search.proquest.com/docview/928760520?accountid=14872

Moore, S.D., Kochan, F.K., & Reames, E.H. (2011). Professional development and student achievement in high poverty schools: Makng the connection. *International Studies in Educational Administration (Commonwealth Council for*

Educational Administration & Management (CCEAM)), 39(2), 65-79. Retrieved from: http://christyhiett.wiki.westga.edu/file/view/Professional%20Development%20and%20student%20achievement%20in%20high%20poverty%20schools.pdf/342868410/Professional%20Development%20and%20student%20achievement%20in%20high%20poverty%20schools.pdf

Muijs, D. (2004). Doing qualitative research in education with SPSS. London, GBR: SAGE Publications Inc.

Muijs, D. (2011). Leadership and Organisational performance: From research to prescription?. *International Journal of Educational Management*, 25(1), 45-60. doi:10.1108/09513541111100116.

Mulford, B., Kendall, D., Ewington, J., Edmunds, B., Kendall, L., & Silins, H. (2008). Successful principalship of high-performance schools in high-poverty communities. *Journal of Educational Administration*, 46(6), 461-480. doi: 10.1108/0957823081088200

Mullen, C.A., & Hutinger, J.L. (2008). The principals role in fostering collaborative learning communities through faculty study group development. *Theory Into Practice, 47,* 276-285. doi:10.1080/00405850802329136

Murphy, J. (2009a). Closing achievement gaps: Lessons from the last 15 years. (cover story). *Phi Delta Kappan*, 91(3), 8-12. Retrieved from: http://www.jstor.org/stable/40345082?seq=1#page_scan_tab_contents.

Murphy, J. (2009b). Turning around failing schools: Policy insights from the corporate,

government, and nonprofit sectors. Educational Policy, 23(6), 796-830 doi: 10.1177/0895904808320677

Murphy, J., Elliot, S. N., Goldring, E., & Porter, A. C. (2006). Learning-centered leadership: A conceptual foundation. New York, NY: Wallace Foundation.

Murphy, J., & Meyers, C.V. (2009). Rebuilding organizational capacity in turnaround schools: Insights from the coporate, government, and non-profit sectors. *Educational Management Administration & Leadership,* 37(1), 9-27. doi: 10.1177/1741143208098162

National Association of Elementary School Principals. (2012). Rethinking principal evaluation. Retrieved from: http://www.naesp.org/sites/default/files/PrincipalEvaluationReport.pdf

National Center for Education Evaluation and Regional Assistance. (2011). *Do low-income students have equal access to the highest-performing teachers?* Washington, DC: Education Publications Center.

National Institute for Excellence in Teaching, (2012). Beyond "job-embedded": Ensuring that good professional development gets results. National Institute for Excellence in Teaching.

Nettles, S. M., & Herrington, C. (2007). Revisiting the importance of the direct effects of school leadership on student achievement: The implications for school improvement policy. *Peabody Journal of Education, 82*(4), 724-736. doi:10.1080/01619560701603239

No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, §115, Stat. 1425 (2002).

Orr, M. T., King, C., & LaPointe, M. (2010). Districts Developing Leaders: Lessons onConsumer Actions and Program Approaches from Eight Urban Districts. *Education Development Center, Inc*. doi: 10.1.1.669.4318

Pattillo, K. (2010). From failing to effective: A case study of transformational leadership and teachings at a township high school in Durban, South Africa. *ISP Collection.* Paper 883. Retrieved from http://digitalcollections.sit.edu/isp_collection/883.

Piccolo, R. F., Bono, J. E., Heinitz, K., Rowold, J., Duehr, E., & Judge, T. A. (2012). The relative impact of complementary leader behaviors: Which matter most?. *The leadership quarterly*, *23*(3), 567-581.

Printy, S. (2010). Principals' influence on instructional quality: insights from US schools. *School Leadership & Management*, 30(2), 111-126. doi:10.1080/13632431003688005

Protheroe, N.(2010). Schools as effective data users. *Principal*, 90(1), 25-28.Retrieved from: http://eric.ed.gov/?id=EJ917571

Protheroe, N. (2011). What do effective principals do? *Principal, 90*(5), 26-30. Retrieved from : http://www.naesp.org/resources/Sharing-Your-Enthusiasm/Bonus%20Articles/Research%20Report%20-%20What%20Do%20Effective%20Principals%20Do.pdf

Public Impact. (2008). *School turnaround leaders: Competencies for success.* Retrieved from http://publicimpact.com/teachers-leaders/competencies-of-high-performers.

Reardon, S. (2011). The widening achievement gap between the rich and the poor: New and possible explanations. In G. J. Duncan & R. J. Murnane (Eds.), Whither opportunity? Rising inequality, schools and children's life chances (pp. 91–116). New York: Russell Sage.

Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Economic Policy Institute, 1660 L Street, NW, Suite 1200, Washington, DC 20035.

Richardson, J. (2009). 'Quality Education Is Our Moon Shot': An Interview with Secretary of Education Arne Duncan. *Phi Delta Kappan, 91*(1), 24-29. Retrieved from Education Research Complete database.

Robinson, V. M. J., Lloyd, C.A., & Rowe, K.J. (2008). The impact of leadership on student outcomes: an analysis of the differential effects of leadership types. *Education Administration Quarterly, 44*(5), 635-674. doi: 10.1177/0013161X08321509

Rivkin, S.G., Hanushek, E.A., and Kain, J.F. (2005)Teachers, schools, and academic achievement. *Econometrica*, *73*(2),417–458. doi:10.1.1.322.4872

Salmonowicz, M. (2009). Meeting the challenge of school turnaround. *Phi Delta Kappan*, 91(3), 19-24. Retrieved from Education Research Complete.

Sartain, L., Stoelinga, S., Brown, E. R., & Consortium on Chicago School, R. (2011). Rethinking Teacher Evaluation in Chicago: Lessons Learned from Classroom Observations, Principal-Teacher Conferences, and District Implementation. Research Report. *Consortium on Chicago School Research*.

Scheurich, J., Goddard, R.D., McKenzie, K., Skria, L., and Youngs, P. (2010). The most important research on urban school reform in the past decade? *Educational Researcher, 39*(9), 665-667.

Schwab, K. (2010). The global competiveness report. *World Economic Forum*. Geneva: Switzerland, 2010.

Shidler, L. (2009). The impact of time spent coaching for teacher efficacy on student achievement. *Early Childhood Education Journal*, *36*(5), 453-460.

Shindler, J., Jones, A., Williams, A.D., Taylor, C., & Cardenas, H. (2012*). Inciting something better than "best practice." Taking a closer look at relationships among classroom management practices, school climate, and student achievement.* Los Angeles: Alliance for the Study of School Climate at California State University, Los Angeles.

Shouppe, G., & Pate, J.L. (2010). Teachers' perception of school climate, principal leadership style and teacher behaviors on student academic achievement. *National Teacher Education Journal, 3*(2), 87-96.

Simkin, L., Charner, I., & Suss, L. (2010). Emerging education issues: Findings from The Wallace Foundation survey, 9-10. New York: The Wallace Foundation.

Sinco Kelleher, J. (2013, May 2). Gabbard tours schools. *Hawaii Tribune Herald.* Retrieved from http://hawaiitribune-herald.com/sections/news/local-news/gabbard-tours-schools.html

Steiner, L., Hassel, E.A (Public Impact). (2011). *Using competencies to improve school turnaround principal success*. Charlottesville: University of Virginia's

Darden/Curry Partnership for Leaders in Education. Retrieved from www.DardenCurry.org

Stone, Z., Barron, K., & Finch, N. (2012). Effective and promising practices for closing achievement gaps. Retrieved from: http://sites.edvantia.org/pdta/pdf/TDOE_Effective_Practices_Achievement_Gaps 080812.pdf.

Toch, T., & Rothman, R. (2008). *Rush to judgment: Teacher evaluation in public education*. Retrieved from: www.educationsector.org/usr_doc/RushToJudgment_ES_Jan08.pdf. Accessed January 14, 2014.

Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust. *Educational Administration Quarterly, 45*(2), 217-247.doi10.1177/001316X08330501

U.S. Department of Education (2009a). *School improvement fund: Summary of Applicant information, Hawaii*. Retrieved from http://www2.ed.gov/programs/sif/summary/hiapp.pdf

U.S. Department of Education (2009b). *Great teachers and great leaders.* Retrieved from http://www2.ed.gov/policy/elsec/leg/blueprint/great-teachers-great-leaders.pdf

U.S. Department of Education (2010a). ESEA Reauthorization: A Blueprint for Reform [powerpoint]. Retrieved from http://www2.ed.gov/policy/elsec/leg/blueprint/index.htmlU.S. Department of Education, Laws & Guidance/Elementary & Secondary Education (2011). A

blueprint for reform. Retrieved from https://www2.ed.gov/policy/elsec/leg/blueprint/publication_pg5.html

U.S. Department of Education, National Center for Education Statistics (2010). *Summer 2010 ED Facts State Profile-Hawaii*. Retreived from http://www2.ed.gov/about/inits/ed/edfacts/state-profiles/hawaii.pdf

US. Department of Education, National Center for Education Statistics [USDOE, NCES]. (2011*). Digest of education statistics, 2010 (NCES 2011-015)*, Chapter 6. Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=1

U.S. Department of Education, Office of Planning, Evaluation and Policy Development (2010). *Elementary & secondary education: A blueprint for reform.* Retrieved from http://www2.ed.gov/policy/elsec/leg/blueprint/publicationtoc.html

U.S. Department of Education (2010b). Race to the top program: Executive summary. Retrieved from http://www2.ed.gov/programs/racetothetop/index.html

U.S. Department of Education (2013a). Race to the top: Hawaii report year 2: School Year 2011 - 2012. Retrieve from http://www2.ed.gov/programs/racetothetop/performance/hawaii-year-2.pdf

U.S. Department of Education. (2013b). Elementary & secondary education: ESEA flexibility. Retrieved on May 21, 2013 from: http://www2.ed.gov/policy/elsec/guid/esea-flexibility/index.html.U.S Department of Education, Institute of Eduction Sciences. (2013). Operational authority, support, and monitoring of school turnaround. NCEE Evaluation Brief (Report No. NCEE 2014-4008). Retrieved from

http://files.eric.ed.gov/fulltext/ED544585.pdf?&session-id=88e38b9173e279436d5174bbd64c958a.

Valentine, J.W., & Prater, M. (2011). Instructional, transformational, and managerial leadership and student achievement: High school principals make a difference. *NASSP Bulletin*, 95(1), 5-30. doi: 10.1177/0192636511404062

Wahlstrom, K.L., & Louis, K.S. (2008). How teachers experience principal leadership: The roles of professional community, trust, efficacy, and shared responsibility. *Educational Administration Quarterly, 44*(4), 458-495. doi:10.11177/001319x08321502.

Wahlstrom, K.L., Louis Seashore, K., Leithwood, K., & Anderson, S.E. (2010). Investigating the links to improved student learning: Executive summary of research findings. Learning from Leadership Project. Retrieved from: http://conservancy.umn.edu/handle/11299/140884

The Wallace Foundation. (2013, January). The school principal as leader: Guiding schools to better teaching and learning. New York: Author. Retrieved from: www.wallacefoundation.org/knowledge-center/school-leadership/effective-principal-leadership/Pages/The-School-Principal-as-Leader-Guiding-Schools-to-Better-Teaching-and-Learning.aspx.

White-Smith, K..A., & White, M.A., (2009). High school reform implementation: Principals' perceptions on their leadership role. 44, 259-279. doi:10:1177/0042085909333942.

Williamson, R. (2012). Coaching teachers: An important principal role. Research into

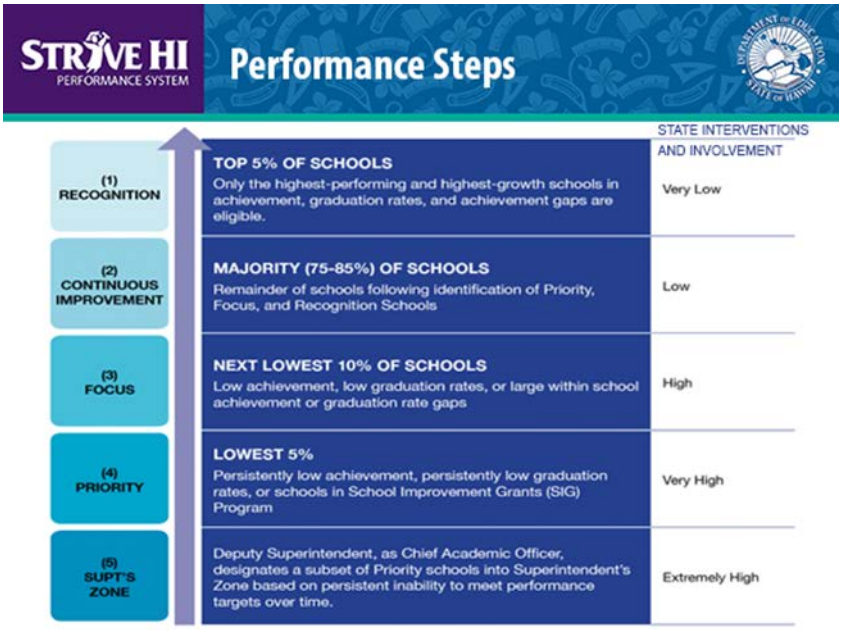
Practice. *Education Partnerships, Inc*. Retrieved from: http://eric.ed.gov/?id=ED538322

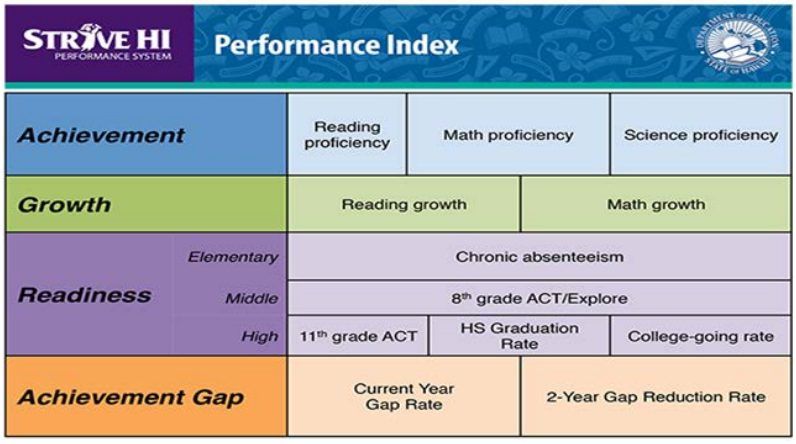
Yager, S., Pedersen, J., Yager, R. E., & Noppe, R. (2011, November). Impact of School Leadership on Teacher's Professional Growth: Teacher Perception of Administrative Support. In *National Forum of Applied Educational Research Journal* (Vol. 25). Retrieved from: http://web.a.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=08953880&AN=70933235&h=Z4opx6HIok%2b9SfkGt1lMXIAKZI3sSvQzXU8wK0YUCZnv8g0FEyuNuPqti4eMysdBbXxSB%2bKGZcRy22orpti9lg%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d08953880%26AN%3d70933235

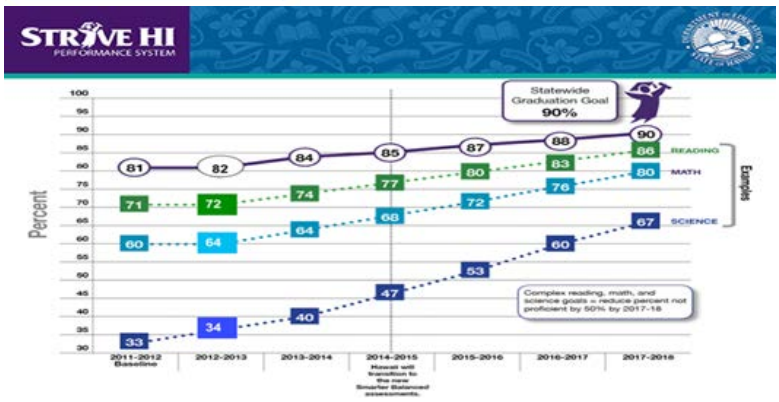
Ylimaki, R.M., Jacobson, S. I., & Drysdale, L. (2007). Making a difference in challenging, high-poverty schools in the USA, England, and Australia. *School effectiveness and School Improvement, 18*, 361-381. doi:10.1080/09243450701712486

Zepeda, S.J. (2014). *The principal as instructional leader. A handbook for surpervisors.* Routledge.

Appendix A: Strive HI Explanation







Appendix B: Comparison of Strive HI versus NCLB

	No Child Left Behind (2002-2012)	Strive HI Performance System (2013-)
Who designed the system?	The federal government designed the system based on an outdated approach to school reform	Hawaii stakeholders designed the system to align to the BOE/DOE State Strategic plan's 2012 vision of success
What is the system's focus?	Proficiency in reading and math	Readiness for college and careers
	Adequate Yearly Progress (AYP) measures school performance based mostly on one test, the Hawaii State Assessment (HSA) reading and math scores in grades 3-10	The Strive HI Index measures school performance and progress using multiple measures including: • Student achievement: HSA reading and math scores, end-of-course science assessments. • Readiness: Chronic absenteeism; 8th and 11th grade ACT scores in reading, English, math and science; high school graduation rates; and college enrollment. • Achievement gap: Reducing the gap between "high-needs students" (those who have a disability, language barriers, or low family income) compared with the achievement of other students
How are school performance targets set?	All schools are held accountable to meeting one national aspirational target, regardless of current challenges	Each school is held accountable to meeting ambitious and attainable goals that are customized to each school complex (a high school and its feeder schools) based on current performance
Which students are schools held accountable for?	All schools are held accountable for the performance of student subgroups that do not fully reflect Hawaii's student population	All schools are held accountable for the performance of all of Hawaii's students and student subgroups that reflect the state's student population
How are schools supported for improvement?	Schools are required to use federally-designed one-size-fits-all interventions	Based on the 5 Strive HI Steps, schools receive customized rewards, support and interventions that have proven successful in Hawaii's schools

https://www.hawaiipublicschools.org/DOE%20Forms/StriveHIIndexReports/StriveHIvsNCLB.pdf

Appendix C: Permission for Instrument

Jackie Brauhn <JBrauhn@coloradoedinitiative.org>
Wed, Jul 8, 2015 at 9:45 AM To: Dyana Ontaimachado <dyana.ontaimachado@waldenu.edu>
Cc: Philip Griswold <philip.griswold@waldenu.edu>

Hi Dyana,

Thank you for reaching out and sorry for the late reply, I have been on vacation.

You are welcome to adjust the Teacher Perception Survey to fit your study. You must give us credit by noting that your version was adapted from CEI's. As well, cannot claim that your version relies on the validity of our analysis found I the technical report.

Please let me know if you have any questions

Jackie Brauhn

Coordinator, Research & Impact
1660 Lincoln Street | Suite 2000 | Denver, CO 80264
720-502-4731 | 866.611.7509 (f)

THE COLORADO EDUCATION INITIATIVE

Appendix D: Teacher Perception of Principal Attributes Questionnaire

Teachers Perception of Principal Attributes Questionnaire (TPPAQ)

This Questionnaire is anonymous and voluntary. Your participation is greatly appreciated.

Directions: There are 41 items in this survey. The statements describe specific principal attributes. Teachers' perceptions of principal leadership are important to understand attributes that are associated to school effectiveness. Please take a few minutes to read each statement and select the response that most appropriately describes your assessment of your principal's attributes for each item. DO NOT record your name. All responses will remain confidential. Responses will be reported as a group and not as individual data. Please be honest and candid with your responses.
For each item, select the response that describes how your principal responds to each statement. Please choose a response for each statement as follows:
1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

---

1. My principal understands and provides a rigorous core curriculum for most of our students.

   1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

2. My principal minimizes disruptions of instructional time.

   1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

3. The department chairs/grade-level team leaders influence how money is spent in this school.

   1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

4. Our school-wide improvement goals drive teachers' professional development.

   1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

5. In our school, we have clearly defined expectation for learning for teachers and students.

1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

6. In our school, our assessment practices provide accurate and meaningful data on student progress.

   1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

7. In our school, teachers are accountable in collecting, understanding, and using data to respond to student learning

   1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

8. Our school provides interventions and supports to enrich advance students.

   1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

9. I receive useful feedback about my teaching practices from my principal.

   1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

10. I discuss instructional issues with my principal.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

11. Conditions at this school encourage professional development.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

12. My principal gives the staff a sense of overall purpose.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

13. My principal provides useful assistance to me in setting short-term goals for teaching and learning.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

14. My principal demonstrates high expectations for my work with students.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

15. My principal gives me individual supports to help me improve my teaching practices.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

16. My principal encourages me to consider new ideas for my teaching.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

17. My principal models a high level of professional practice.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

18. My principal develops an atmosphere of caring and trust

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

19. My principal promotes leadership development among teachers.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

20. My principal encourages collaborative work among staff.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

21. My principal creates conditions for teachers to collaborate during the school day.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

22. My principal provides or locates resources to help staff improve their teaching.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

23. My principal regularly observes classroom activities.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

24. My principal works with teachers to improve their teaching after observing classroom activities.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

25. My principal buffers teachers from distractions to their instruction.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

26. My principal encourages me to use data in my work.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

27. My principal encourages data use in planning for individual student needs.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

28. My principal has a structured process to analyze student data.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

29. At our school our leadership team has representation from all grade levels.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

30. At our school, we have planned and scheduled cycle of inquiry (data teams) to analyze student work.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

31. At our school, we have a clear structure and process for decision-making.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

32. At our school, it is a safe place for me and my students.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

33. At our school, my principal communicates school-wide goals to the teachers.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

34. At our school, we have scheduled and protected collaboration time.

    1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

35. At our school, the principal is approachable and trustworthy.

1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

36. My principal is an effective instructional leader.

1- Never 2- Sometimes 3- Neutral 4- Most of the Time 5- Always

37. My principal has been the principal in my school for ___ years.

38. I have worked at this school for _____ years.

39. I have ____ years of teaching experience.

40. My educational background is: ☐ Bachelor Degree

☐ Bachelor Degree + additional credits
☐ Master's Degree
☐ Doctorate Degree
☐ Other _____

41. I work at _____.

Needed to obtain Strive HI index

Appendix E: Approval from Community Partner

DAVID Y. IGE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI'I 96804

OFFICE OF THE SUPERINTENDENT

February 16, 2016

Ms. Dyana Ontai-Machado
91-1537 Pukanala St.
Ewa Beach, HI 96706

Re: Research Application Decision

Dear Ms. Ontai-Machado:

I am pleased to approve your Hawaii State Department of Education (HIDOE) research application for the study "Teachers' Perception of Elementary School Principals' Leadership Attributes and its Relationship to School Effectiveness" (Application #RES2015001).

This approval will expire March 30, 2016. If you require additional time to complete your study, you must submit a request for an extension or another application before this approval expires. If you intend to make changes to your project you must submit the change request to the Data Governance and Analysis Branch prior to implementing the change. These changes include but are not limited to (1) any changes that require approval from your Institutional Review Board and (2) any changes that are in conflict with or not included in this approval letter. Significant changes may need to be reviewed by the Research Review Committee at their next scheduled meeting. If changes are approved, a modified approval letter will issued to the researcher, the targeted schools, and affiliated state/district office staff.

As described in your application, the objective of your study is:

- To determine whether an association exists between teachers' perception of their principal's leadership attributes and school effectiveness as measured by the Strive HI index in hopes of creating a project of professional development or road map in structuring schools to build a positive climate focused on improving instructional practices of teachers.

You have indicated that you will be inviting 58 HIDOE schools to participate in your study (see Attachment 1).

You must present this letter to the appropriate HIDOE administrator(s) upon invitation to participate in your research.

You have also indicated that you will be inviting the following individuals at these targeted schools to participate in your study:

- Teachers, Counselors, Curriculum Coordinators, Academic Coaches, Technology Coordinators, and School Service Coordinators from 52 elementary schools on Oahu.

Teachers who participate in your study will be involved in the following activities:

- Participate in an anonymous survey that will take approximately 15 minutes.

Counselors who participate in your study will be involved in the following activities:

- Participate in an anonymous survey that will take approximately 15 minutes.

Curriculum Coordinators who participate in your study will be involved in the following activities:

- Participate in an anonymous survey that will take approximately 15 minutes.

Academic Coaches who participate in your study will be involved in the following activities:

- Participate in an anonymous survey that will take approximately 15 minutes.

Technology Coordinators who participate in your study will be involved in the following activities:

- Participate in an anonymous survey that will take approximately 15 minutes.

School Service Coordinators who participate in your study will be involved in the following activities:

- Participate in an anonymous survey that will take approximately 15 minutes.

For those HIDOE schools that participate in your study, school personnel, as designated by the principal, will be involved in the following support activities:

- Principals will place a copy of the informed consent letter

As you proceed with your study, please be aware of the following:

- The only HIDOE data that you are authorized to use for your study are the data resulting from the activities described above.

  Please note that, although you may have access to other non-public HIDOE data in your role as a HIDOE employee, you may not use these data for your study without the prior written consent of the appropriate individuals or an approved data request.

  Should you wish to use any non-public HIDOE data beyond those described above, please submit a research application modification request to the Data Governance and Analysis Branch.

- Since you are a HIDOE employee, but will not be conducting your study as a part of your HIDOE assigned duties, all study activities must be conducted during personal time (i.e., non-work hours, while on vacation/leave from your HIDOE position).

- The participation of HIDOE schools, offices, students, and personnel in your study is strictly voluntary.

- All study activities must take place at dates, times, and locations agreed upon by the administrators of the participating HIDOE schools and offices.

- Any compensation provided to HIDOE personnel for participation in your study must be for activities completed outside of instructional and work hours and must be in compliance with the Hawaii State Ethics Code. Any questions about this topic should be referred to the Data Governance and Analysis Branch.

- You are required to conduct your study in accordance with both the conditions of approval described in this letter and the document "Affirmation and Acknowledgement of the Processes, Procedures, and Conditions for Conducting Research in the Hawaii State Department of Education" (the "Affirmation Form for Researchers"). See Attachment 2.

- You are responsible for ensuring that all individuals involved in this study — both those affiliated with your organization and those contracted by your organization and affiliated with external entities or vendors — adhere to all of the conditions of my approval, including those detailed in this letter and those stipulated by the Affirmation Form for Researchers.

Should you have any questions about the above, please contact Ke'ala Fukuda, HIDOE Data Governance and Analysis Branch, at DOEresearch@notes.k12.hi.us or (808) 784-6061.

Best wishes for a successful study. We look forward to receiving your findings and recommendations.

Very truly yours,

Kathryn S. Matayoshi
Superintendent

KSM:bk

Attachment 1: School List
Attachment 2: Affirmation and Acknowledgement of the Procedures and Conditions for Conducting Research in the Hawaii State Department of Education

c: Data Governance and Analysis Branch

Target HIDOE Schools and Offices for HIDOE Research Application

Please indicate the target HIDOE schools and offices for your application by placing an "x" to the left of the appropriate school categories or individual schools/offices.

Application # (assigned by HIDOE):

	All Schools (all 255 non-charter schools)	*IMPORTANT: if applicable, please use the blue grouping options FIRST. Otherwise, editing the cells next to individual school names will break the formulas used to autofill. Please note that the blue categories are additive (e.g., if you select both "All Elementary Schools" and "Central District," the form will select all elementary schools across the state, including those in Central District, plus all other schools in Central District)*	
	All Elementary schools (all 179 non-charter schools)		
	All Middle Schools (all 55 non-charter schools)		
	All High Schools (all 46 non-charter schools)		
	Central District Schools (all 42 schools)		**Kauai District Schools** (all 17 schools)
	Aiea-Moanalua-Radford Complex Area (all 22 schools)		**Kapaa-Kauai-Waimea Complex Area** (all 16 schools)
	Aiea Complex (all 7 schools)		Kapaa Complex (all 5 schools)
x	Aiea Elementary		Kapa'a Middle
	Aiea High		Hanalei Elementary
	Aiea Intermediate		Kapa'a Elementary
x	Alvah A. Scott Elementary		Kapa'a High
x	Gustav H. Webling Elementary		Kilauea Elementary
x	Pearl Ridge Elementary		Kauai Complex (all 5 schools)
x	Waimalu Elementary		Chiefess Kamakahelei Middle
	Moanalua Complex (all 6 schools)		Elsie H. Wilcox Elementary
	Major General William R. Shafter Elementary		Kaua'i High
	Moanalua Elementary		King Kaumualii Elementary
	Moanalua High		Koloa Elementary
	Moanalua Middle		Waimea Complex (all 7 schools)
x	Red Hill Elementary		Ele'ele Elementary
x	Salt Lake Elementary		Kalaheo Elementary
	Radford Complex (all 9 schools)		Kekaha Elementary
	Admiral Arthur W. Radford High		Ni'ihau High & Elementary
	Admiral Chester W. Nimitz Elementary		Waimea Canyon Middle
x	Aliamanu Elementary		Waimea High
	Aliamanu Middle		Leeward District Schools (all 42 schools)
	Lt. Col. Horace Meek Hickam Elementary		Campbell-Kapolei Complex Area (all 18 schools)
	Makalapa Elementary		Campbell Complex (all 10 schools)
x	Mokulele Elementary	x	Ewa Beach Elementary
	Pearl Harbor Elementary	x	Ewa Elementary
	Pearl Harbor Kai Elementary		Ewa Makai Middle
	Leilehua-Mililani-Waialua Complex Area (all 20 schools)	x	Hotomua Elementary
	Leilehua Complex (all 10 schools)		Ilima Intermediate
x	Hale Kula Elementary		Iroquois Point Elementary
x	Helemano Elementary		James Campbell High
	Iliahi Elementary		Kaimiloa Elementary
	Ka'ala Elementary	x	Keone'ula Elementary
	Leilehua High		Pohakea Elementary
	Major Sheldon Wheeler Elementary		Kapolei Complex (all 6 schools)
	Major Sheldon Wheeler Middle		Barbers Point Elementary
	Sergeant Samuel K. Solomon Elementary		Kapolei Elementary
	Wahiawa Elementary		Kapolei High
	Wahiawa Middle		Kapolei Middle
	Mililani Complex (all 7 schools)		Makakilo Elementary
x	Kipapa Elementary	x	Mauka Lani Elementary
	Mililani High		Nanakuli-Waianae Complex Area (all 9 schools)
	Mililani 'Ike Elementary		Nanakuli Complex (all 3 schools)
x	Mililani Mauka Elementary	x	Nanaikapono Elementary

	Mililani Middle		Nanakuli Elementary
x	Mililani Uka Elementary		Nanakuli High & Intermediate
	Mililani Waena Elementary		Waianae Complex (all 6 schools)
	Waialua Complex (all 3 schools)	x	Leihoku Elementary
x	Hale'iwa Elementary		Ma'ili Elementary
	Waialua Elementary	x	Makaha Elementary
	Waialua High & Intermediate		Wai'anae Elementary
	Hawaii District Schools (all 41 schools)		Wai'anae High
	Hilo-Waiakea Complex Area (all 13 schools)		Wai'anae Intermediate
	Hilo Complex (all 9 schools)		Pearl City - Waipahu Complex Area (all 17 schools)
	Chiefess Kapi'olani Elementary		Pearl City Complex (all 10 schools)
	Ernest Bowen de Silva Elementary		Highlands Intermediate
	Ha'aheo Elementary		Kanoelani Elementary
	Hilo High		Lehua Elementary
	Hilo Intermediate	x	Manana Elementary
	Hilo Union Elementary	x	Momilani Elementary
	Ka'umana Elementary	x	Palisades Elementary
	Keaukaha Elementary	x	Pearl City Elementary
	Prince Jonah Kuhio Kalaniana'ole Elem & Inter		Pearl City High
	Waiakea Complex (all 4 schools)		Pearl City Highlands Elementary
	Waiakea Elementary	x	Waiau Elementary
	Waiakea High		Waipahu Complex (all 7 schools)
	Waiakea Intermediate		August Ahrens Elementary
	Waiakeawaena Elementary		Honowai Elementary
	Honokaa-Kealakehe-Kohala-Konawaena Complex Area (all 19 schools)		Kale'opu'u Elementary
	Honokaa Complex (all 4 schools)		Waikele Elementary
	Honoka'a Elementary	x	Waipahu Elementary
	Honoka'a High & Intermediate		Waipahu High
	Pa'auilo Elementary & Intermediate		Waipahu Intermediate
	Waimea Elementary		Maui District Schools (all 31 schools)
	Kealakehe Complex (all 6 schools)		Baldwin-Kekaulike-Maui Complex Area (all 31 schools)
	Holualoa Elementary		Baldwin Complex (all 5 schools)
	Kahakai Elementary		Henry Perrine Baldwin High
	Kealakehe Elementary		Iao Intermediate
	Kealakehe High		Pu'u Kukui Elementary
	Kealakehe Intermediate		Waihe'e Elementary
	Waikoloa Elementary & Middle		Wailuku Elementary
	Kohala Complex (all 3 schools)		Kekaulike Complex (all 7 schools)
	Kohala Elementary		Ha'iku Elementary
	Kohala High		King Kekaulike High
	Kohala Middle		Kula Elementary
	Konawaena Complex (all 6 schools)		Makawao Elementary
	Honaunau Elementary		Pa'ia Elementary
	Ho'okena Elementary		Pukalani Elementary
	Ke Kula 'o 'Ehunuikaimalino		Samuel Enoka Kalama Intermediate
	Konawaena Elementary		Maui Complex (all 8 schools)
	Konawaena High		Kahului Elementary
	Konawaena Middle		Kamali'i Elementary
	Kau-Keaau-Pahoa (all 9 schools)		Kihei Elementary
	Kau Complex (all 2 schools)		Lihikai Elementary
	Ka'u High & Pahala Elementary		Lokelani Intermediate
	Na'alehu Elementary		Maui High
	Keaau Complex (all 4 schools)		Maui Waena Intermediate
	Kea'au Elementary		Pomaika'i Elementary
	Kea'au High		Hana-Lahainaluna Lanai-Molokai (all 11 schools)
	Kea'au Middle		Hana Complex (1 school)

	Mountain View Elementary		Hana High & Elementary
	Pahoa Complex (all 3 schools)		Lahainaluna Complex (all 4 schools)
	Keonepoko Elementary		King Kamehameha III Elementary
	Pahoa Elementary		Lahaina Intermediate
	Pahoa High & Intermediate		Lahainaluna High
	Honolulu District Schools (all 53 schools)		Princess Nahi'ena'ena Elementary
	Farrington-Kaiser-Kalani (all 25 schools)		Lanai Complex (1 school)
	Farrington Complex (all 12 schools)		Lanai High & Elementary
	Governor Sanford B. Dole Middle		Molokai Complex (all 5 schools)
	Governor Wallace Rider Farrington High		Kaunakakai Elementary
x	Ka'ewai Elementary		Kilohana Elementary
x	Kalihi Elementary		Maunaloa Elementary
	Kalihi Waena Elementary		Moloka'i High
	Kalihi-kai Elementary		Moloka'i Middle
	Kalihi-uka Elementary		**Windward District Schools** (all 30 schools)
x	Kapalama Elementary		**Castle-Kahuku Complex Area** (all 16 schools)
	King David Kalakaua Middle		Castle Complex (all 10 schools)
	Linapuni Elementary		Ahuimanu Elementary
	Mayor Joseph J. Fern Elementary		Governor Samuel Wilder King Intermediate
	Pu'uhale Elementary		He'eia Elementary
	Kaiser Complex (all 6 schools)		James B. Castle High
x	Aina Haina Elementary	x	Kahalu'u Elementary
x	Hahai'one Elementary	x	Kane'ohe Elementary
	Henry J. Kaiser High	x	Kapunahala Elementary
	Kamiloiki Elementary	x	Pu'ohala Elementary
	Koko Head Elementary	x	Reverend Benjamin Parker Elementary
	Niu Valley Middle	x	Waiahole Elementary
	Kalani Complex (all 7 schools)		Kahuku Complex (all 6 schools)
	Hawaii School for the Deaf and Blind	x	Hau'ula Elementary
	Kahala Elementary		Ka'a'awa Elementary
	Kaimuki Middle	x	Kahuku Elementary
	Kalani High		Kahuku High & Intermediate
x	King Liholiho Elementary	x	La'ie Elementary
x	Mayor John H. Wilson Elementary	x	Sunset Beach Elementary
x	Waikiki Elementary		Kailua-Kalaheo Complex Area (all 14 schools)
	Kaimuki-McKinley-Roosevel (all 28 schools)		Kailua Complex (all 8 schools)
	Kaimuki Complex (all 10 schools)	x	Blanche Pope Elementary
	Ala Wai Elementary	x	Enchanted Lake Elementary
x	Ali'iolani Elementary		Ka'elepulu Elementary
	Hokulani Elementary		Kailua High
	Kaimuki High	x	Keolu Elementary
	King William Lunalilo Elementary	x	Maunawili Elementary
	Palolo Elementary		Olomana
	President George Washington Middle		Waimanalo Elementary & Intermediate
	President Thomas Jefferson Elementary		Kalaheo Complex (all 6 schools)
x	Prince Jonah Kuhio Elementary		Aikahi Elementary
	William P. Jarrett Middle	x	Kailua Elementary
	McKinley Complex (all 8 schools)		Kailua Intermediate
	Central Middle	x	Kainalu Elementary
	Kauluwela Elementary		Kalaheo High
	Lanakila Elementary	x	Mokapu Elementary
	President William McKinley High		**All Charter Schools** (all 35 schools)
	Princess Miriam K. Likelike Elementary		Connections New Century Public Charter School
	Princess Victoria Ka'iulani Elementary		Hakipu'u Learning Center New Century Public Charter School
	Queen Ka'ahumanu Elementary		Halau Ku Mana New Century Public Charter School
	Royal Elementary School		Halau Lokahi New Century Public Charter School

	Roosevelt Complex (all 10 schools)	
	Kula Kaiapuni 'O Anuenue	
	Ma'ema'e Elementary	
	Manoa Elementary	
x	Noelani Elementary	
x	Nu'uanu Elementary	
	Pauoa Elementary	
	President Abraham Lincoln Elementary	
	President Theodore Roosevelt High	
	Prince David Kawananakoa Middle	
	Robert Louis Stevenson Middle	
State Offices		
	Office of the Superintendent	
	Office of the Deputy Superintendent	
	Office of Curriculum, Instruction and Student Support	
	Office of Fiscal Services	
	Office of Human Resources	
	Office of Information Technology Services	
	Office of Strategy, Innovation and Performance	
	Office of School Facilities and Support Services	
District Offices		
	Honolulu District Office	
	Central District Office	
	Leeward District Office	
	Windward District Office	
	Hawaii District Office	
	Maui District Office	
	Kauai District Office	

	Hawai'i Academy of Arts & Science Public Charter School
	Hawai'i Technology Academy Public Charter School
	Innovations Public Charter School
	Ka 'Umeke Ka'eo Public Charter School
	Ka Waihona o ka Na'auao New Century Public Charter School
	Kamaile Academy Public Charter School
	Kanuikapono Learning Center Public Charter School
	Kawaikini New Century Public Charter School
	Ke Ana La'ahana Public Charter School
	Ke Kula Ni'ihau O Kekaha Learning Center Public Charter School
	Ke Kula 'o Nawahiokalani'opu'u Iki Laboratory Public Charter School
	Kona Pacific Public Charter School
	Kua 'O Ka La Public Charter School
	Kualapu'u Elementary New Century Public Conversion Charter School
	Kula Aupuni Niihau A Kahelelani Aloha (KANAKA), A New Century Public Charter School (PCS
	Kula Aupuni Niihau A Kahelelani Aloha New Century Public Charter School
	Lanikai Elementary Public Charter School
	Laupahoehoe Community PCS
	Malama Honua Learning Center
	Na Wai Ola New Century Public Charter School
	School for Examining Essential Questions of Sustainability Public Chater School
	Volcano School of Arts & Sciences Community Public Charter School
	Voyager Public Charter School
	Wai'alae Elementary Public Charter School
	Waimea Middle Public Conversion Charter School
	West Hawai'i Explorations Academy Public Charter School
	Kanu 'o ka 'Aina New Century Public Charter School
	Ke Kula 'O Samuel M. Kamakau Laboratory Public Charter School
	Kihei Public Charter High School
	Myron B. Thompson Academy New Century Public Charter School
	University Laboratory School

ATTACHMENT 2

AFFIRMATION AND ACKNOWLEDGEMENT OF THE PROCEDURES AND CONDITIONS FOR CONDUCTING RESEARCH IN THE HAWAII STATE DEPARTMENT OF EDUCATION

Section I: Researcher Information

Name: Dyana Ontai-Machado Title: Doctoral Student

Affiliated organization or institution: Walden University

Email address: Dyana.ontaimachado@waldenu.edu Phone number: (808)294-9887

Mailing address: 91-1537 Pukanala St Ewa Beach HI 96706

Section II: Affirmation of Research Project Value and Quality & Affirmation of Research Project Representative Responsibilities

I, the above-named research project representative, have reviewed the Application to Conduct Research in the Hawaii State Department of Education (HIDOE) to which this document is attached ("the Application") and affirm that, to the best of my knowledge, information and belief, the research project proposed in the Application ("the Project"), entitled

Teachers' Perception of Elementary School Principals' Leadership Attributes and its Relationship to School Effectiveness

is educationally worthwhile and of sound technical design.

Furthermore, I affirm that I will:

1. Comply with the established procedures and conditions for conducting research in HIDOE, as described in this document;
2. If applicable, comply with the established procedures for requesting data from HIDOE;
3. Act in accordance with professional ethics and standards of conduct when implementing the Project, including using the data collected during the course of implementing the Project (e.g., completed surveys, interview responses, signed participant consent forms, minor student assent documentation) or made available to me by HIDOE for the Project (e.g., HIDOE data sets) (collectively referred to as "the Data") exclusively for the purposes described in the Application and in an ethically responsible manner that is consistent with the Forum Code of Data Ethics;[1]
4. Ensure that the Project and the handling of the Data are in compliance with all relevant federal and state laws and regulations pertaining to information confidentiality and security and the privacy and use of student and personnel records, such as the Family Educational Rights and Privacy Act (FERPA), the Protection of Pupil Rights Amendment (PPRA), the Individuals with Disabilities Act (IDEA), and the Hawaii Revised Statutes (HRS);
5. Obtain and maintain documentation of written consent from all adult participants (which includes students 18 years and older) and both active assent from participants who are minors (written assent for those ages 12 to 17 years and verbal assent for those 11 years

[1] For information about the Form Code of Data Ethics, see the National Forum on Education Statistics' *Forum Guide to Data Ethics*, available from the U.S. Department of Education's National Center for Education Statistics (NCES) website at: http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010801.

and younger) and written consent from their guardians prior to their participation in the Project;

6. Protect the security of the Data and the confidentiality of the Project's participants by:
    a. Ensuring that procedures for maintaining the Data are secure enough to prohibit access to anyone other than the Project Staff,
    b. Preventing the unauthorized release or publication of the Data, particularly those data that are personally identifiable and school-identifiable, by the Project Staff,
    c. Maintaining the confidentiality of the personally identifiable and school-identifiable at all stages of the Project, including within the final report, and
    d. Destroying the Data, including any copies, when the final report on the Project is complete;
7. Assume responsibility for the protection of the Data and liability for any inappropriate or unlawful release or publication of the Data by the Project Staff;
8. Submit proposed revisions to the Application to DGA for review and approval prior to making changes to the Project's approved scope or design;
9. Submit an application for an extension of the Project to DGA prior to the end of the Project's approval period, should additional time be required to complete the Project;
10. Duly note the general source of information as "Hawaii State Department of Education;"
11. At least two (2) weeks prior to printing, publishing or otherwise publicly releasing the final report on the Project, submit electronic copies of a final draft to:
    a. The administrators of the participating schools and offices for their review, and
    b. If the Project involved either participants who are HIDOE students or personnel or the collection and/or receipt of personally identifiable HIDOE student or personnel data, to DGA via email at DGA@notes.k12.hi.us to be screened for the inclusion of personally identifiable HIDOE student and personnel data;
12. Submit an electronic copy of the final report on the Project, including its findings and any related recommendations, to DGA ***no later than six (6) months after the end of the Project's approval period***; and
13. Upon request, share electronic copies of the final report on the Project with:
    a. Participants in the Project,
    b. The complex area superintendents of the participating schools, and
    c. The assistant superintendents/directors of the participating HIDOE offices.

Section III: Acknowledgement of Conditions for Conducting Research in HIDOE

In addition, I acknowledge the following:

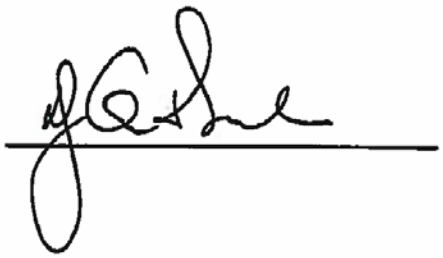
1. Participation in the Project by HIDOE students and personnel will be strictly voluntary and contingent upon the written approval of the relevant school or office administrator(s) and the written consent of the individual participant(s) (and, in the case of minor participants, their guardians);

AFFIRMATION AND ACKNOWLEDGEMENT OF THE PROCEDURES AND CONDITIONS FOR CONDUCTING RESEARCH IN THE HAWAII STATE DEPARTMENT OF EDUCATION

2. After consenting to participate in the Project, participants (and, in the case of minor participants, their guardians on their behalf) may withdraw from the Project at any time, for any reason;
3. All activities related to the Project must take place at dates, times, and locations agreed upon by the administrators of the participating schools and offices;
4. Any compensation provided to HIDOE personnel for participation in the Project must be for activities completed outside of instructional and work hours;
5. Observation activities must be limited to the stated scope of the Project and observations of HIDOE personnel must not be used for the purpose of personnel performance evaluations;
6. Copies of the Project's data collection instruments (e.g., surveys, interview schedules) must be presented to the administrators of the participating schools and offices for review prior to the implementation of the Project;
7. If the Project will involve participants who are minor students, a copy of the relevant data collection instrument(s) must, upon request, be made available to the students' guardians for review in the office of the participating school prior to the implementation of the Project;
8. Oral instructions must be provided for all participant activities related to the Project that involve minor students;
9. The Application cannot be approved by HIDOE until DGA has received an official approval or response letter for the Project that has been issued by an accredited institutional review board (IRB);
10. Data requests related to the Project will be filled as the time and workload of HIDOE personnel allow;
11. If a FERPA-compliant written agreement pertaining to the Project is executed between myself and a designated HIDOE representative and its contents are in any way in conflict with the contents of this document, the language of the FERPA-compliant written agreement will take precedence.
12. Consideration by HIDOE of any future Applications to Conduct Research in HIDOE that I may submit is contingent upon my submission of a final report on the Project to DGA no later than six (6) months after the end of the Project's approval period;
13. If the Project involves either participants who are HIDOE students or personnel or the collection and/or receipt of personally identifiable HIDOE student or personnel data, it may be subject to a random audit by DGA — either during its implementation or after its completion — to determine whether the Project, the Project Staff, and the handling of the Data are/were in compliance with the processes, procedures and conditions for conducting research in HIDOE described in this document, as well as all relevant federal and state laws and regulations pertaining to information confidentiality and security and the privacy and use of student and personnel records;
14. In the event that any of the processes, procedures, or conditions for conducting research in HIDOE described in this document are violated by any of the Project Staff, I will report the violation(s) and submit a detailed description of the violation(s) — including dates and other relevant details — to DGA in writing within ten (10) days;

AFFIRMATION AND ACKNOWLEDGEMENT OF THE PROCEDURES AND CONDITIONS FOR CONDUCTING RESEARCH IN THE HAWAII STATE DEPARTMENT OF EDUCATION

15. In the event that there is a security breach involving any of the Data that are personally identifiable, I will immediately report the breach to DGA in writing and submit a completed "Information Security Breach — Initial Assessment and Scope" form to DGA (this form will be provided by DGA in the event it is needed).
16. If any FERPA violations occur related to the Project, I, as the responsible party, will be ineligible to receive personally identifiable data from HIDOE for a minimum of five (5) years;
17. Violation of any of the procedures or conditions for conducting research in HIDOE described in this document by any of the Project Staff will result in the immediate revocation of the Project's approval, at which point I will:
    a. Stop the implementation of the Project,
    b. Have the Data, including any copies, destroyed by a company with which the Project Staff are not affiliated, and
    c. Have said company send a letter to DGA verifying the destruction of the Data; and
18. If approval of the Project is revoked by HIDOE, I will be ineligible to submit an Application to Conduct Research in HIDOE or to conduct research in HIDOE as either a principal investigator or a research project team member for 24 months from the date of the revocation of the Project's approval.

Signature:  Date: 10·21·15

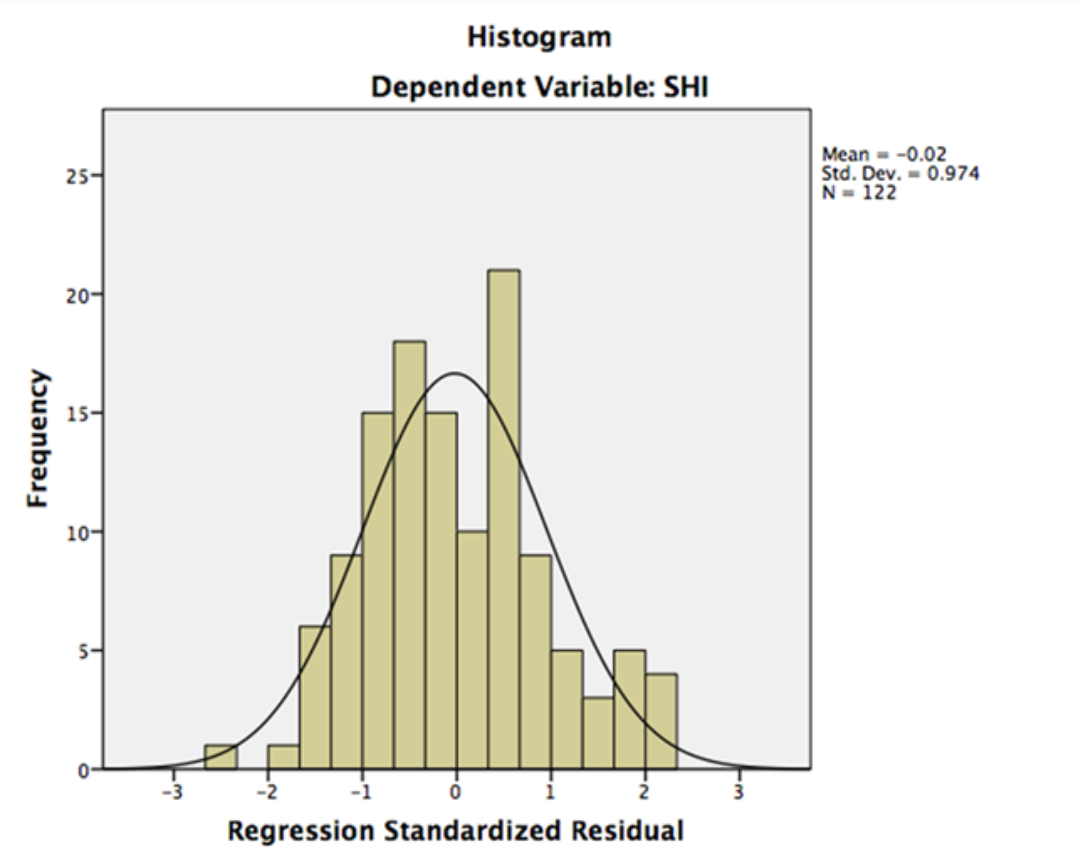
Appendix F: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
@40Educa	123	1	4	2.508	0.7918
@3DTLEAD	124	1	5	2.82	1.148
@24PD2II	124	1	5	2.98	1.334
@21PCOLLT	124	1	5	2.98	1.343
@25PANDS	124	1	5	3.06	1.28
@13PCOLLT	124	1	5	3.07	1.332
@9PD2II	124	1	5	3.09	1.275
@15DTLEAD	124	1	5	3.09	1.431
@22PD2II	124	1	5	3.11	1.314
@23PANDS	124	1	5	3.12	1.24
@10PCOLLT	124	1	5	3.18	1.21
@11DTLEAD	124	1	5	3.26	1.222
@19DISTLD	124	1	5	3.31	1.334
@31DISTLD	124	1	5	3.32	1.335
@18BPSC	124	1	5	3.34	1.492
@8DProcAD	124	1	5	3.37	1.259
@16DTLEAD	124	1	5	3.39	1.354
@36PD2II	122	1	10	3.4	1.536
@12SETHEX	124	1	5	3.44	1.381
@35BPSC	124	1	5	3.5	1.543
@17PD2II	124	1	5	3.52	1.445
@28DProcAD	124	1	5	3.56	1.114
@5SETHEX	124	1	5	3.6	1.059
@6DProcAD	124	1	5	3.64	1.077
@34PCOLLT	124	1	5	3.72	1.253
@4PD2II	124	2	5	3.75	0.96
@20DTLEAD	124	1	5	3.77	1.342
@2PANDS	124	1	5	3.81	1.039
@32BPSC	124	1	5	3.91	1.203
@33PANDS	124	1	5	3.93	1.142
@1SETHEX	124	1	5	3.95	1.103
@14SETHEX	124	1	5	3.98	1.252
@7COIIP	124	2	5	4.03	1.035
@26COIIP	124	1	5	4.12	1.123
@27DProcAD	124	2	5	4.18	1.021
@29DISTLD	124	1	5	4.4	1.088
@30COIIP	124	2	5	4.41	0.846
@37PrincYrs	124	0.5	15	5.955	3.788
@38YrsatSchool	124	0	28	8.297	6.4879
T_BPSC	124	3	15	10.75	3.925
T_DISTLD	124	4	15	11.03	2.877
T_COIIP	124	6	15	12.56	2.271
T_PCOLLT	124	5	20	12.95	4.118
@39YrsTeach	123	1	30	13.467	8.3883
T_PANDS	124	5	20	13.93	3.692
T_DProcAD	124	5	20	14.74	3.52
T_SETHEX	124	5	20	14.96	4.139
T_DTLEAD	124	5	24	16.33	5.246
T_PD2II	124	6	25	16.45	5.101
SHI	124	97	369	213.49	83.205
Valid N (listwise)	120				

Appendix G: Correlation Prediction

		T_SETHEX	T_PANDS	T_DISTLD	T_PCOLLT	T_PD2II	T_DTLEAD	T_COIIP	T_BPSC	T_DProcAD
	Correlation Coefficient	.188*	0.159	.235**	0.058	0.047	0.122	0.148	0.153	0.007
@37PrincYrs	Sig. (2-tailed)	0.037	0.078	0.009	0.526	0.602	0.177	0.102	0.09	0.943
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	-0.016	-0.005	-0.102	-0.1	-0.06	-0.107	.202*	-0.097	0.17
@38YrsatSchool	Sig. (2-tailed)	0.864	0.952	0.261	0.27	0.507	0.236	0.024	0.282	0.06
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	0.053	-0.054	-0.09	-0.012	-0.047	-0.036	0.032	-0.09	0.126
@39YrsTeach	Sig. (2-tailed)	0.56	0.555	0.323	0.894	0.609	0.693	0.724	0.32	0.166
	N	123	123	123	123	123	123	123	123	123
	Correlation Coefficient	0.045	0.117	-0.027	-0.006	0.012	0.006	0.152	-0.124	0.152
@40Educa	Sig. (2-tailed)	0.622	0.199	0.763	0.945	0.897	0.944	0.093	0.17	0.093
	N	123	123	123	123	123	123	123	123	123
	Correlation Coefficient	1	.755**	.831**	.753**	.847**	.859**	.597**	.703**	.713**
T_SETHEX	Sig. (2-tailed)	.	0	0	0	0	0	0	0	0
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	.755**	1	.782**	.753**	.832**	.817**	.580**	.702**	.628**
T_PANDS	Sig. (2-tailed)	0	.	0	0	0	0	0	0	0
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	.831**	.782**	1	.783**	.820**	.810**	.514**	.758**	.635**
T_DISTLD	Sig. (2-tailed)	0	0	.	0	0	0	0	0	0
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	.753**	.753**	.783**	1	.873**	.863**	.443**	.709**	.571**
T_PCOLLT	Sig. (2-tailed)	0	0	0	.	0	0	0	0	0
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	.847**	.832**	.820**	.873**	1	.905**	.596**	.689**	.742**
T_PD2II	Sig. (2-tailed)	0	0	0	0	.	0	0	0	0
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	.859**	.817**	.810**	.863**	.905**	1	.526**	.781**	.639**
T_DTLEAD	Sig. (2-tailed)	0	0	0	0	0	.	0	0	0
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	.597**	.580**	.514**	.443**	.596**	.526**	1	.422**	.790**
T_COIIP	Sig. (2-tailed)	0	0	0	0	0	0	.	0	0
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	.703**	.702**	.758**	.709**	.689**	.781**	.422**	1	.414**
T_BPSC	Sig. (2-tailed)	0	0	0	0	0	0	0	.	0
	N	124	124	124	124	124	124	124	124	124
	Correlation Coefficient	.713**	.628**	.635**	.571**	.742**	.639**	.790**	.414**	1
T_DProcAD	Sig. (2-tailed)	0	0	0	0	0	0	0	0	.
	N	124	124	124	124	124	124	124	124	124

Appendix H: Test of the Normality of Residuals



Appendix I: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.650[a]	0.423	0.346	67.194	0.423	5.488	14	105	0	
2	.650[b]	0.423	0.352	66.876	0	0	1	105	0.992	
3	.650[c]	0.422	0.358	66.57	0	0.022	1	106	0.884	
4	.649[d]	0.421	0.362	66.365	-0.002	0.335	1	107	0.564	
5	.647[e]	0.418	0.365	66.207	-0.003	0.481	1	108	0.489	
6	.644[f]	0.414	0.366	66.12	-0.004	0.712	1	109	0.4	
7	.638[g]	0.407	0.365	66.204	-0.007	1.283	1	110	0.26	2.048

a. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PCOLLT, T_COIIP, @36PD2II, T_PANDS, T_DISTLD, T_SETHEX, T_DTLEAD, T_PD2II

b. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PCOLLT, T_COIIP, @36PD2II, T_PANDS, T_DISTLD, T_SETHEX, T_DTLEAD

c. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PCOLLT, T_COIIP, @36PD2II, T_PANDS, T_DISTLD, T_SETHEX

d. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PCOLLT, T_COIIP, T_PANDS, T_DISTLD, T_SETHEX

e. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_COIIP, T_PANDS, T_DISTLD, T_SETHEX

f. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PANDS, T_DISTLD, T_SETHEX

g. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PANDS, T_DISTLD

h. Dependent Variable: SHI

Appendix J: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	346888.866	14	24778	5.488	.000[b]
	Residual	474078.726	105	4515		
	Total	820967.592	119			
2	Regression	346888.368	13	26684	5.966	.000[c]
	Residual	474079.224	106	4472.4		
	Total	820967.592	119			
3	Regression	346792.129	12	28899	6.521	.000[d]
	Residual	474175.462	107	4431.5		
	Total	820967.592	119			
4	Regression	345306.811	11	31392	7.128	.000[e]
	Residual	475660.781	108	4404.3		
	Total	820967.592	119			
5	Regression	343186.817	10	34319	7.829	.000[f]
	Residual	477780.774	109	4383.3		
	Total	820967.592	119			
6	Regression	340063.924	9	37785	8.643	.000[g]
	Residual	480903.667	110	4371.9		
	Total	820967.592	119			
7	Regression	334454.253	8	41807	9.538	.000[h]
	Residual	486513.338	111	4383		
	Total	820967.592	119			

a. Dependent Variable: SHI

b. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PCOLLT, T_COIIP, @36PD2II, T_PANDS, T_DISTLD, T_SETHEX, T_DTLEAD, T_PD2II

c. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PCOLLT, T_COIIP, @36PD2II, T_PANDS, T_DISTLD, T_SETHEX, T_DTLEAD

d. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PCOLLT, T_COIIP, @36PD2II, T_PANDS, T_DISTLD, T_SETHEX

e. Predictors: (Constant), T_DProcAD, @37PrincYrs, @39YrsTeach, @40Educa, T_BPSC, @38YrsatSchool, T_PCOLLT, T_COIIP, T_PANDS, T_DISTLD, T_SETHEX