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## **A Case Study: Examination of Three Area Superintendents' Perceptions of How a Professional Coaching Model Can Assist Principals in Developing Teacher Self-Efficacy and Organizational Effectiveness**

*Pam Winn, James Gentry, & Elita Driskill*  
*Texas Woman's University*

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### **Abstract**

This qualitative study examined three areas superintendents' perceptions of how a professional coaching model assisted 7 principals and 4 assistant principals in developing teacher self-efficacy and organizational effectiveness on their respective campuses. Three area superintendents and eleven campus principals/assistant principals engaged in a seven-month process employing a professional coaching model on eleven campuses (eight elementary and three middle schools) within one school district in North Texas. An internationally certified coach implemented the professional coaching model. At the end of the seven-months, the area superintendents participated in an interview to share their perceptions. The data collected for this study focused on the area superintendents' perceptions of how a professional coaching model improved teacher self-efficacy and organizational effectiveness. Findings indicated three themes emerged from the literary analysis of the superintendents' interview transcripts: Theme 1 (T1) Coaching for Growth, Theme 2 (T2) Coaching for Organizational Effectiveness, and Theme 3 (T3) Coaching for Self-Efficacy.

Keywords: self-efficacy, professional coaching, organizational effectiveness, growth mindset, T-TESS

After piloting the Texas Teacher Evaluation and Support System (T-TESS) for two years, Texas fully implemented the T-TESS system in 2017-18. T-TESS is designed to facilitate continuous, timely, and formative feedback to teachers in order to support them in the process of improving their instructional practice. The new evaluation system requires principals and evaluators to utilize instructional/professional coaching practices to support teachers' improvement efforts. However, a performance gap exists between the coaching skills required to utilize T-TESS effectively and the coaching skills of currently practicing administrators. During the T-TESS rollout process, many district leaders and principals expressed a need to develop their coaching skills to implement T-TESS and support teacher growth effectively. Such is the case with the district in this study which was presently implementing T-TESS pilot as a means of teacher evaluation. To ensure fidelity in implementation, district leadership and principals expressed a desire to develop the coaching skills of the administrators to ensure the evaluation system would improve teacher effectiveness.

### **Review of Literature**

#### **Coaching**

In education, teacher coaching models have been "... characterized by an observation and feedback cycle in an ongoing instructional or clinical situation" (Joyce & Shower, 1981, p. 170). Many definitions of coaching have been used in association with education. Some define coaching as training by experts followed by support to ensure implementation of the new knowledge and skills. For example, Sailors and Shankline (2010) defined coaching as field-based experts who model practices for teachers to incorporate in their classrooms. While Devine et al. (2013) defined it as an implementation support to ensure teaching methods introduced through professional development are properly employed when utilized in practice. Whereas, Lofthouse et al. (2010)

emphasize the goal of teacher coaching is improving classroom instruction through a sustained “professional dialogue” in which coaches focus on improving teaching through the development of specific skills. Consistent within all of these definitions of coaching is the goal to improve the process of teaching and learning. In education, coaching is optimal when utilized as a job-embedded professional learning strategy targeting instructional practice in order to improve student learning (Croft, Cogshall, Dolan, Powers, and Killion, 2010). The commitment to growth and improvement in the professional setting is richer when fostered by a skilled individual who “coaches” teachers to meet their instructional goals with students. Research supports coaching teachers can improve instructional practice. A meta-analysis, consisting of 60 studies applying causal research designs to examine the effect of coaching on teachers, yielded results indicating teacher coaching programs have the potential for improving teachers’ instructional practice and academic achievement (Kraft, Blazar, and Hogan, 2017).

### **Executive/Professional Coaching**

This study utilized a professional coaching model which is defined by the International Coach Federation (ICF) as partnering with clients in a thought-provoking and creative process inspiring them to maximize their personal and professional potential (International Coach Federation, 2018, October 2). While education has historically viewed coaching as an intervention for poor performing teachers or those in need of assistance, often referred to as “coaching the broken,” the converse is true in the business world. High performers and top executives are often provided the “perk” of professional coaching. These C-suite executives can pay as much as \$10,000 to \$100,000 per person for a professional coach to maximize their professional potential (Rock & Donde, 2018, October 30). With professional coaching being a costly investment, businesses carefully consider who might be the best person to receive this capacity-building benefit. Moreover, studies have linked the positive effect of coaching to organizational change (Vidal-Salazar et al., 2012), as well as, having an impact on the development of strong self-efficacy and improvement in task performance (Bozer et al., 2013). Specifically, coaching was connected to individual outcomes including improvement in goal-driven self-regulation, well-being, coping, and work-attitudes (Theeboom et al., 2014), and enhanced performance and goal attainment (Losch et al., 2016). Thus, in the business world, professional coaching is seen as an investment in the individual in order to enhance the overall organizational, as well as, the improvement of the individual. This connects professional coaching to both self-efficacy and organizational effectiveness.

### **Organizational Effectiveness**

Daft (1995) defined organizational effectiveness as “the degree to which an organization reaches its goals” (p.98). The measurement of organizational effectiveness encompasses the perceptions of its members regarding the degree of overall success (Lee & Choi, 2003). Organizational effectiveness is basically defined as how efficient an organization is; it is clarified by acknowledging an organization is comprised of a group of individuals focused on achieving a mutual goal and effectiveness is basically how well the goals are achieved. The measurement of effectiveness is tied to minimal cost/maximal gain (Jordan, 2015). Research addressing organizational effectiveness was prominent in the 1960s to mid-1980s (Etzioni, 1960; Yuchtman & Seashore, 1967; Seashore & Yuchtman, 1967; Steers, 1975; Cameron, 1986; Lewin & Minton, 1986) when American companies began facing more competition from abroad; however, there is little current research on the topic of organizational effectiveness with the shift to a greater focus on organizational capacity building. Cameron (1986) asserted organizational effectiveness is a problem-driven construct, and there is no single model or criteria for organizational effectiveness. Specifically, she noted, “Because criteria of effectiveness are neither stable or static, maintaining harmony and congruence between one’s valued criteria and those valued by the organization is an important determinant of the pragmatics of career success” (p. 540). Thus, coaching teachers from

a growth-minded model (T-TESS) enhances the alignment of an individual's professional goals with the organization's goal to create harmony and encourage organizational effectiveness - which is primarily determined by the perceptions of the various stakeholders connected to the organization. This study combines the terminology of Lee and Choi (2003) and Cameron (1986) to define organizational effectiveness to be measured by the perceptions of its members regarding the alignment of one's values to the organization to encourage individual growth in order to impact the overall success of the organization.

### **Self-Efficacy and Coaching for Self-Efficacy**

Bandura (1997, 1999) defined "personal efficacy" aka "self-efficacy" as belief in one's abilities to plan and execute the required courses of action needed to deliver the specific attainments. In the educational setting, efficacy is the internal "knowing" an individual has the skills and knowledge needed to impact learning and achieve the desired results (Ellison & Hayes, cited in Knight, 2009). Understanding how self-efficacy influences practice resides in understanding self-efficacy is developed from real accomplishments in which life experiences facilitate learning. Therefore, a person's self-efficacy is enhanced due to participation in these meaningful learning experiences (Carroll, 1993). Bandura (1999) supported this axiom concerning self-efficacy and stated, "The self-satisfaction derived from progress in mastering an activity serves as its own reward during the pursuit of higher level goals" (p. 28). Positive self-efficacy related to a task or undertaking is earned and requires practice, having access to exemplars and role models, and the overall working environment contributes to the building of self-efficacy. Professional coaching is an example of an opportunity in which individuals can work with role models within the work environment; therefore, creating a learning experience to enhance self-efficacy. The process of being coached by peers may build positive self-efficacy through shared experiences of "mastering higher-level goals," and reflection on the experiences is the first requirement to understanding one's progress or lack of progress with a task or effort.

McCormick, Tanguma, and López-Forment (2002) review of leadership experience and self-efficacy echoed Carroll's (1993) findings. McCormick et al. (2002) found, "Prior leadership experiences predicted leadership self-efficacy judgments" (p. 34). Experience with positive role models and engaged practice remain the critical factors for building positive self-efficacy. Coaching peers in a positive manner is a leadership skill that is needed in building positive self-efficacy (Hammond & Moore, 2018). In fact, Hammond and Moore (2018) found a "coach's positive tone, the detailed written feedback, and the specificity, directness, and a limited number of suggestions" were most valued by teachers participating in a professional development experience (p. 110). The experience, the professional behavior of the leaders or coaches, and dialogue or feedback, all together impact the building of positive self-efficacy. What professional coaches say and do matters; coaches are the determining factor related to the learning or lack of learning when working to accomplish a task, skill, or goal.

The literature review noted the following: 1) coaching has been used in education and business to improve practice albeit one industry has traditionally focused on "coaching the broken" while the other has focused on coaching the best; 2) organizational effectiveness is tied to individuals' aligning their values with those of the organization's in order to impact the organization's success; and 3) self-efficacy is built from the self-confidence in one's own abilities derived from mastering activities and skills. Drawing from these highlights, this study is guided by the supposition a professional coaching model utilized in education can increase teacher self-efficacy, and therefore have a positive impact on organizational effectiveness.

### **Method**

The purpose of this qualitative study was to examine the perceptions of three area superintendents regarding how a professional coaching model can assist principals/assistant principals in developing teacher self-efficacy and organizational effectiveness. A large, suburban

district in North Texas partnered with an Educational Service Center (ESC) to develop professional coaching skills for administrators. All selection of subjects, professional development coaching sessions, and implementation processes were determined by the district in collaboration with the ESC. As a part of their job, administrators engaged in a district-driven initiative utilizing a professional coaching model. Research methodology did not impact or change the practices being implemented. The study was designed to survey area superintendents' perception of how the practice of professional coaching assisted with campus principals' ability to develop teacher self-efficacy and organizational effectiveness. The coaching model began in the fall of 2016 with job-embedded coaching walks; interviews were conducted in the spring of 2017. Participants applied to be part of the job-embedded coaching and district area superintendents determined which administrators would be invited to engage in the coaching application process delivered through the ESC. However, participation in the study was elective and individual responses and findings were confidential.

### **Participants**

Three area superintendents, seven campus principals, and four campus assistant principals participated in the study and completed interviews at the end of the professional coaching implementation. This study focused on the perceptions of the three area superintendents who participated in the professional coaching model and observed campus principals utilizing the model with teachers on their campus. Two of the participating area superintendents were female and one was male. The total combined educational experience of the three area superintendents was sixty-four years with a total combined administrative experience of forty-nine years. The combined previous, superintendent experience for the 3 area superintendents totaled five years. Each area superintendent identified campus principals within their area who were asked to select 3-5 high-performing teachers with whom they were to practice their coaching skills in a long-term relationship. Principals/Assistant Principals, leaders in the organization, were asked to select high-performing teachers to create the culture of "business/professional coaching" in which coaching is valued and reserved for the top performers instead of coaching for remediation.

### **Professional Coaching Model Employed**

Prior to the study participants engaged in training on professional coaching; there were 3 sessions taking place in January, February, and March (2016). Principals and assistant principals participated in a training designed to address the International Coaching Federation (ICF) core competencies. The primary tenets of the training were the effective communication skills of coaching which include defining coaching and teaching skills of listening, paraphrasing, and questioning. The principals completed 12 hours (2 days) of training, and assistant principals completed 6 hours (1 day) of training. The district employed a professional coaching model designed to be an extended learning process that was intense, job-embedded, and based on application. The structure of the model was collaboratively designed by the area superintendents and the ICF certified coach. The professional coaching model utilized in this study occurred over a seven-month term. Area superintendents and principals/assistant principals formed teams to include one area superintendent and 2 to 4 principals/assistant principals. The participating administrators observed the ICF certified coach providing instructional coaching to teachers and then attempted to coach or co-coach a teacher while being supported by the ICF certified coach; each observed the coach for at least two full days (a total of eight days combined). Each team (principal/assistant principal and ICF certified coach) observed a classroom teacher and focused on collecting data requested by the teacher that was related to his/her professional goals. While the observations were similar to the T-TESS model, the post conference focused on coaching and not evaluation. After the observation, the team of observers debriefed and prepared to engage in the coaching process. As the coaching administrator coached the teacher, other members of the

group observed and took notes. Each coaching session lasted 20 to 25 minutes. After the coaching session, each team debriefed as a coaching team with the ICF certified coach providing feedback on the various coaching skills utilized in the session. The ICF certified coach worked with principals as they coached teachers. Initially, the time allotted consisted of coaching 2.5 to 3 hours at one campus to coach 2 teachers. Later allotted time was revised to 1 campus coaching 2 to 3 teachers and peer coaching.

Over the next seven months, principals and assistant principals followed a similar process to coach the same teachers 2 to 3 more times; each selected 3 teachers to coach. On observation days, each principal/assistant principal engaged in a coaching conversation with an area superintendent, ICF certified coach, or peer and received feedback from the ICF certified coach. In addition, the principals/assistant principals recorded at least one coaching conversation and were given the opportunity to share it with the ICF certified coach to receive feedback, and each principal or assistant principal received one forty-five to sixty minutes of coaching time with the ICF certified coach allowing them to experience the impact of coaching on their practice and applied to their work. The area superintendents did not receive this coaching. Each area superintendent and principal observed coaching interactions modeled by the ICF certified coach and each other (one superintendent observed 4, one observed 7, and one observed 14) (see Figure 1).

Figure 1. Mini Coaching Model

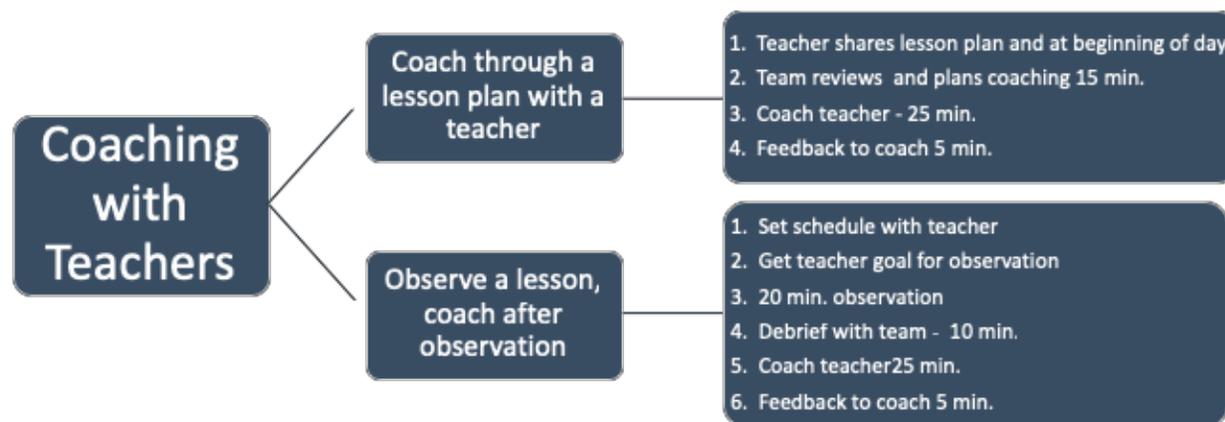


Figure 1. The Mini “Coaching” model used for personalized lesson development based on learning goals and questioning. The Mini “Coaching” model includes lesson plan review and classroom implementation observations. This coaching model encourages the use of coaching skills such as getting agreement or an understanding, reflective listening, paraphrasing summation, and giving/receiving feedback.

\* Coaching through a lesson plan was offered; no one chose that option.

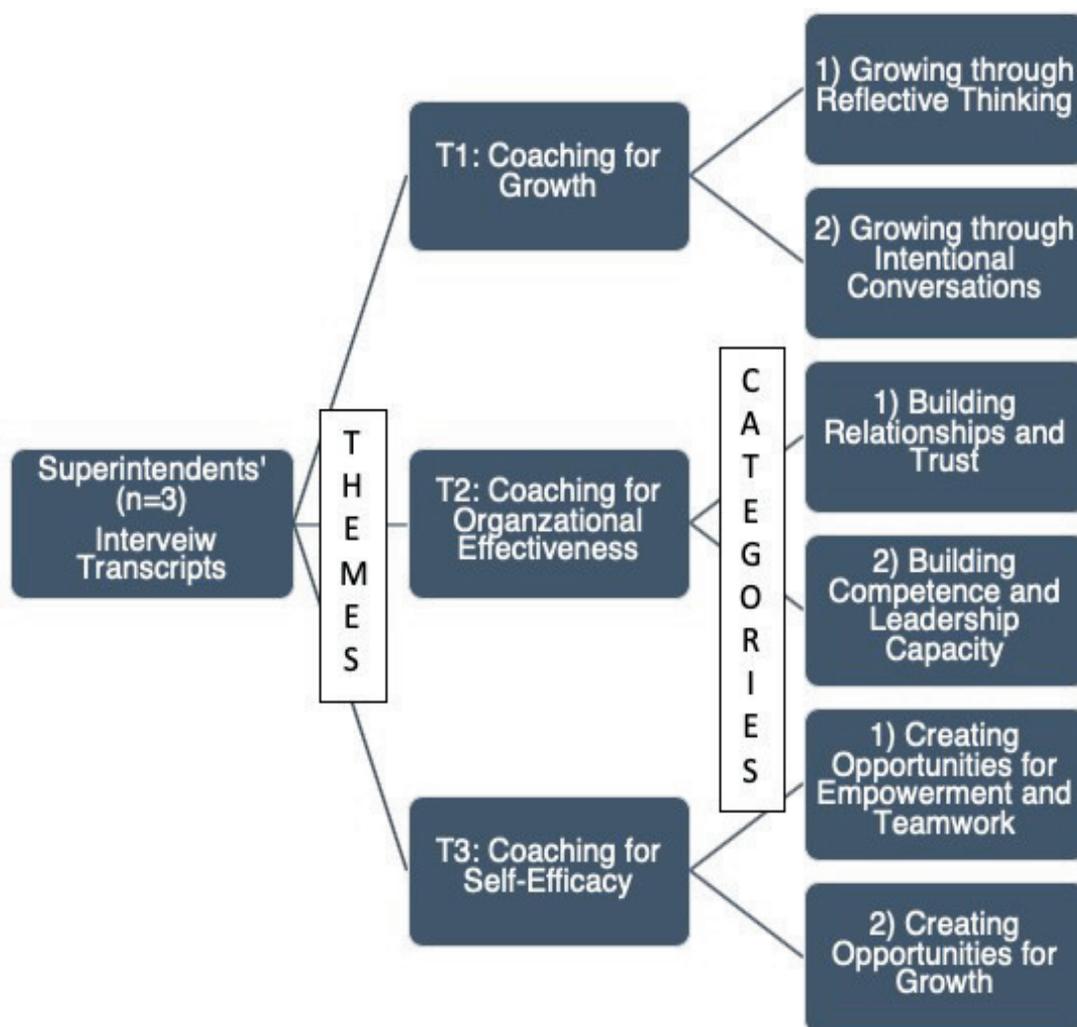
### Data Analysis

Researchers utilized literary analysis to review and code the three interview transcripts. Individually each researcher identified concepts, categories, and themes within the three narratives (Creswell, 2016). A peer-debriefing session allowed researchers to collapse categories and form themes from the transcripts of the interview narratives (Spall, 1998). The research team determined possible themes (Creswell & Miller, 2000; Creswell, 2016) after researchers completed solo content literary analysis procedures. Categories were collapsed as comparisons

between researchers' findings continued from literary analysis. Themes or categories without support or deemed unsubstantiated by fellow researchers were not reported. Quotes identified as representing identified themes were reported. Researchers coded interview transcripts into three themes during the peer debriefing sessions (Creswell & Miller, 2000).

### Findings

Researchers determined six categories from literary analysis coding of the interview transcripts. After peer debriefing, researchers agreed all codes and categories were valid, with 100% agreement. Six categories emerged from the data; three themes emerged after the collapsing of the six categories with 100% agreement between the three researchers (See Figure 2). The themes represent the content researchers identified from the literary analysis of the superintendents' interview transcripts. Theme 1 (T1) Coaching for Growth, Theme 2 (T2) Coaching for Organizational Effectiveness, and Theme 3 (T3) Coaching for Self-Efficacy summarized the main points and commonalities discovered by researchers through the literary analysis.



*Figure 2.* The three themes and six supporting categories determined by researchers from the literary analysis of three superintendents' interview transcripts and researchers' peer debriefing.

Professional growth, organizational effectiveness, and empowerment were the main topics of interest during the respective interviews for each of the three superintendents in this study. All three superintendents viewed coaching positively. Their perceptions ranged from the personal growth of teachers and principals in their respective schools to their school district organization as

a whole. Coaching was perceived as a valued endeavor to continue and maintain as a mechanism to provide individuals with professional growth experiences. Furthermore, the three superintendents in this study perceived coaching as the means to support the building of organizational leaders related to teamwork. By providing opportunities for faculty to grow professionally, the three superintendents reflected on how coaching provided avenues for building professional, skilled faculty and education leaders for their school district. The following sample statements reflect the perceptions of the three superintendents by the three identified themes.

### **Theme One (T1): Coaching for Growth**

**Superintendent 1:** *“And then I think that's why the role of the coach (principal) in the field is important to do X Y or Z.... Taking the direction they need to go for their [faculty] and their own growth and development.”*

**Superintendent 2:** *“I am a leader, yes. But, I am I am here to support you regardless of my title. So let's throw the title out the window. I'm here for you... So, the conversation gives [the coaches] some feedback on some things [the teacher] wants to try. Let's talk about how you go about this... about, you know, what your goals are and based on what you know is taking place in [your school].”*

**Superintendent 3:** *“Exceptional leadership is the nuts and bolts of instruction [growth] and is truly having those conversations with teachers and giving constructive feedback... Also, providing a time to help them realize where they must grow in their practice.”*

### **Theme Two (T2) Coaching for Organizational Effectiveness.**

**Superintendent 1:** *“I think as leaders [principals and teacher leaders] they've been able to focus a little bit more on their own behavior and their own actions and how that's influencing the success of their school.”*

**Superintendent 2:** *“We [district schools] own it. There it is! They problem solve it. The principal is going back in to observe it now. And now all the teachers want to hear about it from school. More conversations about children's [learning needs] bring meaningful change to all.”*

**Superintendent 3:** *“We [the school district] can only get better for kids when we [leaders and all educators] continue to be reflected in our practice.”*

### **Theme Three (T3): Coaching for Self-efficacy**

**Superintendent 1:** *“And they've also said to me a time or two you're coaching me...I think [the principals] wove it into how they needed to support their teachers.”*

**Superintendent 2:** *“When you allow them an opportunity... [Principals say] I got to do that [to get better]. How do I get that...? Coaching and the conversations with them [teachers]... And I think they [teachers] felt empowered now.”*

**Superintendent 3:** *“Really coaching somebody versus being a consultant for them is what I think ultimately we want to become [as leaders]. Unless you are really intentional, [I have discovered] that you lose... You can't get it back if you lose teamwork and your way [your goals and purpose].”*

### **Discussion**

Drawing from these highlights, this study is guided by the supposition a professional coaching model utilized in education can increase teacher and principal self-efficacy, and therefore, have a positive impact on organizational effectiveness. Findings based on the interview comments from the area superintendents suggest the professional coaching model improved teacher self-efficacy; teachers perceived themselves to be empowered through the process.

Discussion between teachers and principal become much more intentional and began to focus on specific, measurable goals and outcomes. As principals engaged in the professional coaching model they became more reflective in their work and more confident in their ability to effectively guide teachers to engage in self-directed improvement. The area superintendents noticed principals moved away from consulting (providing the answers) to coaching (leading the teacher to self-reflect to find an answer) creating teachers who are problem-solvers and also building leadership capacity on the campus. The area superintendents noticed better teamwork between administrators and teachers and observed more engaging conversations focused on teaching and learning.

With organizational effectiveness as the overall goal, throughout the interviews, the area superintendents noted the coaching conversations focused on effectiveness and actions aligned to providing meaningful change directed toward students being more successful. There was a focus on a growth-mindset within the intentional coaching conversations. The area superintendents commented on a shift in principals' perceptions of teachers as valued professionals with possible solutions who are capable of setting goals and crafting their instruction for improved student success. The comments in the interviews continually connected the professional coaching process to building leadership capacity within the teachers and principals.

Furthermore, the area superintendents perceived both principals and teachers experienced personal growth in this process. Principals experienced a shift in their perceptions of teachers' ability to problem-solve. Principals were challenged to provide intentional questions focused on teaching and learning, and had to develop better communication and self-reflection skills. The interview comments indicated leadership to be more transactional in this process. The process of leading teachers to the answer through questioning instead of telling them the answer was an insightful experience for the principals. It was perceived the teachers' grew in competence and confidence as they were empowered through meaningful conversation about their craft. The focus on goal-driven practice provided tangible measurements for teachers to self-reflect on their performance. Again, with less-directive leadership, teachers embraced the empowerment and demonstrated a growth-mindset in the coaching conversations.

### **Recommendations**

Based on the findings in this study, it is recommended districts shift the focus of coaching from "coaching the broken" to coaching the top performers to have greater gains in student success. Research supports the use of coaching to impact self-efficacy (Bozer et al., 2013) and goal attainment (Losch et al., 2016). When individual values align to those of the organization, the organization is more effective (Cameron, 1986). The area superintendents asserted coaching led to more empowered teachers and more confident principals - increasing leadership capacity at both levels. The time spent on teacher evaluation became more intentional and more focused on specific goals to improve teaching and learning. Many districts employed the policy exempting teachers from T-TESS who obtain a "successful" evaluation. This policy further enforces providing coaching for the lower performing teachers, not the high performing teachers. It is recommended districts revisit policies exempting teachers from the coaching because they are high performing.

### **Limitation**

The findings in this study are limited to the perceptions of three, area superintendents employed by the same district limiting the scope of the study since districts may have a shared ideology and shared values. This study's research goals were purposive; thus, researchers determined the research focus on leadership perceptions outweighed the population sampling disadvantages. This study's methodology could be applied to other districts or superintendents from a variety of districts to further enhance the validity of the findin

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## **Principal Perceptions of Personal Needs and Supervisor Support Developing Instructional Leadership Skills Using the Texas Principal Evaluation and Support System (T-PESS)**

*Kim Tunnell*

*Mineola ISD*

*Chuck Holt*

*Texas A&M University Commerce*

*Mei Jiang*

*Texas A& M University-Commerce*

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### **Abstract**

Principals have a complex task in leading their campus in providing a learning environment set to prepare students for academic success. The Texas standards for principal qualifications include the multiple roles expected of the principal in this leadership capacity. The new Texas Principal Evaluation and Support System (T-PESS) is designed with these standards for the evaluation of principals through a growth model for principal improvement. Both the standards and T-PESS emphasize the need for instructional leadership from principals.

The researcher conducted this study to ascertain the perceptions of principals on instructional skill development. Two questions were asked of principals to gain insight into their needs as instructional leaders and their perception of the support provided by their supervisors. The Q methodology was used as principals took cards containing one of each of the 21 leadership responsibilities from McREL's Balanced Leadership Framework<sup>®</sup> and ranked their perceptions on a grid that showed their level of agreement or disagreement with their perceived needs and levels of support. The data were analyzed using descriptive methods to determine common patterns among the participant responses to the two questions.

The study reinforces the literature on the need for coaching and support in order to develop instructional leadership skills in principals. The research indicates that there is a lack of alignment between the support provided by supervisors and the reported needs of the principals.

*Keywords:* T-PESS, instructional leadership, Balanced Leadership Framework<sup>®</sup>, Texas standards for principal certification

### **Introduction**

Challenging conditions continue to exist for Texas public schools and the leadership at the campus and district levels. A continued reduction in economic funding for school districts in the State of Texas (Barta, 2016) and the continued threat of a voucher system both within Texas and nationally were evident in the Senate platform during the 84<sup>th</sup> and 85<sup>th</sup> Texas legislative sessions. The reduction of funding coupled with the changes in the accountability system in Texas to include the A-F ratings for districts and schools pose a tremendous risk in retaining quality principals to lead. In addition to these challenges facing schools and districts, a new principal evaluation system was implemented in the State of Texas. The Texas Principal Evaluation and Support System (T-PESS) was created to reflect the Texas Principal Standards. T-PESS became statute in Chapter 21, Section 21.3541 Appraisal and Professional Development System for Principals of the Texas Education Code, which was designed to support principal growth and development to improve their instructional leadership on their campuses. The T-PESS process began statewide in 2016-2017; beginning in the 2017-2018 school year, an added component in the principal appraisal was the establishment of a student growth goal that targets improvement in student performance.

Implementing T-PESS and leading a campus with a relentless focus on student achievement within a complex change process calls for effective leadership skills in principals and a new level of support in the educational arena from central office staff members in regard to student achievement. Waters, Marzano, and McNulty (2003) reported that highly effective principals impacted student achievement by 10% in a given year on standardized tests. They also found that the greatest predictor of success for students was the number of years of experience of the principal. Leithwood, Louis, Anderson, and Wahlstrom (2004) found that these high-quality, experienced principals had the largest impact in high-poverty, low-achieving schools.

### **Statement of the Problem**

Filling the gap in finding and retaining effective principals skilled in instructional leadership, particularly in at-risk and low-performing schools, is a current need within school districts (Marzano, Waters, & McNulty, 2005). Navigating the increased accountability system requirements, along with demands for closing the achievement gap with increasingly diverse populations under a high-stakes testing environment, has resulted in principals leaving the profession and moving from campuses and districts in alarming numbers as shared in the 2012 National Conference of State Legislatures.

Principal leadership is equal to 25% of the school's total influence on student achievement and gains in English language arts and mathematics take consistent principal leadership for 3 years (Fuller & Young, 2009). Effective principals are needed to meet the demands of the new, complex system of school accountability and the multi-faceted aspects of the public-school environment.

Given the complex responsibilities of a campus principal, lack of support and instructional leadership development are equally important in creating a principal pipeline that attracts leaders to fill the shortage of quality school administrators. The "systemic evaluation and support that builds on principals' strengths and addresses their weaknesses" (Syed, 2015, p. 8) was identified as one of four elements of creating greater student achievement through improved school leadership. The State of Texas accountability requirements and A-F grading, coupled with expectations by the public that every child leave school ready to enter the workforce and prepared to compete globally, placed tremendous pressure on the campus principal. This pressure can be overwhelming, especially if principals are not supported by their central office (Markow et al., 2013). The ability of principal supervisors to support instructional leadership development using T-PESS as a coaching and mentoring process could serve as a remedy to the lack of skilled leaders and promote the retention of principals.

### **Research Design**

The researcher used Q Methodology (QM), which was introduced in the 1950s and is a mixed-method based on psychological, philosophical, scientific, and statistical principles to ascertain the views of participants about a target issue or topic. "Q methodology is unique as it combines the strengths of both qualitative and quantitative research traditions" to gather an individual's viewpoint concerning a specific topic or issue. QM is used to describe the subjectivity of human behavior and perceptions. The researcher attempted to identify any common themes of principal needs and type of support from their supervisor in developing as an instructional leader on their campus. The uniqueness of QM is that it can be placed in both the quantitative and qualitative strand of research. With this method, the researcher employed a quantitative factor analysis to group qualitatively gathered responses. For this action research study, the participants were principals in one mid-sized public school district in Texas. The district is categorized by TEA as an "other central city" district. The strategic sampling of individuals allowed the participants to categorize themselves during the Q-sort to reveal their thoughts, priorities, and values. Principals within the district were invited to participate through email and personal phone calls. A total of 10 principals were selected given the confines of the study and statistical relevance for using QM.

### **Significance of the Study**

This action research study was designed based on research of characteristics of effective principals, the components of the T-PESS system, the characteristics of high-performing cultures, and the support structures for principals. The process of collaborative goal-setting, monitoring, and coaching embodies the essential role with the principal supervisor or superintendent. The fidelity of implementation using these elements can not only enhance the effectiveness of principals in raising student achievement but also ensure that T-PESS does not become a compliance-driven system lacking in relevance and meaning.

As with any new implementation, compliance of specific components within the system can over-emphasize the requirements instead of a focus on the intent to improve leadership. The T-PESS system was developed as a growth-based model for principals to hone their craft of instructional leadership based upon effective best-practice. The processes of self-reflection and feedback and coaching from their supervisors are embedded in the system; if implemented as designed, these processes can guide principals to build their leadership capacity and offer strategies to use T-PESS as a tool to increase student achievement.

### **Collection of Data**

The researcher implemented the following steps for practical analysis of the principals' perceptions. Face-to-face meetings were scheduled with each of the selected principals. The participating principals were provided with an explanation of the Q-sort task and the purpose of gathering their values, beliefs, and opinions regarding two items: the perceived need for support by their supervisor and the perceived support received from their supervisor. The researcher provided an overview of Marzano's 21 Balanced Leadership Framework<sup>©</sup> responsibilities in the event that the participant was not familiar with the research and definitions. The cards contained the responsibility on the front and the definition and associated practices on the back to provide additional clarification.

The 21 cards containing one of each of the Balanced Leadership Framework<sup>©</sup> responsibilities identified as directly aligned to the relationship and coaching capacity with the supervisor were shared with each participant. The participant sorted items by comparing and contrasting the 21 responsibilities. The first task required the participant to sort and rank the cards based upon the participant's perceived need of support. First, the participants were asked to separate the 21 cards into three piles: (a) the responsibilities with which they most agreed was a need for their own principal support, (b) the responsibilities with which they most disagreed was a need for their own principal support, and (c) the responsibilities for which they felt neutral. The first guiding question was "What are your needs for support as an instructional leader?"

Following the explanation for their ranking, a picture was taken of the grid with the principal's sorted 21 responsibilities. The cards were then reshuffled and given back to the participant to now rank the Balanced Leadership Framework<sup>©</sup> responsibilities by the perceived support they receive from their supervisor. The second guiding question for this Q-sort was "What support as an instructional leader [is the participant] getting from [his or her] supervisor?" The cards were sorted following the same process from the first Q-sort by separating the cards into three piles and then placing the cards on the grid from the perspective of support provided by the supervisor. Explanation of participants' reasons for placement of the cards were recorded as well.

### **Treatment of Data**

While QM traditionally involves factor analysis, it can also lend itself to the descriptive analysis of the perceptions and beliefs of principals. The measurement of the distribution of the 21 cards including the averages, tendency towards each other, and the common themes can provide insight into the needs of principals and the type of support that can be provided by their supervisors. Data gathered regarding the individual participants and the correlation of their rankings may be further enhanced by application of correlational analysis. The beliefs from the

participants were extracted to identify the similarities and distinctions of each viewpoint. In selecting participants, the intention of the researcher was not to generalize the responses, but rather to explore patterns and themes from the perceptions. Participants with shared views share the same factor. Descriptive statistics were conducted to identify the mean, mode, and median of the 21 consensus statements to examine the similar placement of the cards as well as the distinguished statements with significantly different placements. The 21 leadership responsibility cards contained in the Q-sort were analyzed using the Statistical Package for the Social Sciences (SPSS) software program. SPSS is specifically designed to analyze Q studies and the descriptive and potential correlational results among the participants' Q-sorts.

### **Findings**

The Balanced Leadership Framework<sup>®</sup> identified the 21 behaviors and 66 associated practices of principals to improve student achievement and guide organizations to become highly responsive and effective (Marzano et al., 2005). These 21 responsibilities, as ranked by the principals based upon their perceptions, gave insight into their needs to develop as instructional leaders and the relationship with the support they are receiving from their supervisor.

The QM offered a statistical analysis of the principals' personal perspective or viewpoint and was used by the researcher to seek to explore patterns and themes instead of generalizing. The similar placement of the cards on the grid and resulting descriptive data pointed to some common themes regarding the needs of principals and the type of support from their supervisor. This methodology and the Q-sort provided statistical analyses to answer the two research question posed in this study.

### **Principal Perceptions of Needs for Instructional Leadership**

Principals in this study ranked similar high needs with their perception for a need for intellectual stimulation, involvement with Curriculum, Instruction and Assessment (CIA), and knowledge of CIA. These three highly-rated needs pointed to a growth mindset in principals to gain knowledge and engage in dialogue regarding instructional practice. Bottoms and Fry (2009) reported that investing heavily in instruction-related professional development for principals and providing instructional coherence and support are two of the seven strategies to empower principals. This perceived need of opportunities for professional development and an understanding of curriculum, instruction, and assessment can be problematic if support from the supervisor is not evident. These top three ranked behaviors of perceived need from principals also aligned with research on the need for focus on teaching and learning and the impact of instructional leadership on student outcomes.

One of the larger discrepancies in the ranking of supervisor support with individual needs was evident with intellectual stimulation and knowledge of CIA. With the multiple responsibilities assigned to principals, a system of support and resources to remain abreast of new research and tools for sharing the information for discussion among the staff members could support principal instructional leadership development. The T-PESS evaluation tool and rubrics reflected the three highly ranked components through standard 1 (instructional leadership), standard 3 (executive leadership), standard 4 (school culture), and standard 5 (strategic operations) with the implementation of systems that improve the quality of instruction. Principals set goals and are evaluated on their ability to implement rigorous and aligned curriculum and assessment (1A), maximize learning (1D), commit to ongoing learning (3B), culture of high achievement (4B), strategic planning (5A), and maximized learning time (5B). In order to achieve a "proficient" score on the T-PESS rubric used to evaluate principals in standard 1B (effective instructional practices), principals are expected to provide guidance on the implementation and effective use of research-based instructional strategies in every classroom and existing structures to actively participate in meaningful professional development.

As indicated by research, monitoring and evaluating is a critical element found in effective learning organizations and part of a coaching relationship. These top two change elements chosen by principals as needs, along with involvement with CIA, which ranked second by principals, reflected the desire of principals to be well-versed in strong instructional practice. As indicated by Marzano and Waters (2009) and Hirsh et al. (2014), a strong instructional framework is consistent with high-performing learning organizations.

The responsibilities of change agent and optimize were ranked in the top four responsibilities needed by principals in this study. Given the alignment with four of the top five ranked needs (excluding involvement with CIA) using the seven behaviors needed for second-order change, implicated that principals in this Texas district need support with the implementation of second-order change.

### **Principal Perceptions of Supervisor Support**

Using the Balanced Leadership Framework's<sup>©</sup> 21 responsibilities and the 66 associated practices, a supervisor evaluates principals within T-PESS to provide guidance and develop the behaviors of principals to improve student achievement in a highly responsive learning organization. Research question 2 was answered with the second Q-sort activity in order to ascertain "What are principals' perceived support from their supervisor regarding their instructional leadership development?" Based on the data analyzed, it was posited that there is a mismatch in the alignment of perceived support to address principals' identified needs. Consistent with the research on the critical role of the district in shifting support towards teaching and learning instead of managing and directing (Honig, 2012), the need for support on the identified needs of principals must be considered. The highest ranked leadership responsibility for support from supervisors was in the area of visibility. The availability of the supervisors to frequent classrooms on campus and to be directly involved with helping principals and teachers address instructional and assessment issues are elements of high performing learning organizations (Hirsh et al., 2014).

Focus, defined as establishing clear goals and keeping them at the forefront of the school's attention, along with monitoring and evaluating the effectiveness of school practices and the impact on student learning, were also ranked high in regards to the level of support from the supervisor. Similar to focus and monitor and evaluate rankings, order offered a large discrepancy between the mean level of support from supervisor and the perceived need of principals. This responsibility, defined as establishing a set of standard operating procedures and routines with effective structures to operate the school, can be categorized as a managerial task.

The data gathered in this study indicated that while supervisors were involved with CIA, their support with the intellectual stimulation and knowledge of CIA were much lower than the ranking of the principals' perceived needs. As Leithwood and Jantzi (2008) reported, the cooperative working relationship with instructional best practice as a priority enhanced higher achievement in students. This collaboration has a profound impact on the academic climate on the campus and provides significant influence (Honig & Rainey, 2014).

### **Conclusion and Implications of the Study**

Overall, principals in this study perceived their supervisors' support with an inverse relationship in comparison to their needs. Equipping principals with the tools and resources to serve as instructional leaders on campus requires the supervisor to move to a coaching role as demonstrated by the results of this study. Research from the Center for Education Leadership (2013) reinforced this belief that the job-embedded support from central office staff members is needed to build instructional leadership. Supervisors may be visible and provide support in the focus on goals and monitoring of progress, but until the supervisor forms a coaching relationship to help principals with their identified needs, instructional leadership development will continue to be an unmet need as indicated by the results of this study.

The use of the Balanced Leadership Framework<sup>®</sup> to narrow the instructional needs of principals can support T-PCESS goal-setting and support. The selection of principal supervisors is crucial to providing the level of support needed. Care must be given to those hired to build principal capacity in instructional leadership; the personnel hired for that role typically may not have been successful principals themselves and lack training in how to develop leadership skills in their assigned principals (Honig, 2012). Building upon the research conducted with new principals, the common themes identified included the limited access of principals to advice from non-supervisory experts (such as curriculum and instruction), the limited access to opportunities for professional development and collaboration, as well as specific aspects of leadership emphasized by central office leaders that do not match the expressed needs of new principals.

The practice of collecting data on principal perceptions similar to this study and using principal perceptions of their needs can enhance the effectiveness of the T-PCESS system. Supervisor can be trained in mentoring and coaching and can utilize T-PCESS within a coaching model to support principals in achieving their instructional goal based upon their identified needs. By continuing this focus on teaching and learning and fostering a tight relationship between principals and their supervisors, principal instructional leadership skills can continuously improve and student outcomes achieved.

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## **Hispanic Student Graduation Rate in College Ready English Language Arts and Mathematics in Texas' Lower Rio Grande Valley**

*Cristobal Saldana*

*Ray Thompson*

*Texas A&M University-Commerce*

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### **Introduction**

In recent years, there has been increasing concern, especially among Texas legislators, about high school graduates' preparedness for college coursework (Chang, 2016). The number of students enrolled in remedial level courses in colleges and universities has begun to level off after a steady rise was seen in the early 2000s (Greene & Forster, 2003; Hacker, 2010; Lu, 2013). In 2014, approximately 49% of all first-time-in-college Texas public university students enrolled in some type of remediation course (Morales-Vale, 2014). This trend was especially noteworthy because in 2012 Texas boasted a student enrollment of 4.9 million students with a graduation rate of 93.2% (Texas Association of School Boards [TASB], 2012). This gave rise to the concept that students who graduated high school needed to be college ready. This belief has become so important that the State of Texas implemented College and Career Readiness Standards into the curriculum of its tested areas (Texas Education Agency [TEA], 2017). In addition, the State of Texas plans to use College Readiness standards in its accountability ratings for the next several years (TEA, 2017).

Approximately 20 years ago, school district administrators began contemplating ways to increase student achievement and teacher collaboration (Canady & Rettig, 1995; C. Williams, 2011). Administrators considered block scheduling as opposed to traditional scheduling as a potential solution for increased student achievement. In the block scheduling method, students attended four classes a day for 90 minutes each. This allowed students ample time to learn material through longer class periods and to cover a year's worth of material in half the time. In the traditional scheduling method, students attended six to eight classes for 45 minutes each over the entire year. With the block scheduling method, students could take four new courses at the end of the semester. In the traditional scheduling method, students would continue to the second part of their courses when the new semester started. Part of the allure of block scheduling was to allow teachers time to plan lessons with ample critical thinking activities (Canady & Rettig, 1995).

With increased accountability, school districts contemplated moving their high schools back to traditional schedules after 20 years of block scheduling (Musbach, n.d.). There were many points to consider in making the change. The impact that this change could have on student preparedness for college coursework was one consideration, despite studies showing little to no difference in student performance between scheduling systems (College Entrance Exam Board, 1998; Gill, 2011; Huelskamp, 2014). Although the TEA included college readiness in an Academic Excellence Indicator System previously, the 2012-2013 school year was the first in which college readiness was actually considered a factor in state accountability for high schools. Given this distinction of college readiness as a factor, school administrators continued to examine which scheduling system produced higher student performance across all indicators, including the college readiness indicators.

### **Statement of the Problem**

School administrators make difficult decisions every day; those decisions in turn impact students. High school administrators also face decisions that will affect their students long after

they graduate. One of these decisions is deciding on a scheduling system to follow in administering the instructional curriculum. For the most part, scheduling systems fall under two categories: block or traditional. Both have their advantages and disadvantages; however, with the TEA's newest rating system, schools are rated on whether students are performing at college-ready standards, specifically in ELA and mathematics. This is important because when a student graduates under the college ready designation, they do not have to spend time in remedial courses in post-secondary institutions to prove that they can perform at the appropriate level. High schools have long experimented with scheduling options (Canady & Rettig, 1995). Block, hybrid, and traditional schedules were the most commonly selected options among schools across the country. With the increasing role college readiness plays in accountability, it behooves schools to consider scheduling options and the effects of each option on college readiness (TEA, 2017).

Because schools should be in the business of student success, it can be argued that every experience a high school student undergoes should help facilitate that success, including success at the next level (Bishop, 2007). As such, more research on the effects of high school scheduling on college readiness has been encouraged. Investigating Texas accountability data will help identify the effectiveness of these differing scheduling options in preparing students for the demands of college rigor.

This exploratory study determined the relationship between a high school's scheduling system and the extent to which Hispanic students scored at college-ready criteria in the areas of English Language Arts (ELA) and Mathematics. In Texas, the TEA holds high schools accountable for certain indicators that are identified as *College Readiness Indicators*. It is essential that schools understand how their choice in scheduling options could affect their accountability ratings (TEA, 2017). By examining the effects of each scheduling option on these indicators, districts and high schools will be able to better understand and implement changes accordingly.

### **Theoretical Framework**

For this study, a quantitative research design was used to determine the extent of the relationship between bell scheduling type and high school Hispanic students' graduation rate under the college ready designation in ELA and mathematics. Previous researchers focused on students' overall performance such as GPA and rarely controlled for race or ethnicity or the schools' bell schedule system used. In this study the researcher targeted the graduation rate of Hispanic students under the college ready designation in ELA and Mathematics while enrolled in high schools that implemented block or traditional scheduling. The three high schools purposefully selected for the study had a Hispanic student enrollment of more than 85% and were located in Texas's Lower Rio Grande Valley.

Labels A, B, and C were used to protect identifiable or confidential information for participating high schools. The school years examined ranged from 2012 to 2016. High School A alternated between traditional and block scheduling. For example, in 2010 and 2011, High School A implemented block scheduling, but in 2012 and 2013 changed to traditional scheduling, and in 2014 and 2015 changed back to block scheduling.

This is important to note as members of the Class of 2012 graduated with 3 years of block scheduling and 1 year of traditional scheduling. Members of the Class of 2013 graduated under 2 years of block scheduling and 2 years of traditional scheduling. Members of the Class of 2014 graduated with 1 year of block scheduling, 2 years of traditional scheduling, and 1 year of traditional scheduling. Members of the Class of 2015 graduated with 2 years of traditional scheduling and 2 years of block scheduling. And finally, members of the Class of 2016 graduated under 1 year of traditional scheduling and 3 years of block scheduling. High school B implemented traditional scheduling while high school C has implemented block scheduling throughout the selected years of the study.

### Research Questions

The following research questions guided the researcher in this study:

1. To what extent was the college ready graduation rate among Hispanic students in ELA related to the high schools' bell scheduling types?
2. To what extent was the college ready graduation rate among Hispanic students in Mathematics related to the high schools' bell scheduling types?

### Hypotheses

Since hypotheses provide a framework for reporting the findings and conclusions of this study, the following research hypotheses guided the researcher in this study:

1.  $H_0$ : There were no significant differences in the proportion of Hispanic students who graduated under the college ready designation for ELA and who were enrolled in high schools implementing block versus traditional scheduling.

$H_1$ : There were significant differences in the proportion of Hispanic students who graduated under the college ready designation for ELA and who were enrolled in high schools implementing block versus traditional scheduling.

2.  $H_0$ : There were no significant differences in the proportion of Hispanic students who graduated under the college ready designation for mathematics and who were enrolled in high schools implementing block versus traditional scheduling.

$H_1$ : There were significant differences in the proportion of Hispanic students who graduated under the college ready designation for mathematics and who were enrolled in high schools implementing block versus traditional scheduling.

### Methods and Procedures

Student college readiness data in the areas of ELA and mathematics, which was reported in the Academic Excellence Indicator System (AEIS) or the Texas Academic Performance Report (TAPR), were analyzed to determine the extent to which student graduation rates are related to the bell scheduling type implemented by the different schools. The z score formula for determining differences between proportions and frequencies as outlined by Guilford (1965) was used to test for differences between college readiness graduation rates of Hispanic students in the areas of ELA or Mathematics exams who were enrolled in a high school implementing block scheduling versus students who were enrolled in a school implementing traditional scheduling. It is important to note the phrasing of the null hypotheses. Should a single significant interaction be found in the comparison of Hispanic student graduation rates between any of the schools, then the null hypothesis was rejected. However, should there be no significance found in the comparisons, then the null hypothesis was accepted.

### Instrumentation

The TEA's AEIS yearly reports prior to 2012 and the TAPR post 2012 were used to gather data for the study. These reports were available on the TEA website and were accessible by the public. The AEIS was replaced by TAPR in 2012 to accommodate the various legislative requirements, including the NCLB Act of 2001 and additional requirements established by the state legislature (TEA, 2017). Data from these reports were recorded on a spreadsheet for analysis purposes.

### Selection of Sample

A purposeful selection technique was used to select three high schools located in Texas's Lower Rio Grande Valley to meet the following two criteria: (1) the type of bell scheduling systems implemented, and (2) Hispanic student enrollment of 85% or greater in each school. To determine if there were differences in the college readiness graduation rate of Hispanic students in the areas of ELA and Mathematics exams, it was necessary to select high schools that employed

traditional or block scheduling. One selected high school used traditional scheduling, while the second selected high school used block scheduling. The third selected high school alternated between traditional and block scheduling.

### Procedures

After the proposal was approved by the Texas A&M University-Commerce Institutional Review Board (IRB) and the Office of Theses and Dissertations Services (OTDS), data on the ELA and Mathematics College exams for each participating school were collected from two different TEA reports: the AEIS for the school year 2012 and the TAPR for 2012 through 2017 school years. It should be noted that for the years to be examined, TEA published some data the year following the conclusion of the school year. For example, the college ready data for the school year 2012 were published in the 2013 TAPR report. So, demographic data could be collected in the 2012 AEIS report, but the data for the class of 2012 were collected in the 2013 TAPR.

Data collected in this study were from school years starting 2012 and ending 2016. This means that data for the 2016 school year were obtained from the 2017 TAPR report. Data for high school A was unique in that the school alternated between traditional and block scheduling. In the 2010 and 2011 school years, high school A implemented block scheduling; in the 2012 and 2013 school years changed to traditional scheduling, and in the 2014 and 2016 school years changed back to block scheduling. High school B implemented traditional scheduling while high school C implemented block scheduling throughout the selected years of the study.

Data for the study were recorded on a spreadsheet for data analyses purposes. Data will be stored for no more than 3 years on a thumb drive secured in a cabinet at Texas A&M University-Commerce.

### Treatment of Data

The  $z$  score formula for determining differences between proportions and frequencies, as outlined in Guilford (1965, pp. 185-187), was used to test for differences between the college ready graduation rate of Hispanic students in the areas of ELA or Mathematics who were enrolled in a high school implementing block scheduling versus students who were enrolled in a school implementing traditional scheduling. The  $z$  formula is shown here for convenience.

$$z = \frac{p_1 - p_2}{\sqrt{p_e q_e \left( \frac{1}{N_1} + \frac{1}{N_2} \right)}}$$

$p_1$  = Proportion of Group 1 students scoring at the College Readiness level on the Texas's TAKS/STAAR ELA or Mathematics exams.

$p_2$  = Proportion of Group 2 students scoring at the College Readiness level on the Texas's TAKS/STAAR ELA or Mathematics exams.

$p_e$  = The variance of the estimated population proportion, which is obtained using the formula

$$p_e = \frac{N_1 p_1 + N_2 p_2}{N_1 + N_2}$$

$$q_e = 1 - p_e$$

The college ready rates for Hispanic students at high schools A, B and C were compared with each other in the areas of ELA and mathematics for each year of the study, beginning with school year 2012 and ending with school year 2016. There was a total of 30 comparisons conducted between schools, 15 in ELA and 15 in mathematics. High school A was compared with

high school B (traditional schedule) and high school C (block schedule) because high school A used both types of bell schedules. All results for the comparisons were reported at the .05 level of significance.

### Demographics of the Schools in the Study

The three schools in this study were all located in the Lower Rio Grande Valley. Two were located in Cameron County (high school A and high school B) while the other was located in Hidalgo County. The two schools in Cameron County were not a part of the same school district. Additionally, the three schools in the study were identified as Title 1 schools. For the 2012-2016 school years, each of the schools were classified as a 6A high school as outlined by the University Interscholastic League, which classified schools for athletic and academic competition based on enrollment. In the area of Hispanic enrollment and Hispanic graduation, each of the schools were also similar. Except for one school (high school C) in one year, the Hispanic enrollment at each of the schools for each of the years of the study approached 90%. And in the year where high school C Hispanic enrollment did not approach 90%, it was at 89.1%. The comparison of demographic data for each of the schools is presented in Table 1.

Table 1

#### *School Demographic and College Ready Profiles*

Demographic	2012	2013	2014	2015	2016
		High School A			
Total Enrollment	2,49	2,59	*1,87		1,94
Hispanic Enrollment	2	1	5	2,013	7
	2,26	2,36		1,842	1,79
	1 (91%)	6 (91%)	1,707 (91%)	(91%)	6 (92%)
Total Graduates	522	566	548	551	606
Hispanic Graduates	469	510	493	503	558
	(90%)	(90%)	(90%)	(91%)	(92%)
Hispanic College Ready ELA Graduates	263	270	266	186	322
	(56%)	(53%)	(54%)	(37%)	(58%)
Hispanic College Ready Mathematics Graduates	295	316	286	116	213
	(63%)	(62%)	(58%)	(23%)	(38%)

High School B					
Total	2,97	2,74			2,67
Enrollment	4	4	2,672	2,663	0
Hispanic	2,87	2,67	2,627	2,617	2,62
Enrollment	7 (97%)	2 (97%)	(98%)	(98%)	3 (98%)
Table 1 Continued					
Total					
Graduates	692	711	655	595	509
Hispanic	663	688	642	584	501
Graduates	(96%)	(97%)	(98%)	(98%)	(98%)
Hispanic					
College Ready ELA	464	420	424	164	292
Graduates	(70%)	(61%)	(66%)	(28%)	(58%)
Hispanic					
College Ready					
Mathematics	471	537	379	128	261
Graduates	(71%)	(78%)	(59%)	(22%)	(52%)
High School C					
Total	3,01	3,18		*1,77	1,56
Enrollment	9	5	3,264	3	9
Hispanic	2,70	2,88	2,994	1,634	1,46
Enrollment	5 (90%)	4 (91%)	(92%)	(92%)	2 (93%)
Total					
Graduates	670	714	740	588	450
Hispanic	597	632	661	542	419
Graduates	(89%)	(89%)	(89%)	(92%)	(93%)
Hispanic					
College Ready ELA	370	367	416	184	258
Graduates	(62%)	(58%)	(63%)	(34%)	(62%)
Hispanic					
College Ready					
Mathematics	406	455	456	152	239
Graduates	(68%)	(72%)	(69%)	(28%)	(57%)

\*Note: A drop in enrollment was seen due to the opening of new campuses within the district that pulled students away who were previously zoned to this school.

### Results and /conclusions, and potential implications

The researcher designed the study to discern whether block or traditional scheduling impacted college ready graduation rates in Texas. While there were several studies that compared overall student performance between the two high school scheduling systems, the researcher in the present study compared the proportion of Hispanic students who achieved college ready designation in ELA and mathematics in a school using one type of bell schedule versus the proportion of Hispanic students who achieved similar designations in a comparison high school with a second type of bell schedule.

A unique feature of the present study was the analysis of college ready rates in the areas of ELA and mathematics for seniors graduating from high school A, which used a combination of traditional and block scheduling. For example, the 2012 graduating class experienced 3 years of block scheduling and 1 year of traditional scheduling while the 2013 graduating class experienced 2 years of block scheduling and 2 years of traditional scheduling. The 2016 graduating class experienced 1 year of traditional scheduling and 3 years of block scheduling. No graduating class

in high school A experienced 4 years of either traditional or block scheduling during the time span covered. The unique data for each year's graduating class in high school A were compared with data from a complementary year's graduating class in Schools B and School C. The final comparisons were for yearly graduation college ready rates in the areas of ELA and mathematics for high school B and C.

### **Discussion of the Results of the Study**

For this study, data were collected from the TEA's website from the AEIS and the TAPR for the school years 2012-2016 for each of the schools in this study. Because college ready data are reported on a year delay, it was also necessary to also obtain these data from the 2017 TAPR for each of the schools. Demographic and college ready data were then input into a Microsoft Excel document. These were analyzed using the *z* score formula.

For this study, two hypotheses were proposed: One for the comparison of graduation rates in the three selected schools for Hispanic students with college ready designation in ELA, and the second for the comparison of graduation rates in the three selected schools for Hispanic students with college ready distinction in mathematics. The three schools each implemented a different bell scheduling system. Each of the hypotheses posited that there would be no significant differences in these areas when compared across scheduling systems. Careful analysis, however, revealed that there were indeed significant differences. Thus, both null hypotheses were rejected.

At the outset, the researcher hoped to identify if evidence indicated that one scheduling system proved to be better than the other, especially because of its impact on students after they graduated. First, the results indicated that students could achieve success whether their school utilized block or traditional scheduling. Alternating scheduling systems, however, as with the case of high school A, appeared to be detrimental to the graduation rate of Hispanic students in both college ready ELA and mathematics, as evidenced by the students from high school A having mixed results when compared to high schools B and C. Had high school A had 4 years of traditional schedule to compare to the years of block, it may have yielded results that could identify whether traditional or block had an impact on Hispanic college ready graduation rates.

Second, block scheduling had the potential to help Hispanic students in the areas of college ready mathematics. In the six comparisons where significant differences were noted, results showed that the school using block scheduling had a greater number of times when Hispanics graduated with a college ready distinction than for schools using traditional or mixed bell scheduling. The fact that there were differences in these comparisons is in line with other studies, such as Trenta and Newman (2002). However, the results in this study are in direct contradiction with results of other studies. For example, Byers (2011) argued that block scheduling had an overall negative impact on students. Both Howard (2010) and Williams (2011) found that block had a negative impact specifically on mathematics scores. Byers (2011), Howard (2010), and Williams (2011) did not specifically look at ethnicity. This is where this study differs from the previous studies.

The results in college ready ELA comparisons were not definitive. In the nine comparisons that yielded significant results, five showed higher graduation rates of Hispanic students with college ready distinctions in schools that utilized a traditional schedule compared to four that showed greater graduation rates in schools that implemented block scheduling. This lack of delineation is in line with several studies in the block versus traditional debate. Williams (1999), Norton (2002), and Dexter et al. (2006) argued that the differences between block and traditional scheduling were negligible. Results of graduation rates of Hispanics with college ready distinction in mathematics in the present study disputes the conclusions of Howard (2010) and Williams (2011) that block is better for the area of ELA. At best, the results are mixed as to which scheduling system is superior for ELA.

An interesting point to note is that during the 2012 school year, the State of Texas began a new testing system. It transitioned from the TAKS to the State of Texas Assessment (Weiss,

2012). The biggest difference between the two tests was the level of rigor. At the outset, at the high school level, students were tasked with passing 15 different exams across the four core areas. However, this requirement was subsequently reduced to five (Ayala, 2017). With regard to the present study, this information is relevant as it most likely had an impact on how schools utilized resources to help students in these tested areas.

### **Implications of the Study**

Several implications for educational administrators can be considered. Texas leads all states in Hispanic population growth (Ura, 2017). This makes this study immensely important. As the Hispanic population continues to boom in Texas, administrators must find a way to ensure that Hispanic students graduate at college ready levels both in ELA and mathematics. This is a trend that is not likely to change any time in the near future. The need to solve this enigma is urgent. One way that administrators can do this is to choose the right bell scheduling system.

Choosing a bell scheduling system is one of the most important tasks for a high school administrator. In choosing a bell scheduling system, three things should be considered. First, if the goal of a school is student success, every decision a school administrator makes should be with that goal in mind. In this vein, administrators should choose a bell scheduling system that allows students to be prepared for college. Second, TEA holds schools and districts accountable for how students perform on state mandated tests. The TEA no longer simply analyzes and rates schools based on overall performance. One of the areas schools are rated in is college readiness. So, a high school administrator should consider which bell scheduling system would help students perform at the highest level and possibly achieve as many college ready designations as possible.

Third, both students and institutes of higher education are spending valuable resources because students are leaving high school ill-prepared for the rigors of post-secondary education. Students spend money on remedial classes that do not count toward their degree completion. Institutes of higher education spend valuable resources to offer these remedial classes. They must provide the venue, staff, and time for these courses. This is at the heart of the mission for the Texas Higher Education Coordinating Board; however, choosing and implementing bell scheduling systems is something that can be done by the local high school and school district only. Institutes of higher education cannot mandate a particular bell scheduling system.

The most significant conclusion of this study is that for Hispanic graduates, in the area of mathematics, block scheduling yields higher college ready graduation rates. The answer for ELA remains unclear, yet implementing a block schedule could benefit a school with regard to graduation rates of Hispanic students with college ready designation in mathematics. Doing so, however, might prove to be detrimental to Hispanic students' obtaining college ready designation in ELA.

A school administrator might contemplate implementing a hybrid schedule, where mathematics is offered through block scheduling and ELA courses are offered through traditional scheduling, but this may result in the potentially untenable task of making all the other courses fit in such a complex scheduling system. In short, results of the present study do not provide an easy answer for the school administrator with regard to implementing a bell schedule that increases the number of college ready graduating Hispanic students in ELA and mathematics. In interest of the benefit of students, efforts to make such a schedule should be explored, especially since it has the potential to be mutually beneficial to all parties. Students would graduate college ready, meaning no remedial courses and wasted time or money for both the students and the universities they attend. Schools would be rated higher in the areas of college readiness, and universities would not have to waste valuable resources offering remedial courses.

A final implication of this study could be a benefit to students who are English language learners (ELL). These students must go through the English as a Second Language program. Sometimes, because they struggle with learning the English language, they lose opportunities for

electives as there is only so much space within their schedules. Offering a block schedule mathematics course that will contribute to overall student success opens up the possibility for those students to regain the opportunity to take an elective course. This scenario is outside the scope of this study, but the implications of this study on the possibility of opening an elective for ELL cannot be understated.

### **Significance of the Study**

During the late 1800s, there was a movement to standardize the requirements for entry into colleges and universities (Carnegie Foundation for the Advancement of Teaching, 1906). As such, schools began to structure learning so that students could fulfill the entrance requirements that were established. This gave rise to the need for a universal crediting system so that colleges and universities could ensure that each student had the appropriate amount of credits in the areas required (Carnegie Foundation for the Advancement of Teaching, 1906). This unit was known as the Carnegie unit.

Eventually, modern high schools developed a system to prepare students to complete the requirements of college entrance within four years (Mackenzie, 1894). For almost 100 years, schooling and crediting systems changed very little. In 1983, however, a nationally commissioned research project entitled *A Nation at Risk* reported that students in American high schools were underperforming in comparison with students from around the world. This research project called for new and innovative ways of educating students to improve student performance in comparison with other nations (National Commission on Excellence in Education [NCEE], 1983).

In the mid-1990s, another nationally commissioned report, *Prisoners of Time*, stated that time was the biggest factor contributing to student underperformance. Students spent as much time in non-core classes as they did in core classes. This meant that students in a difficult and complex chemistry or biology class would get as much seat time as they would in a physical education class. While physical education might be important, it is not an area in which students, schools, districts, and nations are ranked. The researchers posited that there had to be a better way to prepare students for the rigors of college and to be able to compete with their peers in other countries (National Education Commission on Time and Learning [NECTL], 1994).

Canady and Rettig (1995) found that there were indeed significant correlations between seat time and academic achievement. They suggested that high schools organize the school day into longer class periods and fewer classes than the traditional model. Schools experimented with various aspects of the school day, including its overall structure—the number of class periods as well as the length of those periods (Canady & Rettig, 1995). State governments took a closer look at schools and student performance and found that, initially, schools that chose the block or hybrid scheduling option performed better on state tests than did their counterparts that chose to stay with the traditional schedule (Canady & Rettig, 1995).

In a later study, Dexter, Tai, and Sadler (2006) examined how high school scheduling options affected the success of college students and found that students who attended high schools that utilized block or hybrid scheduling were moderately more successful than students whose high schools utilized a traditional schedule. Subsequent researchers found that there was little to no difference in student performance (Norton, 2000; Trenta & Newman, 2002; Williams, 1999). Dexter et al. (2006) were perhaps the closest to examining the relationship between college readiness and high school scheduling options. In this study, the researcher will specifically examine Hispanic students' performance on TEA's College Readiness Indicators—ELA and Mathematics.

Approximately one-third of high school graduates are not ready for the rigors of college coursework (Sparks & Malkus, 2013). Thus, universities around the country had to remediate students to better prepare them for these rigors. This required the universities to absorb the cost of staff positions and classroom availability, and students to spend money for courses that did not

count toward their degree. College remediation has become such a huge epidemic that the TEA published College and Career Readiness Standards in hopes of eliminating the ever-increasing number of ill-prepared college-bound students. Within the 2018 and 2019, high schools will be graded on the degree to which they prepared students for college through college readiness indicators (TEA, 2017).

As school district and high school campus administrators began to seek ways to maximize student performance, one consideration should be bell schedules in the high school setting and their impact on top-tier students. If it is evident that a certain bell schedule negatively effects top-tier students, it might follow that the same bell schedule could have adverse effects on other students. A careful examination of the performance records of schools on traditional bell schedules and those that used alternative bell schedules may allow school district and high school administrators to gain a better understanding of the effects that bell schedules may have on students beyond post-secondary education. Administrators can then use these research results to make decisions to enhance student performance across college readiness indicators; by extension, these decisions will also aid their students in closing the remediation gap at Texas public universities.

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## The Impact of Growing Your Own Principals through a Job-Embedded Principal Preparation Residency Program

*Dusty L. Palmer*  
*Irma L. Almager*  
*Fernando Valle*

*Texas Tech University*

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### Abstract

This qualitative case study explores the impact of job-embedded principal preparation residency program through the lens of a school district's administrator. The school-university partnership provided an innovative way to prepare aspiring school leaders. The job-embedded structure provided an authentic, contextual base experience where aspiring principals served as interns over a 15-month period in their current school district. The praxis of the study positions principal interns to impact teacher growth and improve student achievement during their job-embedded placement. Overall, the school district invested in their own teachers and are now leading their campuses in a principalship role.

Keywords: job-embedded, principal preparation, school-university partnership

**“It’s been a game changer”**

**-District Administrator**

The preparation of principals across the Nation has evolved into a grow-your-own concept where school districts identify and support aspiring leaders within their own district in return to lead or assist in leading a campus of that same district in a principalship role. Through a partnership with six urban school districts, the Wallace Foundation cited four key parts for building the principal pipeline within school districts. In a Wallace Foundation report, Mendels (2017) stated that "standards for principals, high-quality pre-service training, rigorous hiring procedures, and tightly aligned on-the-job performance evaluation and support" (p. 8) were key components for building principal pipelines within school districts. Consequently, Tennessee has also lead efforts with the Race to the Top grant to form partnerships with universities to guide principal preparation efforts. Where in Texas, the Texas Education Agency has put forth time, money, and resources for school districts to partner with universities by funding grow your own teacher grants and principal preparation grants starting with the 2018 – 2019 school year. All these efforts put forth across the nation with school districts partnering with universities to train aspiring leaders within these same school districts has led other efforts for school-to-university partnerships to build principal pipelines.

In this study, the researchers examined the perceptions of a district administrator who understood the impact principal interns' participation in the job-embedded principal preparation residency program have made within his school district in Texas. The purpose of the study was to show how principal interns who receive effective instructional coaching experiences in a job-embedded principal preparation residency program with faculty support can improve teacher growth and impact student achievement. Consequently, if the principal intern's instructional coaching experiences did impact teacher growth and student achievement, then principal

preparation programs, school districts, and other stakeholders should be influenced to establish similar principal preparation experiences that produce highly skilled instructional leaders.

The following research questions guided the study:

1. In what ways did the interns impact the school district during the 15<sup>th</sup>-month job-embedded principal preparation residency program?
2. In what ways have the interns that are now serving as instructional leaders in your school district have impacted your school district?

This study used the theoretical framework of transformational leadership with an emphasis in instructional leadership. Using the basis of transformational leadership where the leader focuses on the needs of the follower (Burns, 1978; Wiltshire, 2012), principals first need to understand the needs of the follower. Marks and Printy (2002) introduced an integrated leadership style that is “transformational leadership coupled with shared instructional leadership” (p. 392). Their purpose was to focus on principal and teachers’ relationships to improve student achievement. In this study, the district administrators provided an insight on the impact the principal interns and former principal interns now serving in the pipeline as assistant principals and principals have had in transforming the campus culture by supporting teachers who ultimately improve student achievement.

The study used a qualitative research methodology utilizing the design of a descriptive case study. The case study utilized a phenomenon from a school district’s perspective that could speak on the real-life experiences of the former and current principal interns in which the phenomenon occurred (Yin, 2014). The purpose of the methodology was for the district’s representative to provide an in-depth, rich informative perspective on the experiences the principal interns have made in their school district. Supplemental data used to compliment the interview findings is student performance data retrieved from the Texas Accountability Performance Reports. Three themes emerged during the analysis of the interview findings. Partial summaries of the findings are provided below.

*Bring to the table.* Participating in the job-embedded residency program has definitely made an impact in the school district. The district administrator continuously used the phrases, “bring a lot to the table” and “sit up a little taller.” For example, the district administrator said, “they bring a lot to the table as far as supporting the school administration for that particular campus.” At professional development meetings where the principal interns and/or assistant principals who were former principal interns of the program are in attendance, other participants in the room “set up a little taller.” The district administrator believed, “it’s made people much more consumer[s] of knowledge” and reiterated that “people around them are learning from them.” The other administrators in the room pay more attention and are engaged in the professional development when current or former principal interns are present.

*Reciprocal mentoring.* The mentor was a valuable part in fostering a meaningful learning experience for the principal interns. However, finding the right mentor for the residency program’s learning objectives was not always a perfect fit. When the partnership with the school district first started, the district administrator had to reflect on what type of mentors they were who had the required skills to mentor. It has been a learning experience year to year finding the right match and consequently mentor changes were made prior to the school year and sometimes during the school year. The principal interns demonstrated the willingness to be flexible. For example, one principal intern was moved three times prior to the school year and made the best of the situation and now he is serving as an assistant principal with a strong potential for moving into a principal position soon.

*Wanted for hire.* The principal interns are highly sought after because they are already trained to “hit the road running” and “if I’m being the principal I have to run, we got stuff to do, we got work to do, I don’t have time to train. These folks come in and they are already trained.” The principals are ready to work and grow struggling teachers. So now that the principal interns are

hired as assistant principals in the district, their role is to continue to dissect data, grow teachers, and ultimately impact student performance. Overall, during the hiring process and interviews the principal interns that participated in the residency program brought a high level of conversation and sophistication for hire. “They win. They win.”

The findings provided evidence that the principal preparation residency program did make a positive impact within the school district. The pipeline of school leadership was built through the program where the participants in residency were moving up in the ranks of leadership in the district. Not only that, the current and former principal interns showed evidence that they were growing teachers on the campus and improving student performance through professional learning communities. However, the lingering question that both the school district and university have to solve is how will the program be sustained since it was funded by a federal grant? In addition, how to continue to fund tuition and fees, salary matching, and funding to support faculty coaches conducting on-site coaching cycles throughout the program? With the support of Texas Education Agency initiative to promote job-embedded residency principal preparation programs, school districts have the opportunity to apply and continue and to sustain an effective job-embedded principal preparation program. Other suggestions would be for school districts to look for other funding opportunities and to manage their future operating budgets to allow for funding support and sustainability of the program.

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## **The Relationship between the Number of Economically Disadvantaged Students to the 2018 State Accountability Rating of Texas School Districts: Implications for State Policy**

*Robert E. Nicks*  
*Gary E. Martin*  
*Tilisa N. Thibodeaux*  
*J. Kenneth Young*  
*Daryl Ann Borel*

*Lamar University*

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### **Introduction**

The Texas Education Agency initiated a letter rating system (A-F) for school districts in 2018 that relies on student performance on state exams as the primary variable in determining an A-F rating for each school district and charter school in the state. This study analyzed secondary data provided by the state of Texas and determined that a major flaw to the simplistic criteria exists. The flaw is the fact that there is a significant relationship between the number of Economically Disadvantaged students and the district or school rating. Whereas districts have no control over the numbers of economically disadvantaged students, the number of these students become a de-facto determinant of the rating. This finding suggests that current policy is in need of further study and change.

#### **Organization of the Policy Brief**

The Policy Brief is organized sequentially as follows:

- Federal government legislation requiring states to utilize student performance on standardized exams,
- Utilizing student test scores for accountability purposes when more authentic assessment would be more reliable and accurate in determining school district effectiveness,
- A brief explanation as to why states utilize student test performance data for school accountability,
- An explanation as to how student test scores are used for accountability purposes in Texas,
- A brief explanation identifying the reasons not all school districts in Texas received an A-F rating in 2018,
- Study Methodology
- Recommendations for policy revision in Texas,
- Policy Brief Closing, and
- References

### **Background of the Issue**

The federal government initiated the requirement for all states to utilize student performance as a required element for school district accountability. The Elementary and Secondary Education Act, passed in 1965, was the first major federal legislation to address widespread education requirements and was designed to support the *Brown v Board of Education* ruling in 1954. The legislation included student testing as a key element to school accountability with the stated purpose being to reduce the achievement gap between white and minority students (McKenzie & Kress, 2015). Test-based accountability has played an important role in education in the United States for over half a century and is used because it is generally seen to be an inexpensive and objective way of evaluating student achievement and holding schools and school

districts accountable. The use of standardized tests to measure student performance for the purpose of school accountability, however, is inherently problematic (Wilian, 2010).

*A Nation at Risk: The Imperative for Educational Reform* was a report issued by the National Commission on Excellence in Education which emphasized the importance of testing for the purpose of school reform and accountability (A Nation at Risk, 1983). Elementary and Secondary Education Act (ESEA) reauthorization in 1994, known as the Improving America's Schools Act (IASA), and No Child Left Behind (NCLB) in 2001, were reauthorizations of the ESEA. A provision of NCLB legislation required each state to develop standards and placed emphasis on annual testing, academic progress, school accountability, and teacher qualifications (Dee & Jacob, 2010). In 2015, Every Student Succeeds Act (ESSA), was passed by Congress to replace NCLB with the intended purpose of giving more flexibility to the states as to how they would accomplish the objectives outlined in NCLB and to reauthorize the Elementary and Secondary Education Act (Mathis & Trujillo, 2016). All three pieces of legislation, NCLB, ESEA, and ESSA included requirements for student testing associated with school accountability requirements.

It has long been argued that reliance on a single, dominant measure, such as state exam scores, may or may not reflect increases in student achievement. State tests measure student performance related to specific content on selected subjects, are limited to quantitative findings, and may lead to narrowing of the curriculum (Haut & Elliott, 2011).

Between-school differences account for less than ten percent of the variance in student scores, in part, because the progress of individuals is small in comparison to the spread of achievement within a specific grade level or cohort age group. This would indicate the validity of basing school accountability questionable in that the school's impact on student achievement may not be representative to how performance is being treated in accountability system design (Wilian, 2010). Despite the obvious limitations in relying too heavily on standardized test scores for accountability purposes, there are reasons why all fifty states do so (Ravitch, 2010). Reasons include:

- Easy to compare scores to identify between-school differences
- Federal legislation requires states to utilize test scores in developing accountability guidelines
- Reduced inter-rater reliability issues compared to more authentic forms of evaluation
- Test format is usually multiple-choice which is easier and less expensive to grade
- Test results can be returned to districts more quickly than other forms of evaluation

The overarching issue is the use of Economically Disadvantaged student performance on standardized tests as the primary, and sometimes dominant, factor to rating school district effectiveness when other criteria may have greater impact and would more accurately reflect accountability findings.

As of 2018, the Texas Education Agency assigns a rating to each school district in the state based on student achievement, student progress, and closing achievement gaps. Seventy percent of the overall score is based on student achievement or student progress, while thirty percent of the overall score reflects the school district's performance on closing the achievement gap (Texas Education Agency Accountability Manual, 2018). All three of the domain areas include the use of student scores on state exams. The higher score based on student achievement or student progress is selected for each school district and is based on the performance across all subjects for all students (Texas Education Agency Accountability Manual, 2018). This score is combined with a score based on closing the gaps between student group performance on the state exams. Combining the selected scores for each school district produces the "overall score" that is used to determine the letter grade rating for the school district.

The option of including a score based upon student achievement or student progress is an element to the rating design with the intended purpose of being fair to both high achieving schools

and school districts that were not scoring well on state exams but had significant growth in student test scores in year-over-year performance (Rivard Report, 2018).

In each data set used to determine the accountability rating for a school district, student scores on the State of Texas Assessment of Academic Readiness (STAAR) are the primary factor in determining the overall score and rating for each school district. The (A-F) rating system was put into effect in 2018 for all school districts and charter schools, however, language in the legislation, single campus school districts were not given a letter grade rating in 2018. Single campus districts received an overall score and were rated either “Met Standard” or “Improvement Required” (TEA News Release Online, August 23, 2018). Also, school districts significantly impacted by Hurricane Harvey were given an overall district-score and received a “Not Rated” designation in 2018 (Texas Education Agency Accountability Manual).

Data included in this policy brief illustrate a significant flaw in the design of the Texas School District Rating System as the percentage of Economically Disadvantaged students enrolled in a school district, is, in fact, a controlling variable to the final rating given to school districts and charter schools in Texas.

### Study Methodology

For this policy brief, the relationship between a variety of known variables that affect student achievement and school district accountability scores devised by the state of Texas was tested for two independent groups : 1) Total population of Texas school districts that received an “A” rating ( $n= 121$ ) and 2) The entire population of Texas school districts that received a “D” or “F” rating ( $N= 55$ ). To test the relationship between our predictor variables (*Percentage of Low SES, Average Teacher Experience, Average Teacher Salary, Number of Students, and Percentage of Total Budget for Instruction*) and the outcome variable (*District Accountability Score*), we conducted the following Spearman correlation tests:

1. “A” rated school districts and “D/F” rated school districts
2. Districts with over 50% low socio-economic students and districts with less than 50% low socio-economic students
3. “A” school districts with over 50% low socio-economic students and “A” districts with less than 50% low socio-economic students
4. “D/F” school districts with over 50% low socio-economic students and “D/F” school districts with less than 50% low socio-economic students

Table 1 provides the means and standard deviations of the predictor variables and outcome variable () for each of the samples used.

Table 1  
*Means and Standard Deviations of Variables by Sample*

Demographic	A Rated Districts ( $n=121$ )	D/F Rated Districts ( $N= 55$ )
	M (SD)	M (SD)
Percentage of Low SES	36.89 (20.68)	70.48 (13.19)
Avg. Teacher Experience	13.31 (2.06)	11.28 (2.27)
Avg. Teacher Salary	49976.36 (5276.39)	46419.20 (4142.58)
Number of Students	7431.51 (13256.23)	2914.02 (4916.98)
Percentage of Total Budget for Instruction	55.27 (4.00)	50.76 (3.33)
District Accountability Score	92.74 (2.00)	64.78 (4.21)

For the first analysis, we wanted to see a comparison between the “A” rated and “D/F” rated school districts on the magnitudes for all statistically significant relationships in the Spearman analysis. Only one variable had a statistically significant relationship with school district accountability scores: *Percentage of Low SES*. This variable had an inverse, moderate relationship

( $r_s(54) = -.46, p < .01$ ) in the “A” sample and an inverse weak relationship for the “D/F” group ( $r_s(54) = -.26, p < .01$ ). In other words, for both groups the percentage of low SES was the strongest predictor of accountability scores; a common finding the research literature.

Because of the magnitude of influence low SES has on performance, we conducted a second analysis to see if there was a difference between districts with less than 50% low SES (Low) and districts with greater than 50% low SES (High) on the magnitudes for all statistically significant relationships in a Spearman analysis. Table 2 provides the means and standard deviations for the two groups and table 3 provides the comparisons between the two groups on the statistically significant Spearman correlation coefficients.

Table 2  
*Means and Standard Deviations of Variables by Sample*

Demographic	Less than 50%	Greater than 50%
	( $n=81$ )	( $n=95$ )
	$M(SD)$	$M(SD)$
Percentage of Low SES	36.89 (20.68)	70.48 (13.19)
Avg. Teacher Experience	13.31 (2.06)	11.28 (2.27)
Avg. Teacher Salary	49976.36 (5276.39)	46419.20 (4142.58)
Number of Students	7431.51 (13256.23)	2914.02 (4916.98)
Percentage of Total Budget for Instruction	55.27 (4.00)	50.76 (3.33)
District Accountability Score	92.74 (2.00)	64.78 (4.21)

Table 3  
Comparison between Low and High Percentage of Low SES Students on Statistically Significant Relationships

Demographic	Less than 50%	Greater than 50%
	( $n=81$ )	( $n=95$ )
	$r$	$r$
Percentage of Low SES	-.44	-.36
Avg. Teacher Experience	--	.36
Avg. Teacher Salary	--	--
Number of Students	--	--
Percentage of Total Budget for Instruction	--	.37

Based upon the results of this analysis, for districts with less than 50% low SES, regardless of accountability rating, the low SES variable had an inverse moderate relationship. For all the districts, regardless of rating, with greater than 50% low SES, the low SES variable had a weak inverse relationship with accountability scores, while the average years of experience for teachers and percentage of total budget used for instruction had weak positive relationships. What this seems to indicate is that the effect of low SES on schools with less than 50% is more apparent than its effect on those with greater than 50% low SES.

For our final analyses, we wanted to investigate within group relationships for the “A” rated districts and the “D/F” rated schools. To test this, we conducted the Spearman correlation with just the “A” district sample and then ran the same analyses with the “D/F” sample. For the “A” schools with less than 50% low SES ( $n=92; M=27.9\%, SD=13.5\%$ ), only one variable had a statistically significant relationship with accountability score ( $M=93.07, SD=2.02$ ): *Percentage of Low SES* ( $r_s(90) = -.41, p < .01$ ). For this subgroup, there was an inverse, moderate effect for SES on accountability score. For the “A” districts with greater than 50% low SES ( $n=29; M=65.5\%, SD=11.4\%$ ), there were no statistically significant relationships. The coefficients only ranged from .01 (*Average Teacher Salary*) to .11 (*Average Teacher Experience*). Because the sample size for this

group was so small, one should be cautious in attempts to interpret these findings. As such, arguably the greatest takeaway from this analysis was that the districts with the highest mean scores had the smallest percentage of low SES students.

In conducting the same analyses for the “D/F” rated districts, there were only three districts that had less than 50% low SES ( $M= 43\%$ ,  $SD= 7.5\%$ ), so no correlations could be conducted. For the school districts with greater than 50% low SES ( $n=52$ ;  $M= 72.1\%$ ,  $SD= 11.6\%$ ), there was a weak, inverse relationship with the percentage of low SES students and district accountability scores ( $M= 64.94$ ,  $SD= 4.15$ );  $r_s(50) = -.29$ ,  $p=.02$ .

When comparing the “A” district subgroups to the “D/F” district subgroups, the descriptive statistics may be the most interesting and meaningful data for this analysis. For example, there are stark differences in the mean percentages of low SES students between the “A” districts and “D/F” districts. For the *less than 50%* group, the average percentage of low SES students for “A” districts was 15.1% less than the “D/F” districts. Likewise, for the *greater than 50%* group, the average percentage of low SES for “A” districts was 6.6% less than the “D/F” rated districts. Another telling descriptive statistic has to do with the percentages of each subgroup when comparing “A” districts to “D/F” districts. Specifically, “A” districts ( $N=121$ ) only had 29 districts with *greater than 50%* low SES (i.e., 24% of districts), while “D/F” districts ( $N=55$ ) had 52 (i.e., 95% of districts).

In addition to this study, Moak, Casey & Associates (2018) reported that a total of 17 states currently have policies in place that grade and rank school districts and that in each state, district data indicating a high percentage of students who are from low-income families generally result in lower than average ratings. The significant correlation of a high percentage of Economically Disadvantaged students in a school district to the district’s rating has wide, and significant implications for school districts in Texas as approximately 59% of all students in Texas have been identified as Economically Disadvantage (Texas Education Agency, 2016-2017 Texas Academic Performance Report). To a great extent, the state’s inaugural A-F grading system could be considered a proxy for identifying school districts that serve high poverty student populations, rather than an indication of educational quality (Moak & Casey, 2018).

### Recommendations

Authors of this policy brief present three recommendations based on study findings of the relationship between the number of Economically Disadvantaged students enrolled in a Texas school district and the 2018 state accountability rating assigned to school districts. Furthermore, an examination of secondary data provided by the state, and other studies, support the findings of this study. The recommendations are:

1. States should develop an accountability system that takes into consideration the heavy influence of Economically Disadvantaged students have on standardized test performance and impact on school district ratings,
2. Include more authentic forms of assessment in the formula that reflect student, school, and school district success not associated with state exam scores, and
3. Sanctions and or interventions by the state, including improvement plans and more serious intervention, should not be invoked for school districts that failed to meet state expectations in 2018 as the state utilized a flawed system of accountability criteria which placed too much emphasis on the performance of a single group of students.

### Closing

School district administrators in Texas school districts that received a “D” or “F” rating from the state are determining the best way to explain the district rating to its’ community, staff, and students in a way that is both understandable and includes plans for future improvement. This is not an easy task when you consider the Accountability Manual for 2018 is 196 pages long and has several references to other documents that further explain the more intricate details of the

system. In this brief, the authors have shown evidence that the most significant rating criterium that disproportionately influenced the overall score of the district, was the number of Economically Disadvantaged students enrolled in each school district. A factor that is not controlled by the individual school district.

Measures of accountability enforcement includes a variety of sanctions that range from a plan for improvement to closing a school and potentially consolidating a school district with another school district if district improvement does not meet the expectations of the state. The problem with sanctions is that the assumption is that the school district knows how to improve the performance of a student group and has failed to do so as a result of lack of effort or lack of commitment. Measuring school district effectiveness based on student performance criteria that is significantly impacted by socio-economic status of the family is a flawed process, but could, and should, be corrected by state policy.

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## **Districts of Innovation: An Action Research Narrative Inquiry Exploring Leadership, Sustainability and the Empowerment of Local Governance in a Rural Northeast Texas School District**

*Nathan R. Templeton & Vicki Brantley*  
*Texas A&M University-Commerce*

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### **Abstract**

The researchers explored empowerment, sustainability, and leadership pertaining to Texas' District of Innovation designation. House Bill 1842, passed by the Texas Legislature in 2015, allowed qualifying districts to exempt certain sections of the Texas Education Code. The aim of these exemptions was to decentralize governance in order to strengthen local decision making and create an individualized plan to better meet the district's needs and improve education for students within that district. The researchers designed a qualitative study of a rural east Texas school district to frame decentralization as problem of practice, focused on administrators' perceptions of establishing an innovation plan and how leadership traits affected accountability and service delivery. Six administrators from one rural district in North East Texas participated in the study. To determine their perceptions of the process of creating and implementing a plan of innovation, administrators participated in semi-structured interviews. Findings revealed trust, communication, and buy-in from the teachers and community as crucial to the implementation and sustainability of the plan. Administrator perception varied by campus as to depth of knowledge of the plan and how it impacted their respective campus.

### **Introduction**

In 2015, the Texas Legislature passed House Bill 1842. This law amended Chapter 12 of the Texas Education Code (TEC) and allowed local education agencies to be designated as a District of Innovation (DOI). Specifically, Chapter 12A of the TEC stated that a traditional school district that meets certain performance criteria may create an Innovation Plan that would exempt the district from certain sections of the TEC (Watson, 2017). The overarching idea was to decentralize governance in order to strengthen local institutional capacity by allowing districts to create personalized plans to improve teaching and learning for all students. Education decentralization is defined as the process by which decision-making responsibilities are transferred from policy makers to practitioners. Often, this process involves moving statutory authority from higher levels to lower levels of governmental agencies. Fiske (1996) noted, however, that effective and efficient government requires "an appropriate balance" (p. 6) of centralization and decentralization.

Decentralization, by definition, can encompass different types of responsibility transfer: devolution, deconcentration, and delegation. Devolution is the permanent—legal or constitutional—transfer of decision-making authority from a higher level of government to a lower level. By contrast, deconcentration is the transfer, usually by administrative decree, of decision-making authority from higher to lower levels of the bureaucracy within the same level of government. Delegation is the assignment, usually by administrative decree, of decision-making authority to other public or private agencies. (Fiske, 2006, p. 7)

Furthermore, fiduciary and fiscal functions related to decentralized processes are often delegated to various levels of responsibility within the school accountability matrix; albeit, depending on stakeholder capacity, some functions may remain centralized while others may be devolved.

Although effective decentralization should logically lead to increased education quality, no hard evidence supports this assertion (Holloway, 2012). Holloway (2012) indicated that

“decentralization’s impact on school quality depends on leadership capacity, stakeholder support, and local tradition and culture, especially concerning community initiative and participation” (p. 112). Strikingly, improving educational outcomes for students or improving education quality in general may not be the purposed intent of a policy centered on decentralization. The purposed intent may undeniably be one of local empowerment, as is the case with House Bill 1842 (Watson, 2017).

In educational environments, empowerment is designed to give greater local control, increase freedom and flexibility, and increase empowerment to innovate and think differently (Watson, 2017). Full decentralization, however, is usually a long-term process that lasts 10 to 15 years, assuming changes in government or agency leadership are not affected by political factors. Decentralization of education is often a nonlinear process, with steps forward and steps backward, often with many interests involved. Conversely, in House Bill 1842, the Texas Education Agency (TEA) granted increased local empowerment through innovation plans for a maximum of 5 years (TEA, 2016). Decentralization of schools is a complex process that involves major changes in the way schools go about making policy, training teachers, designing curricula, and managing local schools. Inherent to these changes are fundamental shifts in values, the relationships of stakeholders to their schools, and the meaning and purpose of public education (Greer, 2012; Johnson, D. R., 2011; Mills, 2013; Parry, 2007; Schmoker, 2005).

In a multi-year study of renewed local control, Vescio, Ross, and Adams (2008) noted that policies addressing local flexibility should be aimed at improving student learning outcomes and developing teacher capacity. Nationally, the purposed objective of the decentralization of schools has been “improving student learning by first enhancing teachers’ skills” (Hough, 2004, p. 63). When addressing equity in education, however, rural schools were presented with unique challenges due to limited focus from national policymakers. Central to these challenges was difficulty in sustaining innovation. Factually, rural schools have fewer resources and access to resources than their urban and suburban counterparts, making it difficult for rural schools to demonstrate targeted improvement.

Specific to Texas, with over 900,000 students enrolled in rural schools, the Lone Star State has the highest concentration of student enrollment in rural schools (Johnson, J., Showalter, Klein, & Lester, 2014). This number continues to increase by approximately 30,000 students per year (Johnson, J., et al., 2014). However, the percentage of adults in rural Texas communities with earned high school diplomas consistently lags below that national mean. Moreover, Texas school performance data on national assessments are also below the national average. For example, Texas eighth-grade aggregate performance on the National Assessment of Educational Progress (NAEP) ranked in the lower quartile since 2002 (Johnson, J., et al., 2014).

### **Statement of the Problem**

The DOI designation was created to give traditional public schools some of the same flexibilities as charter schools by providing more local control and autonomy in certain areas. Improved governance and accountability may lead to higher efficiency in the use of resources, which contributes to school performance. Decentralization policies that increased school autonomy and local governance included improving service delivery, but more commonly involved shifting political power or funding opportunities. It is not known to what extent school decentralization relates to improved educational quality, or if it will lead to changes in school characteristics sufficient enough to influence instructional practices that are necessary for significant learning improvements.

### **Purpose of the Study**

The researcher designed this study to frame decentralization as a problem of practice. Through narrative, the potential of the DOI designation in a rural setting to improve student-learning outcomes, and the matrix for how these outcomes are measured, was investigated in three parts:

1. The theoretical and conceptual frameworks for such a relationship.
2. The empirical evidence confirming or disconfirming education decentralization.
3. Better design and implementation of decentralization policy and the subsequent impact on educational quality.

The key components of a purposeful model of innovation included (a) collaborative leadership, (b) shared commitment to change, (c) collective cognitive experiences, and (d) shared reflective and reflexive practice (Hipp & Huffman, 2010). The researcher searched for contextual richness within the stories of participants through narrative inquiry to gain a better understanding of the framework of DOI.

### **Research Questions**

The following research questions guided the researcher in this study:

1. What factors influenced creating the plan of innovation?
2. What elements of the innovation plan do principals perceive affect accountability and service delivery?
3. What traits of principal leadership are needed to sustain innovation plans?
4. What factors do administrators believe have the greatest influence on sustaining the support and shared leadership component of their innovation plan?
5. How can the factors identified to influence accountability and service delivery be applied to improve a district's innovation plan?
- 6.

### **Setting**

The setting for this action research narrative inquiry was situated in a rural public school district in the northeastern area of Texas. For confidentiality purposes, the district was designated by the pseudonym District Alpha. District Alpha was located in a rural community serving approximately 2,750 residents in Franklin County, Texas. The manner in which the United States Census Bureau classifies rural versus urban areas of the nation is based in part on geographic location. As part of this classification system, the term urban applies to those areas densely represented and applies to all land type uses. The Census Bureau identified two types of urban areas: urbanized areas of 50,000 or more people and urban clusters of at least 2,500 and less than 50,000 people. By contrast, the term rural applies to all areas not designated as urban. According to the most recent statistics from the United States Census Bureau, of the 2,750 residents living in District Alpha, 50.2% were male and 49.8% were female. The median household income was \$37,456, while the estimated per capita income was \$19,281. Additionally, the estimated mean condo or house value was \$97,571 and the average rental property listed for \$681.00.

### **District Student Demographics**

District Alpha had a total student enrollment of 1,617 students. District student demographics based on the 2016-2017 school year (Table 1) were 5.3% African American, 26.4% Hispanic, 62.9% White, 0.3% American Indian, 0.9% Asian, 0.1% Pacific Islander, 4.1% Two or more races, and economically disadvantaged at 60.7% (Table 1). Student program enrollment included 13.3% Bilingual/ESL, 26.7% Career and Technical Education, 5.6% Gifted and Talented, and 9.5% Special Education (Table 2; TEA, 2016).

### **DOI Plan**

Taken directly and verbatim from School Alpha's district website, the following DOI plan was investigated in this study:

**School start date (EB LEGAL; Ed. Code 25.0811).** Previously, students were not allowed to begin school before the fourth Monday of August. For many years, this was the rule; however, districts had the option of applying for a waiver to start earlier. The vast majority of districts applied for the waiver and began the third Monday with some even going as early as the second Monday. The Texas tourism groups lobbied to have this stopped because they believed it was

hurting their tourism business. Several years ago, the legislature took away all waivers and dictated that districts may not begin until the 4th Monday, with no exceptions.

**Proposed school start date.** To allow for a calendar that fit the local needs of their community, the Innovation Plan moved the mandatory start date back 1 week. Students began no earlier than the third Monday of August. By contrast, teachers began no earlier than the second Monday of August. The underlying goal was to improve the district attendance rate and student success through flexibility in the school calendar.

**Teacher certification (DK LEGAL, DK LOCAL, DK EXHIBIT; Ed. Code 21.044, 21.003).**

At the time of the study, in the event a district could not locate a certified teacher for a position or a teacher was teaching a subject outside of their certification, the district had to submit a request to the TEA. TEA then approved or denies this request. There was a lot of bureaucracy and unnecessary paperwork involved in the process.

**Proposed teacher certification.** School Alpha was committed to placing a life changer in every classroom. In order to best serve students, decisions on certification were handled locally. The current state teacher certification requirements inhibited the district's ability to hire teachers to teach hard-to-fill, high-demand dual credit, and career and technical/STEAM (applied science, technology, engineering, and arts & mathematics) courses. In order to enable more students to obtain the educational benefit of such course offerings, the district leaders sought to establish that a certified teacher could teach one period out of their certification area in the secondary grade levels in lieu of the requirements set forth in law.

By obtaining exemption from existing teacher certification requirements, the district had the flexibility to offer an additional period to lower class sizes, allowed more options for a required class to be available at various times during the day, or open up a pathway for CTE classes that would increase the number of CTE student certifications. Teachers who were allowed to fill this role had a minimum of 9 junior or senior level semester hours in that subject or related field and would plan with the certified teacher.

**Student discipline: TEC §37.007 (c), §37.010(b).** At the time of the study, TEC §37 stated that a student placed in a Disciplinary Alternative Education Program (DAEP) who engaged in documented serious misbehavior while on the DAEP campus despite documented behavioral interventions may be removed from class and expelled. Serious misbehavior included (a) deliberate violent behavior that poses a direct threat to the health or safety of others; (b) extortion, meaning the gaining of money or other property by force or threat; (c) conduct that constitutes coercion, as defined by Penal Code 1.07; or (d) conduct that constitutes the offense of: (a) Public lewdness under Penal Code 21.07; (b) Indecent exposure under Penal Code 21.08; (c) Criminal mischief under Penal Code 28.03; (d) Personal hazing under Penal Code 37.152; or (e) Harassment, under Penal Code 42.07(a)(1), of a student or district employee. If the student is expelled, the board or its designee refers the student to the authorized officer of the juvenile court for appropriate proceedings under Family Code Title 3 (Juvenile Justice Code). School Alpha DAEP had a strong and structured system of discipline. The TEC made no allowance for students whose persistent misbehavior disrupted instruction and was detrimental to the educational environment to be expelled.

**Proposed student discipline.** (a) A student placed in a DAEP who engaged in documented serious misbehavior (as defined above) while on the DAEP campus despite documented behavioral interventions may be removed from class and expelled, and (b) a student placed in a DAEP who engaged in documented persistent misbehavior while on the DAEP campus, despite documented behavioral interventions, may be removed from class and expelled.

**Probationary contracts (DCA LEGAL; Ed. Code 21.102).** At the time of the study, for experienced teachers new to the district, the probationary period could not exceed 1 year if the

person had been employed as a teacher in public education for at least 5 of the previous 8 years. A 1-year probationary period was not sufficient to evaluate the teacher's effectiveness in the classroom, since teacher contract renewal timelines demanded that employment decisions be made prior to district receipt of state assessment results.

***Proposed probationary contracts.*** For experienced teachers, counselors, or nurses new to the district that had been employed as a teacher in public education for at least 5 of the 8 previous years, a probationary contract could be issued for up to 2 years. All other teachers hired in the district, whether new to the profession or with less than 5 years of experience, remained on probationary status for 3 years, and were issued a fourth year of probation in accordance with TEC 21.102(c).

**Student transfers: TEC 25.036 Related Board Policy: FDA (LOCAL).** Under TEC .001, a district could choose to accept, as transfers, students who were not entitled to enroll in the district. Under TEC 25.036, a transfer was interpreted to be for a period of 1 school year.

***Proposed student transfers.*** School Alpha maintained a transfer policy under FDA (LOCAL) requiring nonresident students wishing to transfer to file a transfer application each school year. In approving transfer requests, the availability of space and instructional staff, availability of programs and services, the student's disciplinary history records, work habits, and attendance records are evaluated. Transfer students were expected to follow the attendance requirements and the rules and regulations of the district. The district interpreted TEC 25.036 to establish the acceptance of a transfer as a 1-year commitment. Additionally, the District sought to eliminate the provision of a 1-year commitment in accepting transfer applications for the following circumstances:

1. Student behavior warranted suspension (in or out of school), placement in a disciplinary alternative program, or expulsion.
2. Student attendance fell below the TEA truancy standard.
3. If Academic Achievement was not satisfactory, Campus leadership would meet with a campus transfer committee to make a determination on student status. Once the committee made a decision, it would be reported to the superintendent for a final decision.

### **Theoretical Framework**

According to sociocultural theory (SCT), learning that takes place in daily social environments alters how individuals partake in the community or activity setting. Gallucci (2007) described learning as an inherently social and collective phenomenon, which can be explored from a participative or interactive level. In the learning process, SCT identifies a fundamental concept of cultural tools as developed through particular historical and cultural conditions. Turuk (2008) extends the notion that individuals cannot merely interact with the physical world without the use of cultural tools as the skillset aids in the ability to problem solve. As the learners inherit skillsets from generation to generation, each age group continues to modify and rework the tools to meet the specific demands of an ever-changing society (Turuk, 2008). Hence, SCT establishes that children acquire understanding through peer-to-peer interactions and as the learner internalizes knowledge, the internal cultural tools then transform.

Gallucci (2007) determined organizations could also benefit from SCT diagnosed by educators' ability to engage in the learning process through professional development that focus on lesson planning and the instructional process. Galluci (2007) recommended the use of Vygotskian's theory to investigate how individuals use innovative strategies to transform practices to develop a culture of change. Furthermore, SCT can be used to investigate information through two essential learning and development dimensions of differentiating individual learning from whole group learning and examining differing ways to demonstrate learning.

Gallucci's study, framed by the Vygotsky space model, begins with the initial observation of generating new ideas to impact current and evolving practices. In particular, the observer considers these new practices and plans as enhancing one's work. In addition to other cultural tools, the investigator assumes some of these practices as the act of one's transformation and then displays learning through change portrayed by conversations and demonstrations. The embedded method acknowledges an individual or whole-group participation in public and private activity locations. Establishments shall engage in the relationship between individual learning and collective development that will focus on the improvement of organizations. Gallucci (2007) recognized a connection between instructional leadership and organizational change through a practice of conventionalization.

Gallucci (2007) underlined the ability of school administrators and educational leaders to establish an organizational culture that fosters the capacity building of stakeholders within the organizational culture of the school. This theorist further posited a framework that promoted an increased understanding of the role instructional leadership has in impacting organizational change. Organizational change is accomplished by mobilizing structural support systems that elicit positive instructional change through formalized processes, including appropriate allocation and distribution of resources, leadership development, and matrices to ensure compliance. As a result, the researcher used sociocultural theory to perceive how leadership inherent to flexibility and local control supports effective organizational change by examining innovation within decentralization practice.

### **Conceptual Framework**

Design thinking fosters innovation. Design thinking is a solution-focused and action-oriented mindset that draws upon logic, imagination, intuition, and systemic reasoning to explore possibilities of what could be—and to create desired outcomes that align with stakeholder needs (Cross, 2007). The TEA is a proponent of design thinking to promote a bias toward action, encouraging ideation, developing metacognitive awareness, and fostering active problem solving. More importantly, design thinking facilitates improvement by affording local education agencies the ability to design individualized experiences and participation.

Design thinking establishes four key elements described as defining the problem, creating and considering multiple options, refining selected directions, and executing the best plan of action. Connected to the constructs of this study, design thinking is useful to practitioner-researchers because of the focus on action. Johnson (2008) outlined five possible outcomes of action research studies:

1. A greater understanding of the situation under investigation is developed.
2. A new problem is discovered.
3. A plan, a program, or an instructional method is found to be effective.
4. A plan, a program, or an instructional method is found to need modification.
5. A plan, a program, or an instructional method is found to be ineffective (p. 137).

Similarly, action research relates to the investigation or in-depth study of a problem of practice through data and dialogue that subsequently enables an educational entity to realize its stated goals (Mertler, 2007). Problems of practice are often high-leverage areas that a school district or individual campus recognizes as an emphasis on the instructional core, are directly visible, actionable, and associate to a wider approach of improvement.

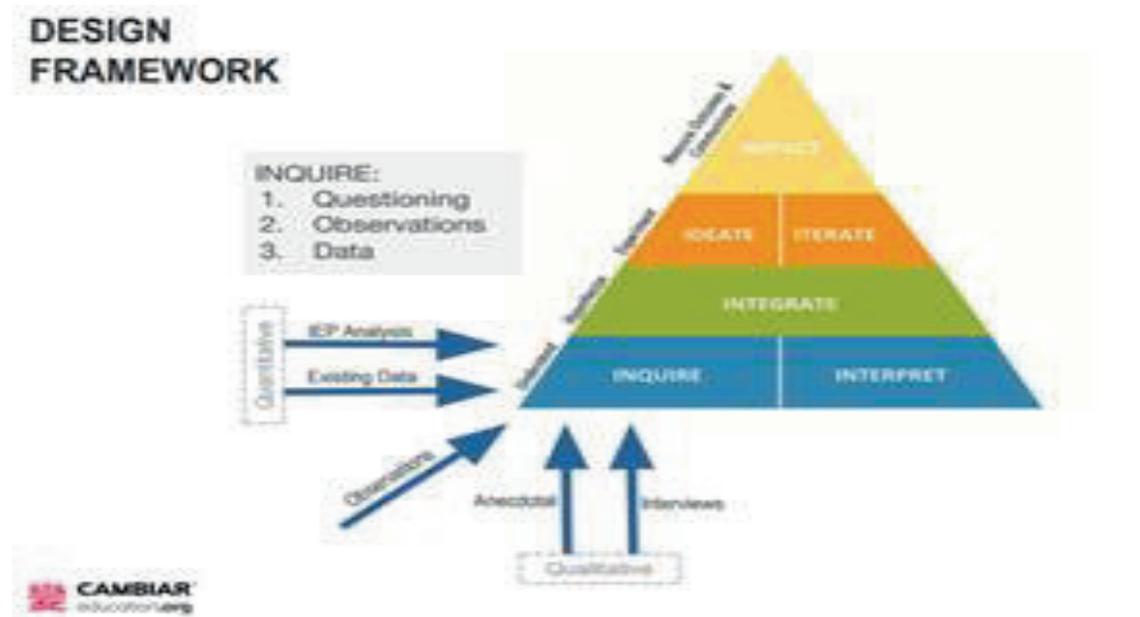


Figure 1. The action research design framework.

### Research Method and Design

For this study, the investigators applied a qualitative action research method. The researcher designed this qualitative study to understand the meaning of events and interactions of ordinary individuals in particular situations (Bogdan & Biklen, 2007). In the study, the ordinary individuals represented the participants, and the specific situations were described by factors that rural educational leaders perceived as most influential for creating and supporting the DOI designation in a northeast Texas rural school. Gay, Mills, and Airasian (2009) suggested investigators employ qualitative methods to inquire how and why a phenomenon happens rather than merely what, where, and when it happens as a quantitative approach typically does.

Furthermore, Babbie and Benaquisto (2009) added that investigators utilize a qualitative approach to inquire participants' motivations, behaviors, concerns, and attitudes of a target population. Moretti et al. (2011) suggested investigators use narratives that denoted individuals' perceptions, experiences, or attitudes with a subject, which acknowledge the reason researchers select the data source used throughout the qualitative study. To generate appropriate findings for the study, researchers must collect data based on individuals' perceptions and experiences with the designated topic (Denscombe, 2007).

McMillan (2004) indicated that, to fulfill the requirements of action research, the researcher must attempt to investigate a problem of practice with an observation to advance the worth of actions and outcomes involved. The primary focus of action research is to solve a particular problem in a classroom or on a school campus, support a specific decision on a single site, or improve professional practice. Adding to the notion, Mertler (2007) extended, action research delivers the opportunity for current practice to move to an advanced, improved state. Clandinin and Connelly (2000) recognized narrative inquiry as a way to comprehend experiences and allow individuals to explain personalized stories, which was the most appropriate design for this practitioner's action research grounded study. In the study, the investigators conducted interviews and then re-storied or retold the experiences that rural school administrators perceived to be the most influential for creating and supporting the DOI designation in rural campuses.

### Population, Sample Size, and Sampling Procedure

The investigators selected participants from a rural school district in northeast Texas designated as a DOI. The Region 8 Educational Service Center (ESC8) was used to recognize a rural school district that implemented an approved plan of innovation with TEA. As an inclusion

criterion, participants had to demonstrate at least 3 years of experience as a principal at the administrator's corresponding school. Creswell (2009) advised for qualitative studies a sample size of five to 30 participants. For the study, the investigator initially interviewed five administrators. The final number of administrators included in the study depended on the saturation of the data, which occurred when interviewing additional participants did not yield any new information to answer the identified research questions. Saturation occurred, in this particular study, after six participants were interviewed; no new data emerged from participants' interview responses. Polkinghorne (2005) reiterated that researchers must saturate data to ensure a topic receives plenty of rich information to examine adequately.

To select administrators in the study, the investigators employed purposive sampling, which occurs when the data needed is obtained from a particular population. As a benefit to the study, Patton (2002), as well as Yang and Banamah (2014), noted purposeful sampling saved time, money, and effort as it permitted recruiters the ability to acknowledge a specific selection of participants that demonstrate criteria or characteristics relevant to the investigation and its purpose. Administrators had to be available to meet with the investigator for the interview process as participants being physically present provided more accurate data. Hoofnagle (2007) recognized the best way to create an atmosphere for appropriate dialogue was for the investigator and the participant to interact physically in person. The only demographic restriction that was imposed in the sample of administrators selected for interviews was the years of experience in the profession.

### **Findings**

Data collection occurred through several semi-structured interviews with administrators in a small rural North East Texas school district. Administrators interviewed were participants in the process of establishing the initial innovation plan for the district. Participants were asked open-ended questions and given an opportunity to reflect on their roles and experiences in the creation and implementation of the first innovation plan composed for the district and their perceptions leadership qualities need for sustainability.

#### **Research Question 1**

The first question focused on the factors that influenced the creation of the plan of innovation, specifically the elements of the plan as written and what factors influenced the components of that plan. The administrators described their roles in the establishment of the plan, and what factors they felt had the greatest influence on the plan's components. Participant responses to this question varied from minimal to strong involvement in the planning process. One administrator stated that he was told about the DOI plan from a central office administrator but had no real involvement in the actual planning phases.

The remaining administrators stated that the process of determining the elements of the plan was multi-faceted. The plan was introduced to administrators during an administrative meeting at central office and examined for potential effectiveness in their district. The administrators reported that the innovation plan could offer benefits to their respective campuses and agreed that it should be presented to the board so a committee could be formed. All but one of the administrators interviewed served on the DOI Committee, which consisted of administrators, teachers, parents, and community members.

Administrators were asked if they knew why the specific components were chosen for their respective innovation plans. When campus administrators were asked this question, it was evident that they knew which elements of the innovation plan had affected them the most. The high school principal mentioned the discipline portions of the plan first and then certification and start date. Alternatively, the elementary school principal mentioned teacher contracts, probationary terms, and certification first, and discipline last. When asked why those things were chosen, two administrators stated that the committee determined those were items that would help the district the most.

Many administrators mentioned that it was hard to attract and retain teachers in the rural location of the district. Allowing teachers to teach one class outside of their certification area kept class sizes down and allowed the district to offer classes at the secondary level they might not otherwise be able to offer. One administrator stated that the TEA stopped allowing waivers for the start date of school; in order for the semester to end before the Christmas break the innovation plan had to include a start date earlier than the state allowed.

### **Autonomy**

The administrators interviewed stated on several occasions that the innovation plan was made with the community and district preferences taken into account. The components of the plan were a reflection of the community and resources, or lack thereof, in this rural school. The discipline, teacher contracts, and school calendar were all items that effected small rural schools. Half of the administrators interviewed mentioned that decision-making was intentional for their district. Participant 1 stated,

the items that were chosen were the ones that we felt would have the biggest impact for our district, the state only allowed certain items to be included in the plan, but we chose the items that would work for us. This plan gives us the power to circumvent certain state education laws that make some things more difficult for rural schools.

Another administrator told the researcher,

the DOI Plan was intended to give more power to the campus levels, in some schools that might be the case, but in our district it just gave the district the power to manipulate some specific items in the education code that didn't work well for rural school districts.

Participant 2 stated,

the addition of the discipline elements gives principals more freedom when it comes to dealing with certain discipline issues. Our hands are tied sometimes with what we can do in certain situations and allowing is to revoke transfers or expel some students gives us some options to get those problem students out. This gives the other students a more quality educational opportunity.

Participant 4 stated,

those were the most important things that we saw as a district that we could make our own and make it fit with our needs. This allows our district to bend some of the TEC so that we can better serve the students in our district.

Participant 6 stated,

we want to draw in good quality staff members that want to stay [pause] when you have a small student population we can't apply the same norms, we don't offer the same electives. Our curriculum is about the only thing that is consistent with other districts in the state. We have to be varied in order to meet the needs of our students.

An administrator stated that the items included in the innovation plan "allowed the district the power to determine the needs of the students in their particular district."

Participants were also asked about the kinds of data reviewed in proposing the innovation plan.

When asked about the data used for decision making, Participant 3 stated,

I'm not sure about the specific data that was used, but we know our district and we know what our difficulties are and we know what our needs are. They had some research on school start date and I think our TAPR report.

Participant 2 stated,

the problem with many items in TEC is it seems to be a *one size fits all*, and rural districts are not the same as urban districts. We have different strengths and struggles. This plan allows us the power to make decisions that will positively impact our district. The data that was given to the committee was things like TAPR report, other districts' innovation plans, things like that.

Participant 4 added,

We looked at several pieces of data including teacher retention, salaries of neighboring districts, class sizes and discipline for the DAEP. The committee was given the information, then recessed to let the members of the committee have time to decipher what was given to them. They took the information and analyzed it and shared it with other teachers in order to get their opinions. We came back together as a committee about a week later and questions were asked and the plan was finalized.

Participants were asked to identify factors that had the greatest influence or drove the district to write a plan of innovation. All of the administrators interviewed mentioned the difficulties faced by a rural school district. Emergent themes found during analysis of responses to research question 1 are provided in Table 3.

Table 3  
*Emergent Themes for Research Question 1*

Theme	Occurrence ( $N = 6$ )	Percentage of Participant Mentions
Trust	5	83%
Teacher Buy-In	5	83%
Communication	6	100%

Several administrators mentioned communication, teacher buy-in, and trust as influential factors of establishing the innovation plan. Participant 1 stated,

we couldn't just write a plan for the sake of writing a plan, we had to defend the need for the plan. Many teachers did not understand the need to manipulate current education code. In the beginning there was a definite air of mistrust. Our plan kinda took the middle of the road because there were things we could have included in the plan that the teachers would not have agreed to. Things like certification. The teachers were very concerned about that and probationary contracts. I think we had to gain their trust and part of that was in the explanation of the purpose behind putting those things in the plan. Gaining the teachers trust was a huge part of the whole process.

Participant 2 agreed,

I think the communication factor is exactly what it took to get teacher buy-in. They (teachers) were very vocal about their concern at first, then when they were saw what the reasons were behind the different elements of the plan, they understood. I don't think they understood what we could offer if our hands weren't tied.

Participant 6 shared,

Our community trusts us. They trust what we are doing is in the best interest of the students, however, because of some of the things that had recently gone on in the district, there was doubt in our intentions. When we brought the committee together gave them the initial components of the plan and the reasons behind those components, I think they were more at ease. Those members of the committee then, went to their campus' or out in the community and talked to others, gathered some input, came back with questions and felt their concerns were addressed.

Participants were also asked how the factors identified could be manipulated to improve establishing and increasing the innovation plan.

This follow-up question centered on the factors of trust and communication identified as challenges with establishing and increasing the innovation plan, as well as how those could be manipulated to improve the innovation plan. Participant 1 stated,

round table discussions, research and looking at data from other districts and what they are doing and how it's working for them. Then we could discuss if those elements would work in our district. Everyone has to bring their ideas and an open mind to the discussions. Transparency, communication and research can all be done better in order to increase understanding and participation in the decision-making process.

Participant 2 mentioned surveying staff:

From a leadership standpoint, actually surveying the staff, students and parents at the campus level to determine the needs for the adding components or expanding the plan. I think we could give them scenarios where this would happen. People basically want to know, "How will this affect me?" It really comes back to your staff and your teachers trusting their campus leadership to do what's in the best interest of the kids.

Participant 3 agreed,

I go back to really soliciting feedback as far as how these things had affected each different type of person that work at the school. You know, how has the district start date affected the teachers? How has it affected the staff? How has it affected the students? If you solicit feedback, then you're going to get the data you need to think about how to increase or change or alter the plan when the next cycle come up.

Participant 4 stated,

reassuring the teacher as we go that we're behind them. I think, again, that building their trust, making sure they are comfortable coming to you with issues or when they need help. Things like that will get us from the beginning to the end. After this first year is over and they see that we didn't do anything crazy with the contracts, class size or certifications, I think they will trust us a little more if we decide we need to look at changing parts of the innovation plan.

Participant 6 stated,

there has got to be trust. I don't think we have to manipulate that. We just have to keep the lines of communication open and be transparent. I do think that educating the community, teachers and staff as to the intent could always be done better.

### **Research Question 2**

Research question 2 focused on the elements of the innovation plan principals perceived as affecting accountability and service delivery. Four of the administrators perceived that the innovation plan positively impacted accountability. Administrators most commonly mentioned school start date and discipline as factors that impacted accountability. Five of the administrators mentioned a positive impact on accountability due to moving back the start date. Emergent themes identified in the analysis of transcripts from research question 2 are provided in Table 4.

Participant 1 stated, "I think it could impact accountability in several ways, more class time, smaller class sizes, discipline problems, revoking transfers in the middle of the year. Yeah, I think there are several ways it could positively impact our accountability." Participant 4 said,

moving the school start date back a week gives the students more class time in the beginning of the year. Those that have re-tests before the Christmas Break will get one more week of instruction. With the teacher certification, we could have a teacher that may be certified in World History teach an overflowing American

history class to keep the class size down. There are a number of ways that it could impact our accountability.

Secondary administrators tended to see how the elements of the plan could potentially impact accountability, whereas the elementary administrator did not see the plan impacting accountability at the lower levels.

Table 4

*Emergent Themes for Research Question 2*

Theme	Occurrence ( $N = 6$ )	Percentage of Participant Mention
Communication	5	83%
Data Driven Decision-Making	3	50%

The elementary administrator reported,

I can see how it (innovation plan) would help in the secondary, but not really make a big difference here. The discipline part doesn't really apply for the elementary kids, teacher certification is for one period, we don't have teachers teaching periods, so neither of those will impact us. The start date could, but it all depends on the school calendar.

Participant 3 stated,

having more control over transfer students could help (with accountability). I mean, if they are discipline problems, attendance problems, or academic problems we can revoke their transfers in the middle of the year now, where we used to have to wait until the end of the year. If you have a student who is disruptive or is hurting our attendance, we can send them back to their home district at that time instead of dealing with it all year. Discipline problems disrupt the other students' education and when they have attendance problems they hurt our accountability and are added responsibility for our teachers to tutor.

Half of the administrators interviewed stated that they could see no difference. Smaller class size, school start date, increased class offerings, innovative classes and removal of disciplinary problems were stated as areas that may impact service delivery by those who perceived an impact on the service delivery.

Participant 1 stated that the plan could

lower class sized if teachers can teach one class outside their certification area.

When we can create a new section in order to reduce a section that is overflowing, this helps the students receive, and teachers give a deeper, richer, more personal educational experience.

Participant 2 stated,

one thing the plan did was allow students to receive one additional week of instruction at the beginning of the year. That extra week could mean the difference in a concept being taught before STAAR re-test or before the end of the semester.

Participant 3 stated,

when you have the flexibility to remove a discipline problem from the classroom, that allows the teacher to deliver instruction, more quality instruction, on a regular basis 'cause they're not gonna be distracted or blown off by that particular student.

### Research Question 3

The third question of the study focused on the traits of principal leadership necessary to sustain an Innovation Plan. Emergent themes identified in the analysis of transcripts from research question 3 are provided in Table 5. The DOI Plan required design and approval of all plans to be

completed by a committee consisting of administrators, teachers, parents, and community members.

Table 5

*Emergent Themes for Research Question 3*

Theme	Occurrence ( $N = 6$ )	Percentage of Participant Mentions
Communication	4	67%

All of the participants shared that their innovation plans were initiated in an administrative meeting and agreed that there were components of the initiative that could be beneficial to the district that should be pursued as an option. Participant 6 stated,

the campus administrators and central office administrators knew it was an option and brought it before the school board. Once the board approved, then we assembled a committee and they determined the collectively the aspects that would be the most beneficial to our district. We have a great community; they back everything we do.

### **Shared Leadership**

A total of 80% of participants viewed their leadership style as one of shared leadership.

One participant stated,

the importance of input in the decision-making process is paramount to success, especially in new initiatives. There are some decisions that are made above the campus level, those are mandates or orders. Anytime we can add voices to the decisions we will make wiser decisions.

Participant 4 stated, “we brought in faculty, community members, parents, the whole bit so that everybody felt like they were equally represented. They were guided though the process and decided which aspects we wanted in our plan.” Participant 1 described the process as a combined effort:

There were things that we had to explain and there were concerns for some of the staff on the certification aspect, but with some explanation and trust, all of the committee members saw the potential impact this plan could have for the district. Once the committee hammered out which components would be in our plan, they had ownership in the plan and defended it to others.

Participant 2 stated, “the aspect of shared decision making through a committee allows all the stakeholders to have ownership, ownership is what we want in our district. We are a team and we want to make decisions as a team.”

Administrators were also asked their perception of leadership elements that contributed to the success and sustainability of the DOI Plan. Administrators mentioned communication most often as a necessary element of principal leadership to sustain the innovation plan. Several participants stated that using data to make decisions was an important element of principal leadership.

Participant 1 stated,

principals must communicate to their faculty and staff any changes that will be affecting them. In the case of the innovation plan, teachers had an opportunity to be on the decision-making committee, however, the principal must communicate the updates and the reasons behind the plan. Teachers will trust their leader more if there is transparency. I think as long as there is communication, teachers are much more comfortable with innovative changes.

Participant 2 stated that it is “vital to give feedback and data on whether the elements of the plan are having a positive effect.” Participant 3 stated,

communication is the key to teacher buy-in. The innovation plan had elements that the teachers were not especially happy about. There were concerns about the contracts and the certification. The only way to calm fears is to communicate the intentions of the district.

Participant 5 felt that, as a campus leader, the principal should be able to communicate to both the staff and parents about the components and reasoning behind putting them in place. When lines of communication remain open, any data and information the district asked for could be gathered and analyzed to determine whether the components were effective or ineffective. Participant 6 agreed, stating,

you have to have buy-in to the plan in the very beginning to get the support that you need to make it happen, but when it's there it always has to be to the benefit of what we are trying to accomplish. And just like everything else in leadership you have to make sure that they know "why" you're doing what you're doing.

#### Research Question 4

The fourth research question guiding the researcher in this study focused on what administrators believed had the greatest influence on sustaining the supported and shared leadership component of their innovation plans. This question focused on the elements of leadership needed to sustain the innovation plan. Administrators mentioned communication as the main factor necessary for sustaining the district innovation plan. Emergent themes identified in careful analysis of the transcripts from research question 4 are provided in Table 6.

Participant 1 mentioned,

sustaining the innovation plan is simply putting the pieces into place and communicating with the stakeholders when those components are being used and being successful. The plan is for 5 years, but we want to sustain what we have put into place and maybe add other elements later.

Table 6

#### *Emergent Themes for Research Question 4*

Theme	Occurrence ( $N = 6$ )	Percentage of Participant Mentions
Trust	4	67%
Subtheme: Change	5	83%

Participant 2 simply stated, "Communication, transparency, and data driven decisions, based on actual needs." Participant 3 mentioned,

continual communication between all parties. I think if you poll the general populous of the school, most of them would know what the district of innovation plan is, they will say, "Oh, I've heard of that, but I don't know what it entails." So I think the common bond is to make sure they are aware of what the components are and this is why we put them into place.

Participant 5 agreed with the others, stating,

we have to communicate the elements of the plan. When certain circumstances of the plan arise, we need to mention that those things were made possible by the innovation plan, otherwise we would not be able to do this. Reminding people of the plan and communicating the effects of the plan will allow others the opportunity to understand the "what" and "why" of the innovation plan.

Administrators reported that sustaining supportive, shared leadership and trust as the most challenging components of their innovation plans.

A subtheme of trust emerged, as most participants indicated that the issues with trust were due to changes. Participant 1 stated that the biggest challenge was "being innovative and kind of see, or

have a vision to see, the big picture. If they're kind of stuck in the role of we've always done it that way, then there's not going to be any innovation." Participant 2 agreed, stating,

some of the people on the committee didn't understand their role, so to be thinking outside the box was difficult. They were very cautious in the implementation of the plan. Just knowing they were dealing with contracts, certifications and things they don't normally deal with. Now sustaining this plan should not be that challenging, the implementation was the challenging part. If we decide to re-do the plan, then I think we will see the same challenges, changing the rules is hard for people to understand.

Participant 3 mentioned the impact on people,

Anytime you're talking about changing contracts, certifications, discipline, things that impact people directly, you're gonna have some push back by certain percentage of people. You just have to hope that people understand that we're doing it for the good of the school as a whole and not to escalate and negatively influence individuals. When some things change people think it's personal.

Participant 4 stated,

At the beginning, when we started our district of innovation we had some teacher that were very leery of the certification portion of it, that they might be reassigned at any moment. We reassured them that wouldn't happen, but that's verbal. That's not something in writing, but I feel like once we have shown them it didn't happen, I think that has made a difference. We built that trust with our teachers. But we still have some teachers that don't trust, I don't want to say the system, but maybe the leadership. Those opinions won't change overnight.

Participant 6 stated,

I think there are going to be some obvious challenges when we deal with discipline or contracts. Some will have forgot about the innovation plan and will think we can't do these things that are new. That is where I just say I have the authority to do this because of our district of innovation plan. It's gonna be an issue. It's never been done before. Basically, everything new could be a challenge when you're dealing with it for the first time.

### **Research Question 5**

The final research question guiding the researcher in this study focused on the factors that influenced accountability and service delivery that could be applied to improve the district's innovation plan. Administrators described factors that they perceived as influential on both service delivery and accountability; the two most commonly cited factors were data driven decision-making and communication. Emergent themes from analysis of transcripts from research question 5 are provided in Table 7.

### **Data Driven Decision-Making**

Participant 2 stated,

if we were in drastic need of a certain position and we felt like we had someone qualified, but not certified, and we could benefit from their services in the classroom, especially in an elective area where they may have real world experience in the workplace. That would be an area that we would want in our innovation plan. That is something we can use in rural schools.

Table 7

*Emergent Themes for Research Question 5*

Theme	Occurrence (N = 6)	Percentage of Participant Mentions
Communication	4	67%
Data Driven Decision-Making	4	67%

Participant 3 added,

we will look at the data at the end of the year, at the end of 2 years and see what kind of impacts all of these things we're putting in place has had or if it's had any impact. If they don't have impact, then what can we do to change it to a positive impact?

Participant 4 told the researcher,

I'm hoping that as soon as this year is over, we can evaluate those things that we had on the innovation plan and see if it is making a difference. Like the teacher certification, and discipline. Did we do this for the correct reasons, the right reasons for our students? We may not see a jump in the scores, but our teacher, parent and student surveys might tell us something positive.

Participant 5 also mentioned data:

Tracking that data and getting the information together to see if starting at a certain time in August really has any impact or if the kids do—if they do get better service if we start earlier in August. The other items like certification and probationary contracts will be looked at to see if it builds the capacity that we are wanting. Tracking the data is important.

### **Communication**

Participant 1 stated,

teachers have to know and understand the reasons behind the decisions that are being made. This is just like our campus-based decision-making committee and the district-based decision-making committee; however, those committees cannot change what is in the education code. When the district is looking at manipulating things like teacher contracts and certification areas, people get nervous. We let the data speak for itself. An example would be finding a Theater teacher or Family and Consumer Science teacher in the rural area that we live in. Last year we had one applicant for the Theater position. We hired her and she lasted less than a month. We then had to hire someone without certification, but with theater experience. Those examples and relaying that information to the public is how we get buy-in. When you can use a teacher for one period outside the certification area you are problem solving. We may have someone with a superior knowledge of technology but has never went to get certified in that area, now we have opened up an opportunity for our kids they wouldn't have had otherwise. Those are examples of how we would use that area of the innovation plan. When those examples are communicated to the teachers and community, they understand the reasons we want to, at least, have that option available to our district and our kids.

Participant 2 stated,

letting the teachers and community know how the plan is working, if it made a difference or not would be important, however, we may want to go back and look at other areas that we did not include and see if those should be added to the plan. This first year, I think we did the minimal components because it was new. I think we can re-file or re-submit if we want to make changes or add other items. I think

all of that will need to be analyzed and communicated to the committee after the year is over.

Participant 5 stated, “Communication is key. I don’t think you can do something like this without communicating with all the stakeholders. We want a democracy in decision making, that’s how you get the support needed in education.”

Participant 6 stated,

Our community were very much involved in everything we do, so we have a lot of community support. I think the reason we have so much support is because they always feel included. Everything is transparent. We don’t make decisions on a whim. Everything that comes across our desk is taken into consideration and input is sought. We get input from our teachers and from our parents and from the community. We are not just a bunch of administrators sitting around holding a magic ball that affects everybody. But I think that’s because we ask for other opinions and communicate what we’re thinking.

Participants were also asked if they felt that their school’s plan of innovation created a culture of change. This question related to the potential changes in campus culture that being a DOI could bring about. Their responses are discussed below based on whether they felt the culture had or had not changed at their campus.

**Culture change.** Participants 1, 4, and 6 believed that the culture had been changed through the implementation of the innovation plan. Participant 1 stated,

those parents and community members that were part of it and our teachers that were part of it felt like we needed their input and that we listened to them. As an administrative team we would have liked to broaden the certification component a little more, but the staff and community were very much against that, so we listened to them. They were also reluctant on changing the criteria for the probationary contracts. I think once they understood that we were trying to maintain an effective staff, they began to understand our views and the reasons behind what we were seeking to put in the plan. Then they felt like we valued their opinions. So I think it changed some perceptions and those people will help with spreading those positive impressions of administration.

Participant 4 stated,

in the beginning people in the community and some teachers didn’t trust the leadership of our administration. As time has gone on there’s been no debate, no questioning of what has happened or what is transpiring with the plan. I think we are building that trust again. I am hoping that the teachers are understanding that we are an ever-changing environment and we’re changing with our students. This might be some of the first steps in creating that culture of change because in a rural school, things tend to stay the same.

Participant 6 said,

I’m not sure about a whole change culture, but it did create a more positive culture here. The teachers saw that there were people listening to them and their ideas and comments were taken into consideration. They felt valued. In the end I think they saw that sometimes change is good, so I guess you could say it is a start of a culture of change.

**No change in culture.** Participants 2, 3, and 5 felt that the overall culture had not changed at their schools, even though there were some reported changes in levels of trust and communication.

Participant 2 stated,

I don’t think plan will create a culture of change because most of the elements in the plan do not directly affect the teachers daily. Having said that, let me explain. The elements of the plan will affect a teacher at the beginning of the year, only if they are new or on a probationary contract, and only a select few teachers may be asked

to teach outside of their certification area for one period a day. The discipline changes were for students in disciplinary setting and the other element is kicking out transfer students. So these changes will only affect a small number of teachers or parents. If the elements of the plan impacted the teachers on a daily basis, I think there might have been a bigger change to the culture.

Participant 3 stated that the plan wasn't "all-encompassing enough to change a culture. Has it affected a culture of change? No. Has it been positive? Yes." Participant 5 stated,

I don't think it has on this campus. There hasn't been any discussion, any questions about it since it was being developed and taken to the Board last year. The teacher's main concern here at the elementary was whether we were going to hire uncertified teachers on this campus. When they realized that we weren't they didn't really have an opinion either way.

### **Taking Informed Action**

The key components of purposeful innovations include collaborative leadership, shared commitment to change, collective cognitive experiences and share reflective and reflexive practice (Hipp & Huffman, 2010). In this action research study, the researcher examined these elements by asking about specific factors that influenced the creation of the plan of innovation, elements that affected accountability and service delivery, necessary traits of principal leadership to sustain the plan, and how those traits could be applied to sustain and improve the innovation plan. During the interview process, it became apparent that the components of the innovation plan were not well known to all participant administrators. All administrators had some role in the process of development; however, they were uncertain how many of the components pertained to their unique campus.

One year after implementation, the plan did not seem to be well understood, nor did it seem there was any reflection or data on the successes or failures of individual elements of the plan. Several administrators felt as though the plan was determined by a committee and given to them to implement. The idea behind the plan of innovation was to give more autonomy to campus leadership. Many administrators, however, did not feel that they had realized any greater autonomy pertaining to the DOI Plan. Many administrators saw the plan as merely a means to circumvent elements of the education code such as school start date, certification, and discipline issues. While participants reported multifaceted means for the innovation plan, actual innovation was not among those reported.

In order to become truly innovative, administrators must take steps that are deliberate in building capacity of autonomy. School leaders must use data pertaining to instruction to evaluate and adjust while implementing innovative ideas. Administrators must participate in collaboration and reflection to determine if the innovations previously implemented were beneficial to the success of the students, teachers, and school as a whole. Freedom from mandates alone will not improve student outcomes without continued examination of the components of the innovation plan. Innovations cannot be successful if all components are not understood and implemented with fidelity. Autonomy must be coupled with continuous learning and accountability to promote success in the improvement of student outcomes.

### **Charter Schools**

The DOI plan was conceived in part to help districts have similar allowances as charter schools; however, there were no charter schools in the rural North Texas Region at the time of this study. Participants never mentioned charter schools at all in interviews; the charter school influence did not seem to have any significance in the rural areas that were the main focus of the researcher. Schools in this area were not affected by or in competition with private or charter educational agencies.

### **Innovation of Change**

Through completion of this action research study, the researcher found that, once the plan was written and approved, campus administrators did not feel as though the elements of the plan greatly affected them or their respective campuses. Most administrators agreed that the plan gave them slightly more freedom with regard to certain aspects of their jobs, but the climate of change was not affected. Campus wide professional learning communities focused on innovation should prove helpful in improving strategies and analyzing data concerning innovation plans. These groups of educators can engage in collaborative problem solving that could potentially address any concerns about the innovation plan or improvements that might be needed to create the desired effect.

### **Communication**

In order to truly be innovative, all of the elements in the plan must be completely understood by each administrator. Once administrators achieve this level of understanding, they will know how the plan affects each campus and the best way to implement it. When administrators were asked what data were used to determine the elements of the plan, most could not answer. Those who could answer stated that elements of the plan were chosen ahead of time, presented to the committee, and then the committee determined the extent to which each element would be used. Several of the administrators mentioned communication as a key to understanding and implementing the innovation plan, and also stated that they were unsure of all the reasons for certain elements in the plan. Most participants mentioned the communication to the stakeholders, but the communication was generally an overview of the process and advising of the elements that were being considered. During the interview process it became evident that a deep understanding of the DOI was lacking, even though most participants stated that communication was key to the success of the plan.

In professional learning communities the communication between teachers, community members, and administration is open and there is an ongoing discussion of any innovations and interventions that concern the innovation plan. These professional learning communities also research and develop effective strategies to increase improvement within the innovation plan. Members of these communities discuss and analyze the best way to promote a deep understanding of the DOI plan, as well as the intentions behind the plan and its potential for effectiveness. Outcomes from these analyses are shared with other staff members, as well as members of the surrounding community. This committee will be reconvened several times a year to oversee the plan of innovation and keep lines of communication open.

### **Reflexivity and Social Practice**

Based on participant interviews, the process of building an innovation plan is a major undertaking in which many people participate but few truly understand the motives behind the selection of the elements. The administrators' knowledge and understanding of the innovation plan varied greatly among administrators in the small rural district included in this study. Since the DOI plan was created to give more flexibility to local schools and decentralize policy decisions, administrators should have possessed a thorough understanding of what flexibilities were allowed and how they could create a climate of change and innovation in their district and campuses with the innovation plan.

### **Communication and Understanding**

Administrators in the focus district were told of the innovation plan and what elements could be written into the plan. Further depth of knowledge and understanding of the plan, however, was lacking in most cases. A better approach to designing the innovation plan might be to inform a small committee of administrators before convening the larger committee with teachers and community members. Administrators could then gain a deeper understanding of how each of

the allowable elements could potentially impact their campus and the quality of service and delivery of instruction on their prospective campuses prior to having to make decisions about which elements to include. Each campus administrator could form smaller committees to design an innovation plan that was better suited to their campus.

The focus district had one committee that made decisions on behalf of the district as a whole; this caused many of the administrators to feel that certain elements did not pertain to them. Building the capacity of administrators to develop and implement innovation is an area of need. Participants saw the innovation plan merely as a waiver of certain elements of the TEC. More training is needed to help administrators understand the underlying motives of the innovation plan and the potential benefits of designing a plan that can be measured for effectiveness. This district seemed to have been rushed in this process and moved forward without an in-depth study of the intent of the innovation plan and how it could impact districts.

### **Building a Culture of Innovation**

The participants in this study felt that the most challenging elements of supporting and sustaining a plan of innovation was trust and change. Community members and faculty could be resistant to change, especially if there is not a high level of trust with the administration. When participants were asked how these factors could be manipulated to improve establishing and increasing the innovation plan, several participants offered ideas to facilitate necessary changes. Suggestions included round table discussions, analyzing data from other districts, and soliciting feedback from staff, parents, students, and community members. A change in the aforementioned factors could positively influence the level of trust in the reason committee members chose specific changes in the innovation plan.

**Making the allowable exceptions to TEC innovative.** The allowable exceptions to TEC in the Texas DOI plan do not appear to be innovative at first glance. If administrators used a design thinking approach in the implementation and utilization of the exceptions, however, the individual DOI plan could become a tool for real innovation. When using the design thinking approach, one of the key factors is empathy interviews. These interviews are completed on an individual basis and used as a tool for finding gaps in perceived needs to create true innovation and change. If the planning and implementation of the DOI plan were structured more around a framework of design thinking, districts would be able to create a truly innovative plan individualized for their district, not just a recreation of other districts' innovation plans.

There are many tools to help inspire administrators to be innovative such as design thinking, 4 disciplines of execution, six sigma, and the lean startup. If educators attempt to utilize such tools they could help facilitate more innovation. The deeper the understanding of the innovation, what it could change, and what that change looks like for the entity, the more innovation could be magnified. Conversely, if the innovation plan is just a recreation of other plans, the unique innovation factor is lost and the DOI plan simply becomes a waiver of mandates. When a district discovers an innovation that could revolutionize the education sector, then that innovation should be scaled and replicated so other districts may experience successes of the innovation.

There is certainly more to be learned in the area of innovation in schools. Texas's DOI plan is the beginning of what could be a model for schools throughout the country. In order to become the best model, there must be a deeper understanding of all the elements of change and what those changes look like for each individual district or local education agency. Furthermore, more effort must be given to understanding and implementing the change process for school leadership. Achieving sustainable change takes time and resources. Connecting sustainability through innovation should encompass aligning district needs with community values; this process requires collaboration.

Sustainability should propel districts to rethink the parameters of the term innovation to include student voice. What new skills, technologies, or dispositions will students need to

effectively compete in the global workplace of the 22nd century? When this component is considered, innovation becomes less about exclusions from top-down hierarchical policies and legislation, and more about thinking critically to implement creative partnerships, build resilient infrastructures in public schools, and foster a culture of innovation.

### **The Action Plan**

The purpose of the action plan in action research is to provide a scholarly approach to improving a problem with practice. As a result of the findings of this study, the researcher recommends the district approach the challenge the process of change by using a participatory action research approach. Participatory action research is a democratic approach to disseminating knowledge by bridging the gaps between theory and practice and action and reflection (Mertler, 2019). Specifically, Mertler (2019) posits participatory action research as a research methodology associated with organizational transformation through collaboration, co-learning, and critical interpretations, thus framing school improvement as an action that challenges school leadership to rethink how they think and act. As such, the following action plan is recommended to not only frame but address local governance through the DOI designation as a problem of practice:

1. Assemble a committee of stakeholders, including teachers, parents and students to discuss specific needs of the district.
2. Hire an external evaluator to use data from initial stakeholder meeting to perform a comprehensive Needs Assessment.
3. Using the District Site Based Committee, incorporate the Needs Assessment into the Campus Improvement Plan with specific targets and responsibilities.
4. Using the Needs Assessment, use the committee of stakeholders to prioritize district needs through the setting of performance goals.
5. Promote stakeholder reflection through the use of participant journaling.
6. Implement the Design Thinking Approach to conduct systemic empathy interviews with stakeholder groups. The purpose of empathy interviews is to affirm or disconfirm the performance goals set by the committee of stakeholders.
7. Using the cycle of continuous improvement model, revisit steps 1, 5 and 6 in order to further solidify district needs and promote a culture of innovation.
8. Amend step 2 to include meeting with the external evaluator to directionally align the improvement process.
9. Amend district goals to align with student performance outcomes.
10. Rewrite the DOI Plan to indicate a logical and coherent need for the district to adopt specific exemptions from the Texas Education Code as enumerated in House Bill 1842.
11. Revisit Step 1.

### **Conclusion**

The central idea behind the DOI plan was to give public schools the autonomy to be innovative in areas that would best serve their respective campuses or districts. Empowering public school districts in decision-making was an attempt by the TEA to increase local flexibility through the lack of restrictions. This affords school districts the opportunity to be innovative and create desired outcomes that align with stakeholder needs (Cross, 2007). Affirming the research of Cross (2007), the DOI designation allowed local education agencies the ability to design individualized experiences.

The DOI designation conveyed the impression that innovation was the driving force behind individualized experiences; however, when interviewing campus administrators, it was clear that strict regulations from the state did not allow the plan to be truly individualized. While the administrators interviewed were aware of the components of the plan and how those components impacted their perspective campuses, most did not see the plan as innovative but rather as much

needed waivers or exemptions to the TEC. In fact, the plan that was written by this rural school district looked much like many other plans across the state. This disconfirms the constructs of the theoretical framework guiding the study, particularly creating and considering multiple options, refining selected directions, and executing the best plan of action (Black & William, 2010; Johnson, 2008).

One example of expressed innovation was the date for beginning instruction. Most public-school districts have traditionally used the school start date as the third Monday in August. The state has always had a waiver for the start date but discontinued the waiver in 2018 in lieu of the DOI Plan. This meant that if the district did not become a DOI, the school start date would have to be the fourth Monday of August, which would put the semester ending after Christmas. This part of the innovation plan does not seem to be innovative, but rather an act of self-preservation. It would be interesting to see the more truly innovative plans that could be created if the guidelines from the state were more flexible. For instance, with more freedom to implement change, school calendars could be aligned with local or community needs and teachers could be hired to teach classes focused on local industry.

In regard hiring teachers who were not in possession of subject-matter certifications as required by the State Board for Educator Certification, the outcomes of the innovation plan were inconclusive. The district in the study was able to hire teachers with industry certifications rather than professional certifications, but these hires were primarily in the career and technical education fields. Although impactful from the standpoint of local flexibility, the State of Texas has allowed districts to waive the necessity for professional credentials in Career and Technical Education programs in lieu of industry certifications for numerous years. Hence, this point of flexibility was not supported by emergent research, as there existed no means to assess goal attainment with transparency (Black & William, 2010; Bunch et al., 2009; Orlich et al., 2012).

The participants in the study were unable to articulate if the DOI plan had an impact on student academic growth. The DOI plan did not address the use of varied instructional modalities to increase student engagement through the use of engaging exploratory methods (Born, 2013). Moreover, the plan lacked an articulated understanding of the importance of using digital media to enhance student engagement, including in the Career and Technical Education areas where such integration of technology is needed to foster a profound utilization of technology to enhance the learning process (Friedman, 2012; Fulton, 2015; Holmes & Gardner, 2006; Osborne et al., 2014).

The findings of the study do affirm some degree of financial flexibility in resource allocation through an intentional focus on college and career readiness. Specifically, the district's innovation plan mandated an increase in college and career readiness course offerings. While only one interviewee was aware of the increases in funding afforded through more student enrollment in Career and Technical Education programs, this part of the innovation plan was measurable. The district reported an annual increase of 600,000 in additional funding, allowing the district to balance the annual budget for the first time in 5 years.

Likewise, increases in class size as described within the district plan appeared to have no measurable effect on student achievement, as the district met or exceeded all measures of student learning outcomes set for by the TEA. It is noteworthy to mention that increases in teacher-to-student ratios are also not necessarily innovative. It is somewhat appalling that the administrators interviewed did not mention monitoring teacher-student ratios. As noted in the literature, teacher-student ratio must be monitored so as not to exceed the level of interpersonal communications and relationships between the two distinct people at all times (Fleer, 2011; Osborne et al., 2014).

Conversely, flexibility in resource allocation, both human and financial, is critical to support the various educational requirements of the education system (Ahlgrim, 2010).

In conclusion, it seems that there is more work to be done in order to make DOI plans truly innovative. Public school districts can and should learn how to design new plans that are both innovative and measurable. These plans must be able to measure the components with some metric in order to determine the impact on student achievement. If no impact can be attributed to the plan,

steps must be taken to determine what changes should be made to the plan in order to increase achievement. Also, a review of other areas of the TEC that might be flexible and allow for more creative innovations for districts to become autonomous is needed.

The Commissioner of Education listed four priorities in the strategic plan:

1. Recruit, support, and retain teachers and principals;
2. Build a foundation of reading and math;
3. Connect high school to career and college; and
4. Improve low-performing schools.

Components of any DOI plan should impact all of these areas. More guidance is needed for districts as to the depth of the innovations and how they can impact these priorities. Admittedly, the DOI is new to Texas and because the phenomenon is new, more empirical research is needed to determine the impact local flexibility could have on these priorities. More specifically, more research is needed to affirm or disconfirm these priorities in regard to challenges faced specifically by rural schools. Teachers constitute a valuable human resource that require support and appreciation (Carmichael et al., 2010; Darling-Hammond, 2013; Gorman, 2013; Hanushek et al., 2005); however, the type of leadership required to sustain plans of innovation has not been fully explored.

Theories of leadership abound throughout education. By contrast, participants in this study expressed limited understanding of how to sustain change over time, a notion the researcher found to be problematic. Effective leadership must not only be transformational, but also authentic (Avolio & Gardner, 2005; Birney & Reed, 2009; Eilam, 2005). As confirmed in the review of available literature, leadership behavior must be both task- and human capital- oriented. Task-oriented behavior refers to the capacity of the leadership to lead with intentionality. By contrast, human capital behaviors emphasize concern for the individual through collaborative dialogue (Derue et al., 2011; Northouse, 2010; Wellman & Humphrey, 2011; Yukl et al., 2009).

In reference to the findings in this action research study, one researcher further concluded that school leadership did not demonstrate the capacity to create a collaborative culture; more importantly, campus leadership was not prepared for goal fulfillment. Both assertions are highly problematic, as the foundation for local empowerment is the ability to effectively govern at the micro level. Furthermore, campus leadership did not possess the needed ability to first identify the individual's priorities and then determine the readiness level of the educators while analyzing group members' abilities and willingness (Alanazi & Rasli, 2013; Hershey & Blanchard, 2001). Therefore, leadership behaviors were not authentic, transformational, or situational, as leadership could not adequately define what was anticipated of stakeholders. As such, the local empowerment plan must be revisited within the action research design to allow for deep reflection to initiate a plan not only sustainable over time but more closely aligned to district and campus needs.

Finally, rural schools face challenges unique to the setting and future endeavors to facilitate innovation in rural settings must allow greater flexibility to administrators in rural schools. Rural communities lack resources inherent to their urban and suburban counterparts, including less per-pupil funding, lack of access to professional learning opportunities, and fewer incentives for higher pay (Gorman, 2013). Specific to the site selected for this action research study, teacher attrition was a taxing issue. Sustainability is not only aligned with leader actions but, more essentially, to stakeholder capacity. Without additional funding matrices to allow for greater flexibility through innovation, increased capacity building through subsequent professional development and growth, and higher wages, rural schools will continue to face daunting challenges (Darling-Hammond, 2013).

More research is needed that focuses on leadership in rural schools, as the literature base is scant. Perhaps policy makers will one day allow local flexibility based on local characteristics; affording the opportunity for innovation to occur from the bottom up. Likewise, the term innovative itself is a misnomer and one more aesthetic in nature and therefore more difficult to define. Innovation must allow for thinking outside the realm of dreamed possibilities. Innovation

must also be driven by industry, not by educators, as education as a field is typically more reactive than proactive in nature (Birney & Reed, 2009; Brown, 2003). More has to be done to focus on schools in rural America not strictly as a matter of policy, but a matter of moral imperative as well.

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