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Table of Contents

Response to Cultures Continuum and the Development of Intercultural Responsiveness (IR) by Kathryn Jones, Jason R. Mixon, Lula Henry and Jennifer Butcher .......................... 1

How Property Tax Caps and Funding Formulas Have Changed the Role of the School Superintendent in Indiana by Patrick L. Gentry and Marilyn A. Hirth ............................. 17

A Case Study of the County School Facility Tax Initiative in Mary County, Illinois by Vince L. Hughes, Alison G. Reeves, and Laurel Puchner ................................................................. 31

Native Americans with Disabilities: Postsecondary Education Outcomes by Deborah J. Graham and Daniel W. Eadens ................................................................. 50

School Climate, Connectedness and Academic Achievement: Examining Positive Impacts from High School Mentoring Services by Rebecca Angus and Thomas Hughes ................................................................................................................................. 69
Response to Cultures Continuum and the Development of Intercultural Responsiveness (IR)

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration (NCPEA) as a significant contribution to the scholarship and practice of school administration and K-12 education.

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This qualitative phenomenological research study investigated the perceptions of pre-service teachers’ intercultural responsiveness. Findings from this study affirmed that pre-service teachers believed that positive dispositions, being culturally aware, and responding by incorporating cultural differences is a key to achieving Intercultural Responsiveness (IR) (Jones, 2013). IR self-actualization is the culminating professional and personal experience that enhances relationships between all cultures.
The research presented in this study provides educators with strategic Interculturally Responsive (IR) components with an explanation of the Response to Cultures Continuum leading to cultural self-actualization, which is the pinnacle of IR. This research highlights integral components of a cultural continuum and is a segment of another study on pre-service teachers’ cultural development (Jones, 2013).

There is an urgent need of cultural preparation for educators (Barnes, 2006; Fairbanks et al., 2010; Gargiulo, 2010; Guo, Arthur, & Lund, 2009; Lenski, Crumpler, Stallworth, & Crawford, 2005). With the increase of culturally diverse students (Martinez, 2005) and a decrease of culturally diverse teachers (Assaf, Garza, & Battle, 2010; Gargiulo, 2010; Walker-Dalhouse & Dalhouse, 2006); a cultural mismatch within the classroom is produced (Barnes, 2006; Colombo, 2005; Cooper, 2007; Lessow-Hurley, 1996; National Center for Educational Statistics, 2007; White-Clark, 2005; Wiggins, Follo, & Eberly, 2007). Many researchers (Barnes, 2006; Colombo, 2005; Cooper, 2007; Lessow-Hurley, 1996; White-Clark, 2005; Wiggins, Follo, & Eberly, 2007) agreed that culturally diverse students do not receive adequate educational support due to the cultural incongruence between student and teacher. As a result, culturally diverse students are often misjudged by educators, stereotyped, and often accused of false beliefs (Aronson, Cohen, McColskey, Montrosse, Lewis, & Mooney, 2009; Chamberlain, 2005).

Research Questions

The overarching questions of the study were: (1) What are the perceptions of pre-service teachers, in reference to teaching English language learners in the classroom setting? (2) What are the perceptions of pre-service teachers, in reference to Intercultural Responsiveness (IR) in the classroom setting? The related questions that were explored are: (1) What are the perceptions of pre-service teachers about their teacher education training related to intercultural sensitivity? (2) What are the perceptions of pre-service teachers, in reference to the relationship between their teacher education training and their perceptions towards English language learners? (3) What instructional strategies are seen as effective for English language learners? (4) What are the perceptions of pre-service teachers about their preparation for working with language learners?

Literature Review

In order to provide a strong foundation, the researcher exhausted the abundant literature on culture. The literature review provided a research-based development of the Response to Cultures Continuum (Jones & Mixon, 2015). Jones and Mixon (2015) believe that as one moves along the cultural continuum the goal of being interculturally responsive is obtained. It is imperative for teacher education programs to infuse these educational constructs into their curriculum. The Response to Cultures Continuum is illustrated below in Figure 1.0:

Response to Cultures Continuum

![Figure 1.0 Cultures continuum.](image)

2
Society must move toward cultural competency because of the diverse languages, ethnicities, religions, and cultures increasing due to previous and current immigration (Yee, 2002). Colombo (2005) defined cultural competence as “the ability to understand diverse perspectives and appropriately interact with members of other cultures in a variety of situations” (p. 2). The first step to becoming culturally competent is gaining an understanding of how culture shapes identities, values, beliefs, and actions (Merryfield, 2011) and connecting mind with the heart for cultural consciousness (Sims, 2011). According to Ward and Ward (2003), cultural competence requires teachers to be grounded in awareness, understanding, acceptance, and appreciation of diversity. While some pre-service teachers can become technically culturally competent; others struggle with being culturally competent (Fairbanks et al., 2010). Teachers who expect students to foster cultural competence should be culturally competent as well (Darling-Hammond, 2010; Keengwe, 2010). The journey toward IR self-actualization begins with the comprehension of being monocultural and is pictured in Figure 1.1 below:

![Monocultural Mindset Stage](image1)

**Figure 1.1. Monocultural mindset stage.**

**Monocultural – The Lack of Cultural Competence**

Mejia and Navarro (2008) defined monocultural as being a culture dominated by one group. Monocultural institutions are guilty of attempting to reform ways of thinking and doing it in the dominant culture (Özturgu, 2011). Nieto (2010) described monocultural education as a familiarity in our nation’s school. It’s a situation in which school structures, policies, curricula, instructional materials, and even pedagogical strategies are representative of only the dominant culture. The American educational system has a deep monocultural (Anglocentric) orientation (Fenwick, 1996). The second construct of the continuum is comprehending cross-cultural competence and is portrayed below in Figure 1.2:

![Monocultural to Cross-Cultural Communication](image2)

**Figure 1.2. Cross-Cultural communication stage.**

**Cross - Cultural Competence via Communication**

Cultural competence is a set of skills to be able to interact effectively with diverse culture groups (Martin & Vaughn, 2007; Wiggins et al., 2007; Yee, 2002); many times in cross-cultural situations (Cross, Bazron, Dennis, & Isaacs, 1989). Fries (2006) and Lynch and Hanson (1993) defined cross-cultural as communication between two different cultural areas. According to Ward and Ward (2003), second language usage promotes cross-cultural competence. According to Fries (2006), cross-cultural awareness implied that more than one culture is involved. According to McAllister and Irvine (2002), teachers encounter increased challenges
dealing with standardized achievement in a culturally responsive environment. They suggested that cross-cultural competence is needed by teachers who teach at culturally diverse schools. The third continuum construct is multicultural competence and is pictured in Figure 1.3 below:

**Figure 1.3.** Multicultural Stage.

**Multicultural Competence with Relating to All**

Multiculturalism pertains to or is represented by many different cultures (Fries, 2006; Gargiulo, 2010). Banks (2007) and Gloor (2006) described it as relating to many different cultures. Multiculturalism is celebrating cultures that are different from the dominant culture, which adds to our diverse society (Gloor, 2006). There is much research indicating that multiculturalism needs to more than a skim off the surface level providing brief cultural segments (Irvine, 2003; Ladson- Billings, 1999; Nieto, 2003; Villegas & Lucas, 2002). The final continuum framework is intercultural competence and it is portrayed below in Figure 1.4:

**Figure 1.4.** Intercultural interaction stage.

**Intercultural Competence by Interacting and Investing**

Intercultural competence is having the ability to appropriately interact effectively in intercultural situations through vehicles such as self-reflection (Guo et al., 2009), attitude, and intercultural knowledge (Deardorff, 2006). Defined by many (Brander, Cardenas, Gomes, Taylor, & de Vicente Abad, 2004; Deardorff, 2004; Fries, 2006) intercultural implies interaction between two or more cultures. Researchers (Govaris, 2005; Nieto, 2010) pointed out that the acquisition of intercultural competence is linked not only to teacher education but also to the dominant values concerning others in the social environment in which teachers operate. Interculturally competent teachers have the ability to adapt to intercultural groups in the classroom, lesson implementation, and students’ needs in their implementation of lessons (Darling-Hammond, 2006). Brander, Cardenas, Gomes, Taylor, and de Vicente Abad (2004) defined intercultural societies as diverse cultural groups interacting together with mutual recognition within the same geographic location.

**Participants and Setting for this Study**

Batchelder (2008) suggested the confirmation of higher educational institutions implementation of these cultural training components is needed. As a result from this need, the researcher chose to examine teacher education programs and the preparation to teach culturally diverse students. The participants in the study consisted of five pre-service teachers who were
entering the student teaching phase in their respective teacher education program. Individual interviews were conducted and ranged from one hour to one and a half hours. Two students from each designated university were selected for participation. In order to provide a stratified sample, three of the participants were male and three were female. Cohen and Crabtree (2006) suggested “when enough information is known to identify characteristics that may influence how the phenomenon is manifested, then it may make sense to use a stratified purposeful sampling approach” (para. 5). All of the pre-service teachers chose to be anonymous for the duration of the study.

The setting for the study involved three teaching universities located in Texas. Each of these universities ranked Multi/Interdisciplinary Studies in their top five degrees awarded during 2012 (Texas Higher Education Coordinating Board Almanac, 2013). The selection of participants was purposive in order to include the stories of pre-service teachers who met certain criteria for effectiveness. These criteria for selection included the following: (a) students had to be approved for student teaching and (b) the campus selection had to include one of the three selected Texas universities.

Findings

The findings from this dissertation study were reorganized into themes of Awareness, Sensitivity, and Responsiveness due to the product of this study being Intercultural Responsiveness (IR). Generally, educators have an awareness of cultures and a sensitivity to cultures, but few actually have the skillset of how to appropriately respond to students and teachers of different cultures (Banks, 2004; Gay, 2002; Lenski, Crumpler, Stallworth, & Crawford, 2005). In order to be Interculturally Responsive (IR), one must be aware, sensitive and responsive because they are interdependent of each other (Jones & Mixon, 2015).

Awareness of Others

Being culturally aware can be defined as viewing cultural diversity as an asset while addressing multicultural issues in the society (Ponterotto & Pedersen, 1993). According to Lenski et al. (2005), the goal is to help prepare pre-service teachers to be more than culturally aware of students’ needs but to respond beyond the issue of cultural awareness in schools. Pre-service teachers can be more efficient in awareness by utilizing differentiated instruction and fostering positive relationships in the classroom.

Aware of cultural identity. The findings in this study led to the conclusion that connecting with one’s own cultural identity is vital to be able to accept another’s cultural identity. Kay admitted that her teacher education training encouraged her to connect with her own cultural identity while in the program. She shared the following:

I am from a diverse family and also I grew up in Austin. So I grew up with much diversity within the city as opposed to like a rural, predominantly White town. I liked learning about struggles people experienced when immigrating to America.

Aware to make cultural connections. Pre-service teachers claimed the culturally responsive classroom takes what ELLs have in their home culture and connects it with authentic representation within the classroom. Ray claimed that his teacher education program seemed to focus on people of different colors connecting to their own cultural identity. He said, “I still don’t know what my cultural identity would be. I feel that White isn’t a culture, despite what some people might think.” Ray claimed to appreciate people that
own their cultural identity by understanding their background while immersing themselves in their culture. Rob also felt that his teacher education training was lacking in teaching them how to become self-aware with our cultural identity. However, he reported:

It is a personal goal of mine. I am aware for myself because while I am not as diverse as some people, I live in a fairly culturally and ethnically diverse area. The teacher education program highlighted a couple of things for me but it’s more from my own interests.

**Aware of cultural specificity.** Pre-service teachers in this study shared feelings of uneasiness of working with ELLs. They said their teacher education programs covered cultural diversity but not enough instruction about ELLs. They felt unprepared because of the basic lack of classroom experience. Findings led to the conclusion that pre-service teachers need an increase with ELL interaction and specific ELL instruction. The findings revealed that it was important to the pre-service teachers to receive a class devoted to specific ELL instruction.

Kim also stated that intercultural sensitivity is the teachers’ willingness to learn about cultures but also they actually incorporate diverse cultures in their classrooms. I know that I will sit down and learn about cultures that are in my classroom so I can appreciate and give the respect that these cultures deserve. For example, she mentioned:

There is even differences in communication, such as eye contact if that is respectful or not, just different things they have different perceptions, different families have different priorities. It could be religious priorities.

**Aware of ELL instruction.** The pre-service teachers in this study understood the importance of being knowledgeable of effective ELL instructional strategies however felt a degree of inadequacy. Pre-service teachers reported to be only familiar with sound theoretical truths. Rob mentioned the differences in Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP). He also noted if the BICS is strong that will help navigate the CALP, a little better, a little more confidently. The student will get to a certain stage that the language will simply transfer. Kay described BICS and CALP by giving an example. She noted that in the BICS stage, you can hold a conversation with somebody and get by in another country. Then once you advance to the CALP stage, then you can have a more academic understanding then you are able to comprehend at a higher level.

Kim stated that in her teacher education classes “they talked about how students can gain conversational English pretty fast. But the academic language is a lot harder to learn and be able to comprehend”. She reported learning that the academic language takes about five to seven years to completely develop. Kim also stated:

I feel a lot of times teachers may think that ELLs understand English because they hear them talking. However some ELLs may sound like they can speak and understand English but that does not mean that they will be able to read a standardized test.

As noted, multicultural awareness can be improved by becoming aware of cultural identity, aware to make cultural connections, aware of cultural specificity, and aware of ELL instruction. The next component is intercultural sensitivity.

**Sensitivity to Others**

Intercultural sensitivity has been defined as being interested in other cultures, sensitive to notice others, and modify own behavior (Bhawuk & Brinslin, 1992). Culturally responsive
teachers must develop positive dispositions that reflect their willingness to provide an equitable education to ELLs (Fregueau & Leier, 2012). Sinicrope, Norris, and Watanabe (2007) stressed that intercultural sensitivity reflects thinking and acting beyond ones cultural circumstances.

Sensitive of academic and cultural needs. Participants from this study noted that teacher education programs should provide a framework to support intercultural sensitive opportunities. Self-reflection, appropriate instruction, and intercultural communication among different cultural groups and pre-service teachers are linguistic accommodations and strategies that should be provided in the teacher education program.

Two pre-service teachers mentioned intercultural sensitivity was the result of an increase in diversity. Kay mentioned intercultural sensitivity was responding to the growing diversity within the schools. She claimed that diversity was everywhere and was a result of globalization. Rob also agreed that intercultural responsiveness was associated with diverse representation. He mentioned the goal of intercultural responsiveness was representation.

Supporting a comfortable classroom climate. Four of the five pre-service teachers acknowledged that the affective filter impacts learning for ELLs. For example, Kim explained the relationship between ELLs and the affective filter as while ELLs are gaining English proficiency, emotions affect the learning process. She mentioned that the emotional factors such stress, anxiety, and self-confidence creates a filter that stops language learning. In reference to the importance of a comfortable classroom climate; some students that are learning English may have low self-esteem and are afraid of ridicule so their filter is blocked. She continued, many times these students are afraid if they say the wrong thing and make a mistake so they may not be willing to contribute as much for fear of making a mistake. Kim reported that her teacher education programs emphasized that teachers should always try to create a safe and warm inviting environment for any student. She claimed they noted that mistakes and risk-taking should be encouraged in the classroom of ELLs.

According to a couple of the pre-service teachers, another factor of a comfortable classroom climate is trust. Emma shared her thoughts of gaining trust of ELLs:

Students from diverse cultures have diverse experiences inside and outside the classroom. I want to help each of these students through their life experiences. I feel what they have gone through depends on how I will be able to reach them. I think that it is important to build trust within a classroom.

As noted, intercultural sensitivity can be improved by teachers being sensitive of the academic and cultural needs of students and by creating a comfortable climate. The next component of the continuum is cultural responsiveness.

Respond Because of Others

The culture and diversity of students should be appreciated and explored by culturally responsive teachers (Dantas, 2007). Cultural responsiveness is defined as the ability to learn from and relate respectfully to people from your own and other cultures (National Center for Culturally Responsive Educational Systems, 2005). Being a culturally competent teacher suggests being responsive to students from all cultures, ethnicities, and linguistic backgrounds while valuing their cultural heritage (Grant & Gillette, 2006; Gur, 2010; Ward & Ward, 2003). Fairbanks et al. (2010) concluded cultural responsiveness produces thoughtful teaching.

Respond from cultural experiences. Pre-service teachers stated that one of the
most influential components of their teacher education program was learning from professor’s experiences. Kay mentioned that she had a professor that shared his experiences while living in Mexico. She claimed that he would explain in detail of how to work with ELLs from his home country. She also noted that other professors would briefly explain how you would implement a certain strategy and then move on to another topic. Kim reported that the most influential component of her teacher education program was learning from the actual experiences of her professors. She shared the following:

I feel that the stories from my professor’s experience helped me the most in learning about ELLs. Some of professors would step away from the textbook and tell us about their personal experience. Instead of just reading about possible scenarios, we learned from their actual situations and their actual responses to those situations.

Respond with equitable education. Further, it was concluded that teacher education programs needed to encourage pre-service teachers to accept every student while attempting to provide an equitable education. Three of the five pre-service teachers claimed that their teacher education program provided encouragement to accept every student no matter ethnicity, race, language or socioeconomic status. Kim shared that in her Diversity of Learners class, they discussed how teachers cannot use cultural diversity as a barrier in class. Teachers should not look at cultural diversity as a barrier but they should view it as an asset. For example, one of Kim’s professors shared the historical saying “students are blank slates that teachers need to write on them” but it is not true! All students come with their unique backgrounds, which should not be a detriment but an asset in the classroom.

Two of the five pre-service teachers admitted that their teacher education program mentioned diversity but the focus on actually accepting every student was to a lesser degree. Ray reported that “every class liked to make a point to focus on diversity but I just feel there are things that are ignored or not talked about which bothers me but especially with cultural things.” Kay also noted that her teacher education program encouraged pre-service teachers to accept every student while attempting to provide an equitable education for ELLs. As noted, cultural responsiveness can be enhanced by teachers if they respond from cultural experiences and with an equitable education for all students.

Intercultural Responsiveness (IR) Development

Jones (2013) coined the term Intercultural Responsiveness (IR) as a result of this study and through the synthesis of cultural research. Intercultural Responsiveness (IR) was defined as a merging of multicultural awareness, intercultural sensitivity while cultural responsiveness is overlapping both along a cultural awareness continuum (Jones, 2013). Educators are inadequately prepared to teach children of varied cultures (Fregeau & Leier, 2012; Keengwe, 2010; Ladson-Billings, 2005; Nathenson-Mejia & Escamilla, 2003; White-Clark, 2005; Wong et al., 2012). Several studies have suggested that multicultural professional development is needed for everyone as the world becomes more globalized (Batchelder, 2008; Bradley, 2007; Genesee, Lindohlm-Leary, Saunders, & Christian, 2005; Keengwe, 2010; Webster & Valeo, 2011).

Emma mentioned another way to interpret intercultural responsiveness. She noted that it means how students are supposed to act within their culture while intercultural sensitivity means how sensitive a student is inside their culture. Her perspective was from the student and how the students respond within their culture. Ray understood intercultural responsiveness to mean understanding that everything you learn in your culture is not
something that everyone in the other culture is going to understand. Cultural sensitivity while being responsive is required.

In regards to awareness, Kim stated, “In a classroom, no matter what, you are going to have people that come from different cultures and different backgrounds.” Kim commented being interculturally responsive is the result of the teacher responding to the differences in the classroom. She claimed that these differences should be assets to teaching instruction because each student comes with the background and that the teacher can build upon. Kim commented that intercultural responsiveness is how a teacher can respond to student differences but intercultural sensitivity is being aware. She continued it is the teacher’s response to their student’s differences and then using it to develop instructional lessons.

**Intercultural Responsiveness Through Self-Reflection**

Culturally responsive teachers make it a priority to reflect on their own cultural perspectives and respect other perspectives. Much research indicated that self-reflection components should be included in teacher education programs (Barnes, 2006; Cochransmith, 1995; Han & Thomas, 2010; Montgomery, 2001; Wiggins et al., 2007). It is important because teachers do not view their self-perceptions as reflected biases or prejudices (Richards, Brown, & Forde, 2007). Researchers (Clark & Medina, 2000; Nathenson-Mejia & Escamilla, 2003) suggested that pre-service teachers need to self-reflect upon their own cultural identities to be able to understand other cultures. In addition, pre-service teachers benefit from understanding cultures that are different from their own (Street, 2005) and as cultural beings appreciating perspectives of other cultures (Han & Thomas, 2010; Nieto & Bode, 2008). Self-reflection provided a systematic inquiry into diverse cultures that can be infused into the curriculum (Cochran-Smith, 1995). McAllister and Irvine (2002) and Wiggins et al. (2007) agreed that self-reflection had the greatest impact on pre-service teachers if conducted authentically.

Participants in the study shared their thoughts about the importance of reflection. Kim shared the following:

I think that my teacher education training does a great job with emphasizing the importance of self-reflection. After every lesson plan you write, after every discussion, and at the end of a course. Our professors always want us to reflect on our experience. Emma also provided some insight into her teacher education training and the implementation of self-reflection. She shared the following:

We participated in self-reflection a lot throughout our teacher education training. We were required to reflect on our actions within the classroom and then on our actions while we were in our teacher education classes. Sometimes we were expected to reflect on our mentor teachers’ classroom.

Rob shared the following:

There is a self-reflection for just about everything in my teacher education program. In just about everything you do whether it is an assignment, group project, or assessment, a reflection is expected to be included. I think that each course and assignment required it.

As noted from the pre-service teachers, the importance of true self-reflection on cultural issues as an educator was highlighted and emphasized.

Another result from this study was the development and creation of the Response to Cultures Reflection Model. The model provides opportunities for self-reflection while reflecting on the main components of Intercultural Responsiveness (IR). The reflection
model incorporates awareness, sensitivity and responsiveness aspects of the continuum in triangular form bound by reflection. Below is the Response to Cultures Reflection Model and the questions associated with the continuum. Journaling these experiences that deal with cultural self-identity and various cultural situations is expected to reach intercultural self-actualization.

**Response to Cultures Reflection Model**

**Awareness**
What is the cultural situation that you are becoming aware of?; What are some resources (website, people, books) that can assist in building a knowledge base of the cultural situation?; What is the level of turbulence of the situation? (mild-moderate-severe-extreme); What steps are you taking to personalize the situation?

**Sensitivity**
How would your culture deal with the situation?; What are similarities and differences between the cultures?; How do you feel about the cultural situation?; What ways are you internalizing the thoughts and actions?; What ways could the cultural situation been approached differently?; Were predetermined dispositions evident in the response(s) to the situation?; Were there expectations of certain assimilation?

**Responsiveness**
Was there a response or lack of response to the culture?; Was there an appropriate/inappropriate response to the culture?; How would you respond differently? Same?; What is the teachable moment from the response?; What adjustments are being made in behavior to improve responding?; What happened to the level of turbulence in the situation based on responses?; How did the response add to the awareness of the cultural situation?

**Beyond Cultural Awareness to Intercultural Responsiveness**
Based on the findings of this study, it can be concluded that for pre-service teachers to be interculturally responsive means being aware and sensitive to cultures while being willing to respond to cultural differences in the classroom (Jones, 2013). Awareness of culture elements within the classroom results in sensitivity to cultural differences. The pinnacle of the cultural continuum is intercultural self-actualization.

**Intercultural Self-Actualization**
'Self-actualization is “the basic need, the ultimate goal and a continual process of growth for human beings, and demonstrates itself in the form of peak experience in psychology” (Hongyu & Lu, 2013, p. 11). Maslow (1967) suggested it brings out a person’s maximum potential and creates organic abilities while still remaining loyal to one’s own self. According to Murtaza (2011), self-actualization is referenced as the meta-motivation because it’s realization that “full inner potential” also known as wisdom is attainable by everyone. Self-actualization leads to the pinnacle of human welfare (Maslow, 1970) and for the population of teachers that interact each year with millions of students, it is imperative that students are being instructed by self-actualized professionals in the cultural realm.
Implications for Practice

The findings of this study have direct implications for pre-service teachers and teacher education programs. As immigration and globalization increases in the United States, the cultural fabric of the educational system is becoming more diverse (Petsod, Wang, & McGarvey, 2006). In addition, the student population is becoming more diverse while the teacher workforce is becoming less diverse (Nieto & Bode, 2008). A cultural mismatch will overtake this widening gap if teacher education programs do not teach pre-service teachers the components of intercultural responsiveness. Teacher education programs should include the following: (a) appreciating the importance of cultural identity; (b) implementing intercultural responsiveness; (c) engaging in self-reflection; (d) increasing the awareness of cultural differences and language acquisition; (e) providing education on the importance of connecting culture to the classroom; (f) mandating a specific course pertaining to ELLs and sound ELL theoretical strategies; (g) offering continuous trainings to pre-service teachers and in-service teachers.

Recommendations for Further Research

Because there is a need to provide equitable education for all ELLs, it is important to consider multiple ways to explore the perceptions of pre-service teachers. Other research recommendations include the following: (a) create a longitudinal study following pre-service teachers as they enter the teacher workforce seeking for changes in perceptions and beliefs about ELLs; (b) research effective teacher education programs that produce pre-service teachers who are equip to teach ELLs in a culturally diverse classroom; (c) compare the beliefs of the teacher education faculty and their implementation of such components to the perceptions of pre-service teachers as they complete their program; and (d) conduct a quantitative study to measure intercultural responsiveness.

Response to Cultures Continuum
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Yee, D. (2002). Recognizing diversity, moving toward cultural competence: One organization’s
How Property Tax Caps and Funding Formulas Have Changed the Role of the School Superintendent in Indiana

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration (NCPEA) as a significant contribution to the scholarship and practice of school administration and K-12 education.

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There has been debate among states as to how to properly fund schools. The debate has been focused on how much funding is supplied through property tax and is motivated by taxpayer anger over fluctuating tax bills. Many of the policies have been implemented without looking at the effects that they will have on schools, especially in Indiana, which saw dramatic restructuring of its school funding mechanism and property tax structure. This qualitative study explores the effects of how the current school funding mechanism and property tax caps has changed the job of the school superintendent in Indiana and to elucidate the superintendents’ understanding of a general fund referendum, and how the superintendents perceive their role in light of the new financial realities of their school districts.
Many States are in the process of debating funding formulas that are fair and equitable within the context of what is a uniform and suitable education for the students of that state, such as for funding remediation of underperforming students in New York (The Campaign for Educational Equity, 2015, p. 1), funding for “adequate” teachers of students in the context of teacher layoffs in California, and budget cuts in Indiana (School Funding News, 2010, p. 1). In Indiana, the combination of the State funding formula changes and property tax cap implementation since 2008 have led to a situation where school districts have had to implement general fund referenda, a ballot initiative that schools may use to petition the public to increase the tax rate above the capped property tax rate and those funds are directed to the school district’s operational budget. As of May of 2016, there have been 77 general fund referenda, with 46 passing and 31 failing (CEEP Database, 2016). With the need for Indiana school districts and their leadership to participate in referendum campaigns and legislative lobbying to gain enough funding to meet their operation budgets, how does the role of school superintendents in those districts change as a result of this political and lobbying activity? The role of the superintendent as communicator has changed from that of an internal organizational communicator that is building capacity by developing a vision of leadership and direction for their school district (Andero, 2000) to a role that is focused on external politics, in light of the changes to public school funding in Indiana. As of the two-year budget just passed by the 2015 Indiana State Legislature, there was a slight increase in overall education spending, but mostly in the form of a disproportionate increase in charter school funding and in the state voucher program, where per student state funding is used to support private school tuition for that child. This qualitative study was driven by the research question, “What are the impacts of the general fund referenda process on the role of the superintendent?” The answer to this question were arrived at through these guiding questions that were asked of the superintendent participants during the interview process:

1. What factors made the referendum a success?
2. How do you perceive your role has changed, if at all, as a result of the referendum process?
3. How was the referendum money utilized? How was the money spent?
4. How has the referendum impacted your decisions on student learning?
5. How are you preparing for when the money goes away?

**Study Context**

Indiana makes an ideal location for a study of this type, because unlike its neighbors, school funding referenda have only begun since 2008; and the process is still new to most communities. The rise in general fund referenda is a result of the fact that Indiana has seen massive reform of its tax and school funding formulas over the past eight years; and as a result, has seen school districts seek litigation as with two major Indiana cases. The first case, *Bonner v. Daniels* (2007, 2008), the plaintiffs sued the then Governor and Superintendent of Public instruction over the state’s funding formula. However, the case was thrown out by the State Supreme Court on constitutional grounds that Indiana’s General Assembly, not the Indiana Constitution, was responsible for guiding and developing a system of adequate education (National Educational Access Network, 2016). The second case, *Hamilton Southeastern Schools, et al v. Daniels* (2010), which was in response to the uniformity of funding to schools. The plaintiffs argued that school funding cuts disproportionately affected their school districts. The case was eventually dropped by the school districts in response to the state changing to a
Developed and originated by the superintendent, a brief perspective on the population of school districts is warranted. There are two main reasons for the lawsuits: the shifting of the school districts’ general funds from a reliable form in local tax support to tuition reimbursement from the state in the form of a less reliable sales tax (Hirth & Lagoni, 2014) and the formula used by Indiana to account for the effects of poverty, known as the complexity index. The changes in how Indiana has funded its school districts in combination with a global recession resulted in a severe revenue shortage for a large number of school districts in the state. As a result of these tax revenue short falls, 65 general fund referenda have been attempted by Indiana School districts since 2008 (CEEP, 2015).

Since local property tax is no longer a source of general fund support, many schools have had to seek additional revenue through general fund referenda in an attempt to prevent staff lay- offs, maintain current programming, and prevent an increase in class sizes (McInerny, 2015). In fact the property tax caps have impacted school districts as a whole, preventing Indiana school districts from collecting 245 million dollars in local property tax revenue (Stokes, 2014). An approximate 33% of Indiana school districts have seen budget shortfalls of greater than 5% of their budget, while an additional 21% of Indiana School Districts have lost more than 10% of their budget due to property tax caps. In 2013 budget decreases combined with receiving less than $5,400 tuition support per student (Indiana Department of Local Government Finance, 2013), left school districts to publically question how they were going to provide basic services, such as busing students (Moxley, 2013). In fact, 35 of Indiana’s school districts experienced losses severe enough to qualify them for aid from the Distressed Unit Appeals Board, which hears appeals from distressed schools and aids in debt restructuring. Though only three schools filed petitions to the board, the cuts made by school districts include areas such as technology and technology support, building maintenance, and staffing (Stokes, 2012). In response to this funding short fall, a group of districts and their leaders who call themselves the Fix-it Coalition of Public Schools, a coalition of 41 of the 65 public school districts earning less than 120 percent of minimal or foundational tuition support, are lobbying for the transfer of more state dollars to their school district budgets. The Fix-it Coalition has been formed as a mechanism to lobby the legislature and the public for more financial support for their schools and schools like them (Indiana Fix-it Coalition, 2015; McCann, 2014). This has led to some public debate and conflict between school districts that are considered affluent and school districts that service a large high-need population (Butts, 2015; Davis, 2014). Much of the debate is in the form of how Indiana determines what its foundation or minimal level of per student funding is and how the “complexity index,” or measurement of wealth is determined (Toutkoushian & Michael, 2007).

Role of the Superintendent

In order to explore the role of the superintendent in the current context of financial turmoil a brief perspective on the evolution of role of the superintendent is warranted. The superintendent, in its modern form as a position separate and superior to the other roles, originated as early as the 1830s in large urban centers and were established in most large cities by the 1890s (Andero, 2000). The superintendent position evolved out of the national movement of curriculum standardization where the position was seen as the “master teacher” or “Teacher of Teachers”; the responsibility was placed on the superintendent to hire, train, and mentor teachers (Kowalski, 2005a). The role of superintendent is thought to have developed over time into four distinct but continuous and overlapping stages, distinguished by the major internal and external influences on the position: The Teacher of Teachers,
Manager, Statesman, and Applied Social Scientist, which are part of the ever-changing role of the position (Kowalski, 2006). The role of the superintendent has adapted and been influenced by the social and political contexts of the schools and the communities in which they have existed, including the many perceptions of the public on the roles and purposes of the school in the community (Kowalski, 2005b). This is shown again by Kowalski (2005a) who describes the emphasis on managerial skills, instead of instructional leadership of the teacher of teachers, that was a product of the industrial age and the desire to have efficient and effective management of the infrastructure and personnel that mirrored the factories of the late 1800s and early 1900s. However, much of the modern role has been influenced by the ever-increasing demands on schools for skill competency of all students and the reduction of resources to accomplish this goal (Bredeson, 1995). The role of the superintendent has been charged with producing a scientifically-based and unified curriculum. This task requires formal and informal training on communication within the organizational structure of the school.

Politics and the Superintendent

How does politics influence the role of the superintendent? Research studying political communication by the superintendent has been limited to the study of communication within the context of local politics. Up until now, the majority of research has examined the interplay between the local culture and political environments, and between the superintendent and the elected officials and their electorate. The focus has been on the interplay between local officials and their influence on school leadership; as in a study on the effect of gender and local politics in regard to rural and Southern cultural perspectives, which shows that local political contexts can make it difficult for women to effectively lead in cultures biased against women (Grogan, 2008; Gammill & Vaughn, 2011). In addition, there have been examinations of the interactions between the superintendent and local school boards or town mayors where mayors have exerted influence on school district policy (Hunter, 1997; Petersen and Short, 2002; Fusarelli, 2006). These studies show that successful superintendents must pay attention to how they communicate and how their words and actions are interpreted within the local cultural and political contexts of the community. Political communication, in these contexts, tends to be focused on an outward-in political influence where superintendents are reacting or responding to political communication about the school district or the superintendents, themselves. Political communication has been identified as a need of the job of superintendent. However, surveys of opinions of school superintendents show a large majority of respondents stating that their training in political speech and activity is lacking and as explored in a study of superintendents in Illinois (Tripses, et al., 2013) and a study of new superintendents in California, Missouri, North Carolina, and Ohio (Petersen, G.J, Fussarelli, L.D., & Kowalski, T.J., 2008). In each of these research articles, the superintendents state that they wished they had more training related to politics through case studies and internship opportunities. Furthermore, until now, there has not been a study of political interactions of the superintendent beyond the local context. What the results of this current study of funding factors that influence the role of superintendent shows is that, at least for the superintendents who participated in this study, political communication has expanded beyond local politics and local political influence. In fact, the superintendents are acting as quasi-political figures, exerting influence on state legislators, state and local legislation, and on the electorate of their community. As non-elected political figures, they are exerting an inward–out type of political communication. This is a novel type of communication, is not
documented in the research of the public school superintendency. In fact, it is a phenomenon that has been mostly observed and studied in politicians and professional lobbyists (Gabel, 2011; Soukup, 2014). Much of the need for political communication and campaign management is based on the need to implement general fund referenda, superintendents’ only legal mechanism for gaining funding beyond the state per student tuition reimbursement.

**Method**

The research model for this study blends the hermeneutical and phenomenological constructs for interpreting and understanding lived experiences with the cultural contexts of the subjects and their interpretations of an event or phenomenon. The research process, which is outlined in Figure 1 below, is reliant on the data gathered from semi-structured interviews. These interviews were designed to understand how the superintendents interpret their experiences related to the passage of a general funding referendum for their school districts.

![Figure 1. Flow chart – Hermeneutic Phenomenology Research Design of this study.](image-url)

It is this basic scientific process of data collection, interviews and transcription that allows for validity of the interpretation (Tordes & Galvin, 2008). In addition, implementation of the use of three different data collection pieces for triangulation, the process of truth checking by using multiple sources to validate a phenomenon, was used for this study. The three points used are subject selection, utilization of the same semi-structured interview format for each subject, and the use of publicly available resources to contextualize the subjects’ statements. This helps maintain fidelity of the data through development of themes and selecting the interviewees that work in similar cultures or from similar institutional knowledge of high achieving, high affluence school districts. As a way to aid in coding and organization of themes, we implemented the use of a “data analysis table” which is a combination of qualitative item analysis with a modified version of an unfolding matrix.
(Raymond & Padilla, 1996). The main difference being that the themes were developed from the transcripts, instead of with the interviewees. The matrix was populated by constructs that are derived from the research questions, which were asked during the interview process. As themes evolved during and after the interviews, data were collected and arranged based on these constructs developed independent of the research subjects, using the themes that arose during the separate interviews. These constructs were then added to as each superintendent was interviewed.

Participants

The body of research on successful funding referenda suggests that high achieving school districts from wealthy areas tend to have higher rates of referenda success. To maintain fidelity of the results, all of the participants in this study represent high achieving school districts of wealthy areas (as measured by the relatively low free and reduced lunch students). Participants were selected for this study by a set of inclusion and exclusion data. The idea was to study high achieving school districts of wealthy communities, since these districts were affected most by the removal of property tax support of the general fund. Each participant was a superintendent of a school district during the successful passage of its general fund public referendum. In addition, the school district must be considered high achieving by being in the top 50 of 413 high schools in Indiana (Report, 2015), and having a low poverty rate by having less than 20% of students receiving free and reduced lunch as determined by the Indiana Department of Education. Ultimately, of the 12 qualifying school districts, three agreed to participate in the study. The characteristics of the superintendents and the school districts they serve are described below and in Table 2. Each of the participants agreed to participate on the condition of anonymity, so any identifiers have been eliminated in the following descriptions of the participants, the sources, and the school districts they lead.

Table 2
Characteristics of the School Districts of the Participating Superintendents of this Study – Identifiers have been removed for anonymity.

<table>
<thead>
<tr>
<th>Eagle #1</th>
<th>Eagle #2</th>
<th>Eagle #3</th>
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<tbody>
<tr>
<td>District has a student population that is under 3,000 students, 62.6% white, approximately 15% of the students receive free and reduced lunch. The school is rated as an &quot;A&quot; school with over 99% of its students earning a high school diploma (IDOE, 2015). The school district successfully passed a general fund referendum in 2010.</td>
<td>District has a student population that is under 6,500 students, 86.4% who are white, and approximately 5% of the students receive free and reduced lunch. The school is rated as an &quot;A&quot; school with over 95% of its students earning a high school diploma (IDOE, 2015). The school district successfully passed a three-year general fund referendum in 2012.</td>
<td>District has a student population that is just under 7,000 students, 82.3% who are white, and approximately 15% of the students receive free and reduced lunch. The school is rated as an &quot;A&quot; school with over 97% of its students earning a high school diploma (IDOE, 2015). The school district successfully passed a seven-year general fund referendum in 2010.</td>
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Eagle #1 is superintendent of a district that has a student population that is under 3,000 students, 62.6% white, approximately 15% of the students receive free and reduced lunch. The school is rated as an “A” school with over 99% of its students earning a high school diploma (IDOE, 2015). The school district successfully passed a general fund referendum in 2010 despite a vocal and well-funded opposition group, which raised nearly
$100,000 dollars in the month before the referendum vote that paid for a media campaign (Rinehart, 2010), which included television commercials in opposition to the referendum question (Dangora, 2010). As part of the superintendent’s continued publicity campaign about the value of his school district and against what he perceived as harmful legislation, he used the school district’s educational foundation as an entity to raise private funds for a documentary that began filming in 2010 (public blog, 2010). The documentary was shown throughout the state at public viewing events and had high well-known pro-public education, anti-reform movement speakers in attendance for a town hall style discussion about the film life cycle (Indiana Code 20-46-1-11 states that “voters in a referendum may not approve a [referendum] that is imposed for more than seven years.”), both the superintendent and his opposition are gearing up for the next referenda, according to the superintendent (personal communication, July, 2014).

Eagle #2 is superintendent of a district that has a student population that is under 6,500 students, 86.4% who are white, and approximately 5% of the students receive free and reduced lunch. The school is rated as an “A” school with over 96% of its students earning a high school diploma (IDOE, 2015). The school district successfully passed a three-year general fund referendum in 2012, which will expire at the end of the 2015 fiscal year. Eagle #2 was one of the founding members of the “Fix-it Coalition” (McCann, 2014) that was formed to have a joint lobby for the passage of legislation that would “fix” the funding formula in Indiana, so that schools, like the ones in the coalition, would get an increase in per student funding. This increase in funding is controversial because it is seen as an assault on less affluent and lower performing school districts and their budgets (Butts, 2015). As the legislature failed to act in favor of the school districts making up the Fix-it Coalition, by striking out or amending parts of House Bill 1001 of the 2015 session (Rep. Brown, 2015 ), Eagle #2 went to his school board to request that they move to pass a resolution and was approved unanimously by the board to seek a six-year general fund referenda to go on the November, 2015 ballot (Shambaugh, 2015). The the general fund referendum passed by a 67% for and 33% against the proposal. Eagle #2 and his school district also faces a well-organized and well-funded opposition group, [Town] Taxpayers for Responsible Education, which is led by a local real estate developer, who has demanded paying teachers less money and benefits and getting control of building costs (Wall, 2012).

Eagle #3 is superintendent of a district that has a student population that is just under 7,000 students, 82.3% who are white, and approximately 16% of the students receive free and reduced lunch. The school is rated as an “A” school with over 97% of its students earning a high school diploma (IDOE, 2015). The school district successfully passed a seven-year general fund referendum in 2010, a referendum that asked for 65% of the funds it was predicted to lose due to property tax caps (Superintendent’s Public Blog, 2010). Four years into the referendum, Eagle #3 is reporting funding issues and even publically threatened the stoppage of busing by the school district (Davis, 2014). According to Eagle #3, though he did encounter critics of the referendum, “there was little evidence” of an organized opposition to the referendum’s passage (Personal Communication, February 2015). The one major difference of Eagle #3’s background as a superintendent is, in his own words, “Let me frame some of my answers with a little bit of background: I moved here 19 years ago from [another state]. I was superintendent during an operation and three building referenda. When I came to Indiana, I was proud of the fact that I was able to do that and used that in my interview process, and they didn’t care about it at the time; this experience has shown to be useful after all.” (Personal Communication, February 2015).
Data and Findings

In this paper, we present evidence of an inherent structural paradigm shift in how the modern day school superintendent conducts business and that the combination of property tax caps and the school funding mechanism in Indiana has put a large number of schools into an uncertain financial state. This financial uncertainty is being compounded in school districts that are seeing an increase in student population and in school districts with a low complexity index (i.e. high wealth). The superintendents of these affected school districts are seeing a shift from the instructional leadership role to a lobbyist and campaign manager role; leaving the superintendents to spending most of their time selling their school districts to their communities so that they support the local school districts in the next general fund referendum and lobbying state legislators to increase the funding from the state to their school district.

After examination and coding of the statements of all three subjects and triangulating the statements against public record, these statements were categorized based on recurring themes. These themes represent the related experience of the group and provides a unique insight into their perception of how the phenomena of the general fund referendum process has changed their role as leader of their school district. As well as their perception of the phenomenon of the referenda, a detailed description of their comments is included in order to develop a picture of the participants’ perceptions and aid in the hermeneutic analysis of this study, which is summarized in Figure 2. The following descriptions and quotes from the superintendents are arranged by similar subjects and themes. Included are exemplar statements by the subjects that support the idea that the superintendents are experiencing a fundamental shift in their roles as school superintendent.

![Data Analysis Matrix](image)

*Figure 2. Data Analysis Matrix – Summary of the coded statements from the superintendents of this study.*

There were several variations of the same idea shared by each of the subjects interviewed related to the perception of a change in the professional role they play in their school district, detailed in Table 3. It was in a very disappointed tone that they described what they perceived as their “new reality.” This tone can really be summarized by a quote from Eagle
"[Y]ou can see it in [the students’ and parents’] eyes and in the things they say that they don’t see it as plausible that I am an instructional leader.” All the superintendents realized and seemed to come to terms with the idea that their roles included being a political actors and lobbyists for their school district. This was apparent in the cluster of responses that occurred in the expression of their political roles as compared to a time prior to the need for a general fund referendum, where they identified as instructional leaders for the districts.

Table 3

Superintendents’ comments on their perceived role in the district

<table>
<thead>
<tr>
<th>Political vs. Instructional</th>
<th>Time Use</th>
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<tr>
<td>- “So back in 2008 when we realized we needed to have a referendum to maintain our current staffing for the school district my office really became more of a political office rather than an instructional leader focus.” - “It’s a shame because I didn’t get involved with this position to be a political candidate. I spend a lot less time on curriculum and instruction and a lot more time with the politics of the funding formula than what I did when I was hired.” - “I will tell you right now, I am a lobbyist” - “It’s a shame because I didn’t get involved with this position to be a political candidate.”</td>
<td>- “Prior to the referenda I probably had more of an instructional leadership role” - “I’m always thinking of the political scenarios instead of the structural scenarios that help support the school district.” - “I am getting between 130 and 170 emails a day, those are quite often pieces of the ongoing decision pieces about the district, and do most of that at night, because during the day I am on the phone or working at the state house working with representatives or contacting other superintendents or contacting volunteer organizations.” - “[W]e did a documentary to try and raise funding. We are part of two coalitions trying to rewrite Indiana code.”</td>
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A major part of the referendum experience for these superintendents is their perceptions of how the process has affected their ability to improve upon student learning and give the best educational opportunities to all of the children in their school districts as an instructional leader, as detailed in Table 4. All of the superintendents expressed true frustration and helplessness when describing the programs that they had to cut or stop implementation on due to the lack of funding and the insufficient amount of funds raised by the general fund referendum. An interesting finding was that when asked what changes they would make, they emphasized less expensive testing; more focus on hiring, recruiting, and retaining high quality teachers; and less emphasis on tests to evaluate teachers. They believe that these changes could save money in the state budget and could be diverted to funding schools in general.
<table>
<thead>
<tr>
<th>Perception of the effects on the school district</th>
<th>How would they render change?</th>
</tr>
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<tbody>
<tr>
<td>- “I spend a lot less time on curriculum and instruction, on student achievement.”</td>
<td>- “Now you have politicians messing with public education. Politicians want 50% of a teacher’s evaluation to depend on test scores; well, there are only two subject matters that are even tested. How are you going to do everybody else? And why is there this assumption that a test score is indicative of a quality teacher? Why don’t you focus on hiring quality teachers up front and don’t worry about it on this end of it?”</td>
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<tr>
<td>- “[C]hildren in the school district are facing untenable class sizes”</td>
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<tr>
<td>- “We realized that we needed to maintain our system and to maintain our [teacher] staffing.”</td>
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<tr>
<td>- “That is one thing that I am always having to educate about is that we passed the referendum so we wouldn’t have to make cuts, not to implement new programs.”</td>
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<tr>
<td>“We haven’t added our PTLW class or our IB classes at the high school or the middle school the way we have liked. I would like to have a numeracy person in each building to match our literacy program in each of our elementaries.”</td>
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Finally, a major effect on the perceived role change that was expressed by these superintendents was how their role has changed in relationship with the community that their school district served, as shown in Table 5. Each superintendent interviewed described the evolution of how he/she interacted with the community and described being more mindful of the political ramifications of every action and comment that originates from the school district. In regard to the quality of interactions and the use of the superintendent’s time, each conversation and community interaction was reported as an event with a possible political ramification.

<table>
<thead>
<tr>
<th>Quality of Interactions</th>
<th>Use of Time</th>
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<tbody>
<tr>
<td>- “[I]t's cause for some caution and safeguard when you have an election.”</td>
<td>- “I am spending a lot more time in meetings with organizations with people to not only educate them about the funding process but also keep these lines of communication open.”</td>
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<tr>
<td>- “[T]here were many of us who were seen as pariahs, there was that suspicion that you did something wrong, that the money got away from you.”</td>
<td>-” [I am] being asked to serve on boards or being part of projects with a local university. I am spending a lot more time in meetings with organizations with people to educate them about the funding process.”</td>
</tr>
<tr>
<td>- “[W]e think we’ll do ourselves a favor with local skeptics in the voting population by pulling out all the stops to get the legislative fix.”</td>
<td></td>
</tr>
<tr>
<td>- “[P]eople in the community came on board because they realized that we were not lying in the first referendum [which was voted down]”</td>
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</table>
The surprising finding from this study is that there seems to be a large disconnect between the financial situation of the school districts and the wealth of the communities that these schools serve. This gets to the crux of this study: How did there get to be such a large disconnect between the wealth of the community and the wealth of the school? This is the context in which these superintendents have had to exist: They are leaders of schools in historically academically successful, and predominately wealthy and affluent areas. In a matter of years, the school districts’ funding formula was changed, going from primarily local property tax supported to being completely funded by the state funding formula. With millions of dollars of disparity between what their budgets were then and what they are today, the schools are having to resort to cutting benefits and freezing pay for teachers, putting off maintenance on their buildings and equipment, and having to ask their communities to pay more to support their schools.

What has been established in the data provided by these superintendents is that they perceive that their role has seen a major and permanent paradigm shift as they are leading their district through changes in funding formulas and losses due to property tax caps. As stated by one superintendent, “I will tell you right now, I am a lobbyist…it is a really interesting and sad change.” The same idea as stated by a different superintendent, “It’s a shame because I didn’t get involved with this position to be a political candidate. I spend a lot less time on curriculum and instruction… and a lot more time with the politics of the funding formula than what I did when I was hired.” Finally, when talking about the actual referendum campaign, Eagle #3 stated,

[The referendum process] is so all consuming, politically, that the leadership of the district comes to a grinding halt for about 6-7 months leading into the referendum. So that is six months that you are not giving your full attention to educational issues. You are out meeting with people, organizing people, fund raising, it has made the superintendency into a different animal.

As part of the perceived role change, the superintendents seem to have an unease in their new political roles which have changed their roles from what they perceive their jobs should be, as stated by one of the superintendents,

I should be working with the teachers to help them teach our students, because I can’t go teach them chemistry, physics or whatever that teacher teaches, so why am I not finding internships and parent volunteers who will help you, which, by the way, all those volunteers – those volunteer hours are going to be burned on the next referendum. We estimated that there were 7000 volunteer hours that could have been used to help your brightest students get an internship or help tutor your most struggling students. (Eagle #1)

Concluding Discussion

In 1967, philosopher Philippa Foot developed “The Trolley Problem” a thought experiment that was used to study moral dilemmas. The Trolley Problem has had several permutations over the years, but it is told as paraphrased from Thomson (1985):

An out of control trolley is heading on a route that has five workers on the track, unaware of their impending doom. You can avert the disaster by flipping a switch, but that switch diverts the trolley to a track with two workers who are incapable of getting out of the way of the trolley. (p. 1385)

This moral dilemma is similar to the one that superintendents have been forced to make in
school districts in Indiana. The education budget that has been set by the legislature of the State of Indiana has diverted much of that budget, 40 million dollars, to fund private school vouchers (payments to parents of children to pay tuition at private schools instead of public schools) and charter schools, which received a $1,500 per student increase in tuition support (McInerny, 2015). These are funds that would normally have been used to support traditional public schools. Although none of the schools in the study have charter schools, all school districts in Indiana receive less money due to vouchers statewide. The consequences have been that traditional public school districts are forced to seek additional funds through the general fund referenda process. This has led a structural role change of the school superintendent, where superintendents have shifted their focus from instructional leadership to referenda campaign management and legislative lobbying. Since these school districts are seeing a cycle of shrinking budgets, combined with minimal funding requests in order to successfully pass general fund referenda, school districts are seeing a slow depletion of staffing and school programs. Many of these cuts of staff and programs are ones that support the most disadvantaged of the school districts.

As the debate over the school funding continues in the State of Indiana, school districts and their superintendents try to compete for legislators’ time and political will to change the funding formula. In 2015 the Indiana State Legislature passed a two-year budget. That budget included a slight increase in overall education spending, but mostly in the form of charter school funding, an increase in the state voucher program, and a slight increase for suburban schools, such as ones that were part of this study. This left a decrease in overall funding for urban and rural schools (Cook, 2015). Even with this increase in funds to these school districts, two of the superintendents in this study reported planning for their next general fund referendum. The trend for schools seeking extra funding continues as schools of all types push for general fund referenda to supplement budget shortfalls and to meet the needs of their students, including large urban school districts (Morello, 2015). This should signal a need for a look at what constitutes the foundation or minimal level of funding that schools receive in the form of tuition support from the state.

Finally, the need for political actions on the part of the school superintendent should signal a real need for training of future superintendents. In addition to training, specifically about the procedures and laws surrounding school funding referenda, there is clear evidence that the age of the superintendent as political official is here. Institutions that train future school leaders should spend more time and energy preparing them for the types of communications, policies, and actions that are related to running a political campaign (a referendum), lobbying for legislation, and coalition building. The new reality in the foreseeable long and short term is that superintendents will need to have these political communication skills or find and acquire the talent in their cabinets.
References


tax-caps- zap-schools-in-zionsville-lebanon-district-awash-in-cash
A Case Study of the County School Facility Tax Initiative in Mary County, Illinois

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration (NCPEA) as a significant contribution to the scholarship and practice of school administration and K-12 education.

K-12 Illinois public school facilities need to be repaired and rebuilt. The County School Facility Occupation Tax (CSFT) was made law in 2007 in Illinois to help provide funding for Illinois public school facilities. This single case study, qualitative research, outlines findings from 86, face-to-face, phone and email interviews and approximately 79 documents analyzed related to the CSFT in initiative in Mary County, (a pseudonym) Illinois. Through interviews and analyzed documents, five themes emerge related to why the CSFT did not pass on Election Day in Mary County in 2011. Themes ranged from lack of collaboration among school officials and use of the CSFT revenue unclear, to a lack of consideration of others, no opportunity for input and distrust of the process. With such a need for new and improved school facilities and the added burden of school funding being such a confusing and misunderstood topic, school leaders must find ways to effectively communicate with and encourage voters to pass school funding initiatives like the CSFT sales tax.
Introduction and Background

Statement of the Problem

The school funding formula in Illinois is not adequate or equitable. The State Comptroller Office reported that public school operating expenditures per pupil in Illinois ranged from $4281.00 to $28,285.00 (Illinois Comptroller Office web site February 2012). Data provided were the most current at the time of the study. These figures alone provide us with a shocking mental image of the difference in the level of education children receive in Illinois public schools at either end of the per-pupil expenditure spectrum. With this in mind, why is it that school funding ideas such as the County School Facility Occupation Tax Law Public Act 095-1675 (CSFT) has been voted down more than thirty times by Illinois voters in certain counties since becoming law in 2007? What were the reasons voters in Mary County, Illinois, (a pseudonym) voted against the CSFT in 2011?

The modern legal challenges (Reynolds, 2008) to school finance statutes, filed more than thirty five years ago in state and federal courts, provide stark evidence about the ways in which states’ laws produced staggering discrepancies between rich and poor districts. According to the Illinois State Board of Education and the Illinois Capital Development Board, 618 school districts responding to the 2011 Capital Needs Assessment Survey, the estimated capital need is close to ten billion dollars (ISBE Capital Needs Assessment 2011).

Recognizing inequities in funding and seeing a need to address the deterioration of public school facilities, Illinois legislators passed CSFT in October 2007. The intent of the law was to provide a supplemental source of funding for Illinois public school facilities. Once passed, the voters in individual counties must adopt the CSFT before the tax can be collected and funneled to schools. Although the law is much more descriptive, the one-cent sales tax collected can be used for building or repairing facilities, energy efficiency, safety, roofing, disabled accessibility, purchasing land and property tax relief. The CSFT cannot be used for operating or administrative purposes such as salaries. According to studies conducted by Nicolaus (2012), a one-cent sales tax increase would have provided school facilities for eighteen different Mary County public school districts an estimated twenty million dollars in the first year. This case study of a single county in Illinois intends to describe why the CSFT initiative failed in one particular county in Illinois.

The research is clear about the need for school funding reform. School funding sounds simple at a glance, but the formulas used in each state are not consistent (Baker, Sciarra & Farrie, 2010). There is a wealth of research related to the reasons why certain schools have more money than others (Biddle & Berliner, 2002). In Illinois, CSFT is one of the mechanisms for providing more funding. However, to date, there is no peer reviewed, empirical research on why the CSFT has been able to pass in some counties but not others in Illinois. As of March 2013, the CSFT has passed in twelve Illinois counties while failing thirty-three times in twenty-six different counties.

A goal of this case study is to provide a rich description of the unique case so that educators can learn from the mistakes of those promoting the CSFT in Mary County and, learn equally from the successes of those opposing the CSFT. While many may find the lessons from this case informative, it is a single qualitative case; as such it is
not intended to be generalizable to those in other Illinois counties or in other states seeking to get CSFT or other school bond or referenda issues approved by voters.

**Theoretical Framework**

Social Exchange Theory (Homans, 1974) suggests that people decide to help each other when they perceive the benefits of the relationship to be greater than the costs. Because of the economic roots of Social Exchange Theory and the concept that human relationships are formed by the use of a cost-benefit analysis and the comparison of alternatives (Homans, 1974), Social Exchange Theory might help explain why voters chose to either support or oppose the CSFT. Homans defined the concepts of “the influence process” and “cohesiveness.” He defined “the influence process” and “cohesiveness as “anything that attracts people to take part in a group” (1958, p 599). In summary, people may or may not take part in a group or a relationship based upon the perceived costs of the group activities or relationships in the group. Perhaps voters in Mary County weighed the positives and negatives of the CSFT and made their decision to support or oppose based upon this “cost-benefit analysis” with “cohesiveness” playing a role in their decision (Homans, 1958; Homans, 1974). It could be that voters were also influenced by each other and outside groups to vote for or against the CSFT initiative.

Social exchange theory can also be explained in a formula where “outcome = benefits – cost.” This formula provided a framework for interview questions (see Appendix A) and elicited reasons why individuals chose to support or oppose the CSFT. For the purposes of this study, the “outcome” was the passing or failing of the CSFT. Presumed “benefits” will be new and/or repaired school facilities and abatement of property taxes. Presumed “costs” will be an increase in the sales tax rate by one-cent. The perceived benefits and costs will be uncovered in the themes provided by the documents and interviews. Critics of this theory share that costs and benefits are difficult to define. As will be illustrated in this case study, the perceived costs and benefits of the CSFT were difficult to define.

**Literature Review**

School funding has been litigated in almost every state (Dayton & Dupre, 2004). In the Serrano v. Priest decision, the California Supreme Court decided that the State of California was relying too heavily on property taxes to fund its public schools (Berke & Callahan, 1972). As a result, states have been forced to alter their school funding formulas and even change their state constitutions to address the concern of basing a school funding system on local property taxes (Dayton & Dupre, 2004).

When first examined, school funding may look like an ordinary budget, but the formulas used in each state are not consistent (Baker, Sciarra & Farrie, 2010), and they are made up of a complex mix of sources. According to Guthrie, Garms, and Pierce (1988) federal funding involves competitive grants, changing formulas, block grants, general aid, and categorical aid that may or may not be funded each year. State funding sources generally include a mix of taxes, aren sent through local government agencies and then moved onto local school districts. Local funding sources generally come in the form of
property taxes and are often times considered unfair as the amount of money a particular school receives varies drastically (Guthrie, Garms & Pierce, 1988).

Local property tax is the most commonly used source of funding for public education (Kenyon, 2007), but with property taxes rising year after year in almost all areas of the United States, they are an unpopular revenue source. Property taxes are “based on assessments that are often viewed as unfair, are regressive (those with lower incomes pay a higher tax rate), and are highly visible because they are paid in lump sums” (Lowry, 2008).

There are also a multitude of state, county, and local taxes in place in certain states to help fund public education. According to Verstegen and Jordan (2009) usually, the sales tax is a state, county, or local tax placed on certain consumer goods. Depending upon how the sales tax is implemented, this type of tax has a great deal of potential to bring financial support to school districts (Verstegen & Jordan, 2009). For example, the entire State of Iowa has a one percent sales tax on consumer goods. The revenue generated by the statewide sales tax is sent back to school districts based upon student enrollment. Modeling after the Iowa law, Illinois adopted a similar sales tax law (the CSFT) to help fund public education facilities, but has left the implementation of the law up to the voters of individual counties.

School funding is confusing and overwhelming. School officials and politicians in the area of school finance and tax reform argue for a more adequate and equitable school funding formula. School leaders argue that lawmakers must provide their schools with more money. Litigation regarding school finance continues today in almost every state (Belfield & Levin, 2007). School funding alternatives are available, but all come with their own costs and benefits. The Illinois CSFT also comes with its own set of costs and benefits.

Methodology

Research Design/Overall Approach

In this case study, through interviews, document analysis, we use a modified version of the convergence of evidence technique (Yin, 2003), to research the reasons why individuals and groups supported or opposed the CSFT using multiple data sources. This is a “single case study” (Yin, p. 53). Although this case study is studying one particular county and the events related to the CSFT in that county, the research methods could be replicated to study other counties. As Yin suggested, the benefits of a future, multiple-case study design would be substantial.

Context

This is a case study of the 2011 CSFT initiative in Mary County Illinois. Of the 102 counties and more than twelve million residents of Illinois, Mary County reportedly had a population of more than two hundred and sixty thousand in 2011 (United States Census Bureau, 2012). Approximately 90 percent of Mary County’s residents are white, while less than ten percent are black and less than two percent is other (United States Census
Bureau, 2012).

The median value of owner-occupied housing units in the County was approximately one hundred and twenty five thousand dollars compared to the median value of owner-occupied housing units in Illinois, one hundred and ninety eight thousand dollars (United States Census Bureau, 2012).

The median household income in Mary County was approximately three thousand dollars less than the Illinois median of fifty six thousand dollars (United States Census Bureau, 2012). The poverty levels in Mary County and in Illinois were very similar at approximately 13.2 percent (United States Census Bureau, 2012). Neighboring counties reported a poverty level anywhere between a high of 16.3 percent and a low of 8.0 percent as compared with the United States’ average of 14.3 percent (United States Census Bureau, 2012).

The retail sales per capita were approximately twelve thousand dollars in Mary County as compared to surrounding counties that ranged from a low of five thousand seven hundred to a high of thirteen thousand five hundred (United States Census Bureau, 2012). Two of six surrounding counties had higher sales per capita than Mary County (United States Census Bureau, 2012). The number of building permits issued in Mary County in 2011 was between 520 and 530. One neighboring county issued almost seven hundred building permits while the five other neighboring counties issued fewer than 260 combined (United States Census Bureau, 2012).

In 2011, there were approximately 180,000 registered voters in Mary County. Two thirds of the registered voters lived in four of the eighteen school districts represented in Mary County. Ninety percent of the registered voters lived in eight of the eighteen school districts (United States Census Bureau, 2012). Although students living in Mary County represent eighteen different school districts, there are only fourteen school districts in Mary County. School districts cross county lines in Illinois. (Interview with Mary County Regional Office of Education Representative, 2012).

Although the State of Illinois has fixed base sales tax rates, which are the same in all counties, individual counties, municipalities, and districts also have their own sales tax rates, which are not the same. In cases where local governments, without voter approval, impose a sales tax rate above the State of Illinois general sales tax rate, this is called the Home Rule sales tax. As of January 1, 2013, certain Illinois counties had a Home Rule sales tax rate as high as 2.00 percent above the Illinois sales tax rate (Illinois Department of Revenue Sales Tax Rates in Home Rule Units of Local Government). For example, the city of Carbondale, in Jackson County, Illinois, had a Home Rule sales tax rate of 2%, bringing the total rate to 8.25% (Illinois Department of Revenue, 2013).

Mary County base, general sales tax rate in 2011 was 6.25% (Illinois Department of Revenue, 2013). The six neighboring counties in Illinois and the other neighboring counties in the other state had base, general sales tax rates varying between 6.25% and 7.35% (Illinois Department of Revenue, 2013). Each municipality within the counties also had additional sales taxes added onto the base sales taxes referenced. The highest total, general sales tax rate in a neighboring municipality was almost 10%.

Sample/Participants
There were three categories of people interviewed: Informants, Elites, and non-Elites. The lead author has prior knowledge of the CSFT and has been involved with preliminary discussions about the CSFT with four individuals referred to as Informants. Denzin and Lincoln (1998) describe the Informant as an insider “to act as a guide to and translator of cultural mores and, at times, jargon or language” (p. 59). All four Informants were knowledgeable of the CSFT initiative and were in a position to provide me with access to documents, and names of potential interview subjects. During the initial interviews, the Informants provided me with a list of 64 potential interview subjects heavily involved with the CSFT initiative, which are called the “Elites” In this project. “Elites” as described by Gillham (2000) are individuals “in a position of authority, or especially expert or authoritative, people who are capable of giving answers with insight and a comprehensive grasp of what it is” being researched (Gillham, p. 64). Of the 64 on the Elite list, 40 were supporters, 10 were neutral and 14 opposed the CSFT.

During the Elite interviews, a list of other potential interview candidates was generated and divided into two categories; Elites and non-Elites. If the names provided were already on my original list of Elites, they were ignored. If the names provided were not on the original list of Elites, they were included on the list of potential non-Elites. After creating the third list of non-Elites, another potential list of 52 non-Elite interview candidates was created, and 20 of them were interviewed. Appendix B provides additional information about the stakeholder affiliations of both the Elite and non-Elite interviewees.

**Documents.** Gillham (2000) stated, “all evidence is of some use to the case study researcher; nothing is turned away” (p. 20). The lead author asked all Informant and Elite interview subjects for documents that they had available related to the CSFT, which were sorted and filed in the manner described by Yin (2003) in his “create a case study database.” The database of documents was labeled and filed using the form referenced above, adapted from Miles & Huberman (1994).

**Data Sources**

**Interviews.** We prepared three different but related semi-structured sets of interview questions for each category of interviewees (Appendix A). Although interview questions were prepared in advance, the semi-structured nature of the interviewed allowed space for the lead author to listen and learn while interviewees told their stories about why the County School Facility Tax initiative did not become law in Mary County and to ask clarifying or follow-up questions. As suggested by Gillham (2003), the interviews were limited to approximately thirty minutes though often ran longer and expanded to topics not specifically covered in the interview questions.

**Documents.** Personal documents included email, meeting notes, and other “first person narrative that describes an individual’s actions, experiences, and beliefs” (Bogdan & Biklen, 1992, p. 132) as they related to the CSFT. Public records collected and analyzed included Mary County Board and School Board meeting agendas and minutes, other agency minutes, media articles, campaign plans, CSFT pre-vote poll questions and answers, and campaign
literature dated from the passage of the CSFT in 2007 to the final meetings up to the CSFT vote. Other public records included census and voting records; campaign promotional items, demographics, and other CSFT related data from Mary County. Documents such as campaign promotional fliers were also categorized by their objectivity: supporting or opposing the CSFT.

Procedures

During the month of August 2012, the lead researcher conducted three practice or pilot interviews, as suggested by Gillham (2000) and Merriam (1998). After the pilot interview sessions, adjustments were made to the Informant interview questions based upon feedback received from pilot interviewee and the researcher’s judgment. The Elite interview questions were piloted with, a school board member and a public school administrator (both of Mary County) who were recruited to serve as pilot interviewees. Each of the interviews lasted approximately 45 minutes and an additional 60 minutes was allowed to debrief the interview process. Field notes were taken in a journal about the pilot interviewees’ responses; pilot interviews were recorded using Audacity 2.0.2 for MacBook.

Between September 2012 and October 2012, four individual Informant interviews were conducted. Informant interviews were face-to-face in a mutually agreed upon location and in the form of a “naturally occurring conversation” (Gillham, 2000, p. 63). Three business days before each initial Informant interview date, the Informants were emailed a confirmation including the planned Informant interview questions.

During our first meeting, each Informant was provided with a verbal summary of the proposed case study research proposal and an explanation of the role of the researcher. After a short discussion, each Informant was provided with a written copy of my questions, allowed time to read, and asked if they had questions. Before proceeding with the interview, Informants were reminded that the researcher would be writing field notes in a journal and recording the interviews using a recording program on a MacBook. Subjects were asked if they wanted a typed transcript of the interview. None of the Informants were interested in seeing their transcripts but all indicated they would be interested in the final results.

At the end of each pilot and Informant interview, subjects were asked to brainstorm a list of potential reasons why they thought the CSFT did not pass in Mary County. Each brainstorming session lasted approximately 15 minutes and took the shape of a casual conversation (Rubin and Rubin 1995). As a result of the brainstorming sessions, a list of potential reasons was generated and was used as a guide when identifying themes during the analysis process for all future interviews and data analysis. Between September 2012 and January 2013, eight brief individual follow-up Informant interviews were conducted either in-person, on the phone, or through email.

Between September 2012 and January 2013, 42 Elite interviews (Thirty-two in person and ten by phone) were conducted. Elite interview procedures were very similar to the procedures listed above for the Informant interviews. The primary difference was that phone interviews were not recorded due to not having the proper technology in place.
The field note technique was used to journal phone interviews. Between October 2012 and January 2013, twenty-two non-Elite interviews were conducted via phone and email. Non-Elite interview procedures were similar to Elite interview procedures. The main difference is that non-Elite subjects were interviewed via email and phone using two questions. Once named by the Elites, each non-Elite interview candidate was contacted by email and asked if they would be interested in participating in the research. In the initial contact email, the procedures of the email interview were explained.

Audio files for interviews were copied to an external hard drive and transcribed immediately. The day after each interview, interviewees were provided with a short email summary of our interview hitting on key points from their answers to the questions. One goal in doing this with the Informants and Elites was to develop a “consultative relationship” (Gillham, 2000, p. 64) in hopes of having follow-up interviews and asking questions as the research progressed. On occasion, interviewees were asked if they could be quoted and they gave permissions. In many cases, the follow-up email generated more detail from the interview subjects. All Informant, Elite, and non-Elite interviews were logged into a modified “contact summary sheet” (Miles & Huberman, 1994) and filed according to interview date.

Both personal and public records, as described by Merriam (1998), were gathered from interview subjects, media archives, and web searches. Documents and records provided by interview subjects were sorted according to whether they were personal or public and then labeled and filed. Media archives were located using the online archive database of the five most circulated newspapers in Mary County using the key terms “Illinois county school facility tax,” “one cent sales tax Mary County,” and “school tax Mary County” during the dates ranging from October 17, 2007 to the weeks following the 2011 vote. For the web searches, the Advanced Google search option was used limiting the results by using the date range listed above and search terms listed above. October 17, 2007 is the date in which the County School Facility Tax became law in Illinois. A wealth of documents were found ranging from editorials and articles in the newspapers to blogs and videos in the Advanced Google search option.

Documents gathered from those interviewed were also sorted and filed using the methods described above. Many of the documents gathered from those interviewed were similar to those found through online and newspaper archive searches. The documents that did not overlap included personal notes from those interviewed; personal letters from the general public to the public officials interviewed; campaign plans, polling questions, and polling results from Unicom Arc. Unicom Arc is a public relations company in the Midwest, contracted by groups interested in learning more about running a campaign. In Illinois, multiple groups supporting the County School Facilities Tax have contracted Unicom Arc to help with their campaigns. Campaigns consist of public engagement and public relationship strategies that are designed to help sway voters.

Data Analysis

According to Stake (1995), “There is no particular moment when data analysis begins. Analysis is a matter of giving meanings to first impressions as well as to final
compilations” (p. 71). Data analysis started with proposal approval and continued to the last day before finalizing this report on the research conducted.

Focusing on the proposed theory, strategies, provided by Strauss and Corbin (1990) to code, memo, and find themes of all interview transcripts and documents were utilized. After each interview, Audacity recordings were played back on the way to the next interview or back to the office to become more familiar with the interview subject answers and be more prepared as the process of coding, memoing and finding themes unfolded. During the coding and memoing, it was important to keep an open mind and focus on what the interview subject stated in the interview while developing categories and sub-categories. As soon as a point of saturation (Glaser & Strauss, 1967) was reached, when the categories and sub-categories were not changing, data analysis process was discontinued and the process of outlining tentative themes and writing the final report began.

Findings

I had a hard time convincing my own wife to vote for the tax, and she is a teacher. I remember her telling me that the administration in her school district hosted several meetings and handed out memos to all district employees about how the CSFT was not right for their school district or their community…. We received a mailing from an anti-tax group stating that the CSFT was a sham and could never be taken back once in place…. Listening to the comments from this group of educators about one school board wanting to abate property taxes, another district wanting to build additional athletic fields, and others not supporting the CSFT, I left thinking that we were not doing our job of communicating to the public about what we planned to do with the CSFT revenue…. We (Superintendents in the County) should have designed a clearer message telling the voters that each school had the ability to spend the CFST differently according to the needs of the district as long as we followed the law (Interview with Mary County superintendent, 2012).

This excerpt from an interview with one Mary County superintendent set the stage for this multi-faceted case study. Analysis of the complex reasons groups chose to support or oppose the CSFT resulted in five themes: (a) Lack of collaboration among school officials; (b) Use of CSFT revenue unclear © Lack of consideration of others in need; (d) No opportunity for input; (e) Distrust of the process. Each of these will be described in turn below.

Lack of Collaboration Among School Officials

The efforts by the pro-CSFT campaign organizers to unite and rally the support of school officials were not successful. Some school officials united against the CSFT for differing reasons, some strongly supported the initiative, others were undecided about their support or opposition, others supported the initiative with mediocre efforts, and others did not have a plan at all to address the CSFT campaign efforts. The public saw and heard
mixed messages in the media, from school leaders, at school board meetings, on social media, and during social gatherings.

Because the school district administration representing the largest number of registered voters in Mary County did not support the CSFT initiative, CSFT support was tough to find amongst its voters. It was rumored that community and school district leaders were talking about trying to implement their own city sales tax to support the schools instead of a countywide sales tax that would be shared with all students in the county. Although no one would go on record to confirm the above statement about a city sales tax, two Mary County elected officials and two school officials representing Mary County public school districts shared opinions.

Further evidence of the lack of unity theme came from an interview with a teacher union representative who stated that behind the scenes discussions in the union indicated support for the CSFT. When asked why the union did not openly support the campaign, the representative stated they would have united with the board, but “…the administration and the board never consulted us” (Interview with Teacher Union Representative, 2012). An elected Mary County official also gave evidence of the lack of unity theme when he stated “Some of the best advice we received was from a retired school principal. He said that we needed to unite the teachers, bus drivers, custodians, and all other school employees before taking this initiative public… Unfortunately, we did not take his advice.” (Interview with Mary County Elected Official, 2012)

With three of the school districts’ Boards of Education in Mary County not voting to support the CSFT and two of those three vocally standing against the initiative, the message being sent to the general voting public was garbled. One of the highest circulated papers in the county, only a few months before the election, ran an article with the title “Mary County Schools Offer Mixed Messages on Tax Reduction” (Mary County Print Media December 2010).

Mary County newspaper editor stated:

It was obvious at the press release that not all of the superintendents were in agreement on how to spend the revenue… I even heard rumor about one district wanting to push for their own city sales tax… the sales tax was an idea that was outside the box, too new, not enough people understood it. (Interview with Mary County Newspaper Editor, 2012)

Use of CSFT Revenue Unclear

Theme two is that the pro-CSFT campaign did not provide the public with a clear need for and clear planned use of the CSFT money. Although some school districts did provide a list, shared it at board meetings, and had it covered in the media, other school districts did not provide a clear and consistent plan or message outlining a need for the money. Although comments were made about not understanding the sales tax issue, some of the data supports an argument that voters understood it, were influenced by others, utilized the “cost-benefit analysis” (Homans, 1958), and then made their decision not to support the CSFT initiative.

A Chamber of Commerce representative stated that the Chamber did discuss the CSFT informally but never had anyone present on either side of the issue. A
representative from the Realtor Association commented that their association was also not approached by anyone from the pro side of the initiative. They were approached by someone from the opposing side of the issue to donate money to their campaign, but ultimately decided not to financially support either side. When asked to pinpoint the top reasons why the CSFT failed, the realtor shared that the district where he/she lived did not offer a clear plan and that he/she was bothered by the fact that some schools were in support while others opposed the sales tax.

An officer from one civic organization with more than two hundred, active members commented that his membership briefly talked about the sales tax in an open meeting and stated that,

We did not understand why all school districts did not come to an agreement on exactly what to do with the money. We typically support the school. This time, we did not agree with the idea of sales taxes being used to abate property taxes.
(Interview with Community Organization Member).

A Mary County retail store owner shared his view during an interview:

Voters will support schools when they understand what they are voting for… My business and I support schools, and I voted against this tax. Why? Because I had no idea what I was voting for or what was to be done with the money… I had a county official calling me asking for money to oppose the tax, the local newspaper did not provide me much information, the local Chamber of Commerce did not take a stance, and the superintendent didn’t convince me that this was a good tax.
(Interview with Mary County Retail Store Owner)

Of the ten (out of 14) local School Boards of Education within Mary County that supported the CSFT, six boards clearly supported the CSFT, and their meeting minutes reflected a great deal of discussion about what to do with the revenue. The other four Boards of Education that supported the CSFT adopted a resolution to have the issue sent to the County Board, but did not follow through with the any of the ideas shared in the campaign plan. Their board minutes indicate that little or no discussion took place after the initial CSFT resolution of support was recorded during the regular meeting.

Many comments about how many new schools were built and major renovations had taken place during the last few years were made, and voters seemed to think the need for new schools was not real. Analysis of a facility inventory document was provided by the County Regional Office of Education. This document listed more than 150 school facilities with approximately ninety student attendance centers. Of the ninety attendance centers, more than one quarter were listed as either being renovated or built within the last twenty years. In one of the largest school districts in Mary County, opposing the CSFT, a new high school, middle school, and three elementary schools were listed as being constructed within the past twenty years. Three large districts supporting the CSFT had high schools and/or middle schools constructed within the past ten years. The five smallest districts supporting the CSFT all had facilities listed as being constructed more than eighty years ago with none having upgrades within the past twenty years. The smallest school district, Louis Town, (a pseudonym) in Mary County, with the
oldest school buildings, was the only community to overwhelmingly pass the CSFT on Election Day. The discovery of the connection between voting patterns and actual need for facility revenues leads to the third theme that is discussed next.

**Lack of Consideration for Others in Need**

Louis Town was not the only school district with facility needs and a high number (50% or more) of low-income families in Mary County. But Louis Town was the school district with one of the highest levels of low-income families and a clear need for new facilities. Seeing that voters in wealthier areas of the county did not support this initiative while voters in low-income areas overwhelmingly supported it was intriguing. The concept of not wanting to help other students in a neighboring community was troublesome to me and led to new interview questions about the failure of the CSFT. One public school teacher commented that “My children attend private school in a neighboring community, and I did not see a need for new facilities in my home community or where I teach. This was one reason why I didn’t support it…” (Interview with Mary County Public School Teacher 1)

This idea of helping *all* kids was mentioned multiple times by interview subjects. In order to look further into who exactly supported the CSFT on Election Day, the election results provided by the Mary County Clerk’s Office were analyzed. Election results indicated the voters of the school districts with newer facilities and a lower number of economically disadvantaged families did not support the CSFT. The school district located in the community with the highest retail sales, some of the newest facilities, and the lowest number of economically disadvantaged children voted overwhelmingly against the CSFT. In a nearby community, with high schools only 10 miles away from each other, the community voted to support the CSFT. This community has a high school that was built almost one hundred years ago, was in obvious need of upgrades during a visit, and approximately 98% of its students are low income (Illinois Interactive Report Card, 2013). The question must be asked, were school leaders and voters looking after the good of *all* kids when designing their clear plans for the use of the CSFT and when voting on Election Day?

The only grassroots movement discovered during this case study came in the form of church groups (in communities with a high number of low income families) advocating for the children in their community, pulling together to support the CSFT. The school leader from Louis Town stated that he/she took time to meet with all of the local church groups in his/her school district and helped explain the CSFT to them early on in the campaign months. The churches in Louis Town hosted informational meetings with their membership, created yard signs, and actively supported the CSFT through formal and informal discussions in the community.

The idea of not wanting to help kids in neighboring schools continued to reappear in interviews, documents, and was even hinted at in print media. An appointed political leader of one of the larger communities in Mary County commented that it was the state’s job to step in to help communities that could not help themselves. School districts without property wealth can either raise property taxes to generate wealth or rely on the state formula to provide their schools with adequate and equitable funding. While
interviewing school and community leaders from Louis Town and another small community with a high number of low-income families, it was stated by both that their community members would not be in support and most likely could not financially afford a property tax rate increase. No doubt, much research is available outlining the strategies districts utilize to make their budgets, and it would be easy to point fingers and blame districts for not spending money wisely. But the idea of not wanting to help all kids came up over and over again. For districts that were not lacking in funds, passing CSFT was seen as an initiative that would not benefit them directly.

**No Opportunity for Input**

The fourth theme was that the public was not provided with an opportunity to provide school boards and school leaders with ideas and input on how to use the CSFT revenue. Those arguing against this theme may claim that the school board represents the community; therefore, the community did have input. But the reality is that the public often lumps school board members into the same category as superintendents, principals, school leaders, and other government employees. One question that should be raised is whether or not school board members vote based on their own ideas and values, or upon the area of the community they represent.

Retired school officials interviewed shared that community meetings, surveys, and input should have been sought by school leaders to gauge the level of support for CSFT before making decision. To look more closely at whether or not community members were provided opportunity for input, board agendas and minutes from school board meetings were analyzed. All board minutes did indicate a section of the board agenda allowing public input. There was no evidence of public input as it related to offering suggestions and ideas on how to utilize the CSFT revenue. There was evidence that two districts hosted community meetings geared specifically towards seeking input. The minutes from one of these meetings were not available. The minutes from the other community meeting indicated that school administration, board of education representatives, and three community members were present at the meeting. Other districts may have hosted community meetings to seek input, but documents analyzed and interview subjects gave no indication of such taking place.

The lack of opportunity for input very well could have led to the idea of one sub-theme that developed about not having a grassroots effort in place. There was no doubt that a major grassroots effort did not take place on the pro side of the campaign. A few retired school administrators were heavily involved with behind the scenes campaign plans while other retired administrators wrote letters to the editor. One retired administrator reported:

> As a retired superintendent, I saw the need for this tax and even wrote a letter to the editor… I will tell you that I was never asked to support this initiative by anyone in the schools. Better yet, different community groups I belong to were never asked for input… Groups like ours expect schools to come to us to request our support. Most of the members of groups I belong to made their decision after reading editorials in the newspapers and listening to the scuttlebutt at the coffee shop. Retired guys like me have a lot of time on our hands and would have been

43
happy to help with a grassroots campaign to support our schools if we would have been asked to do so…. Sometimes we just need to be provided an opportunity to share our input. (Interview with Retired Public School Administrator)

Oftentimes, subjects were knowledgeable about the vast amount of time the pro-CSFT campaign organizers and school leaders spent designing their own plans on how to use the CSFT revenue but never mentioned providing an opportunity for public input. Two teacher union leaders from different school districts shared that their associations were never asked for input about facility needs. The same teacher union leaders shared that this scenario also played out in other districts. This theme was also evident while analyzing media articles. Media articles with quotes from anyone other than school superintendents on plans for the CSFT revenue were not found.

In today’s age of technology, with online surveys, free services offering surveys through text on cell phones, and instant feedback able to be provided through any number of web sites, it seems as though school districts would have provided their communities with an opportunity to share ideas on how to spend the expected twenty million dollars per year. Simply wanting to learn more about why this did not take place, two school leaders and a former school board member from three different communities in Mary County were contacted and asked about this topic. The first school leader shared that he/she felt as though the board represented the community and had made their list of potential ideas during an open board meeting. The second school leader commented that looking back on the entire campaign process, “this was a key missing ingredient” (Interview with School Leader). The school board member stated that their members and the school leaders from their district did seek input from community members during informal conversations during public meetings. When asking a follow-up question about community input to a Mary County school leader who supported the CSFT initiative responded that:

If the sales tax option is ever brought back to Mary County, we will be hosting town hall meetings and reaching out to all stakeholders… I realized then and realize even more now that we did not have all of the right people on the bus. (Interview with Mary County School Leader)

**Distrust of the Process**

The final theme was that voters were unclear about what districts were planning to do with the CSFT revenue and did not trust school official and school boards to spend the money on worthwhile projects Voters did not trust that the revenue was going to be used as promised and did not believe that the sales tax was going to make its way safely from the store register, to the state, and then back to the schools. The level of mistrust was a constant message found through interviews and analyzed documents. The anti-CSFT campaign materials not only hinted towards a distrust of public officials, but included brochures with an explicitly message about not trusting officials to spend the money on schools. Not one interview subject commented that they did not trust school officials, but it was often commented that the average voter had a perceived level of distrust of all government officials; elected political officials, non-elected school officials, school board
members, and other school leaders deemed “government officials.”

Interview subjects shared that they remembered when Illinois introduced the lottery in the 1980’s and riverboat casinos in the late 1990’s. Several subjects commented they remembered politicians promising revenue generated from the lottery and casinos would help benefit public schools. What they remembered most was that in reality, money generated by the lottery and the casinos is sent to the Common School Fund (CSF), with a matching reduction from already promised State appropriations. Perception was their reality; if voters perceived that the government officials were not being honest in the way in which the revenue was handled and then related this perceived dishonesty to the newly introduced CSFT, it was possible that voters saw this as just another way for the State to deceive the public.

Regular comments about why certain districts were choosing to abate the entire amount while others were planning to abate different amounts also played into this theme. Even with the some of the districts clearly spelling out what they planned to do with the money in terms of abatement, other districts were not clear and did not consistently send a message about their exact plans for the CSFT revenue. The public perception of inconsistent messages resulted in a lack of support for CSFT grounded in distrust of government officials, including school officials.

Discussion

What Was Learned

The complexities of this case study seemed overwhelming at times and the findings differed greatly from what we anticipated when this study began. In the end, it was clear that the school leaders claiming support for the CSFT were not united across the county. Many of them met together, helped design a campaign plan, requested and received financial support, but in the end, they were not united in support. Three school leaders representing three different school districts were not united in their message against the CSFT, but their individual messages of not supporting the initiative was evidently enough to influence a majority no vote. The idea of voters not supporting the CSFT due to school officials not being united makes sense when taking the “social exchange theory” (Homans, 1958) into account. Homans’ theory suggests that all relationships have some type of give and take. The give and take must have some type of balance or fairness for the relationship to continue. In this case, the relationship between the voters and the pro-CSFT campaign leaders was not balanced. The lack of a unified front was too much of a negative, and voters chose not to continue the relationship. In other words, they chose not to support the pro-CSFT leaders and placed a “no” vote on Election Day.

School funding is hard for the average school leader to understand, let alone, the average voting citizen in Illinois. When a new county school facilities occupation tax is thrown into the mix, school administrators must organize to provide stakeholders with an understanding of the law. They must also develop a clear and consistent plan to spend the money. Some would argue that the plan must include a promise to abate a percentage of property taxes. With the variety of approaches to school funding in public schools (Hanushek & Lindseth, 2009), school districts in Illinois look to and should continue to
look to alternative school funding methods such as the County School Facility Tax.

The Serrano v. Priest case out of California brought a great deal of attention to school funding in many states (Dayton & Dupre, 2004). In the Serrano v. Priest decision, courts decided that the State of California was relying too heavily on property taxes to fund its public schools (Berke & Callahan, 1972). With this in mind, why did school leaders in Mary County not push the abatement of property taxes more than they did? If supporters were to go back and push the abatement idea further, would it have convinced voters to support the CSFT? Or, did some school districts push the abatement of property taxes too much and not focus their campaigns on rebuilding their facilities?

This case study shows that voters in communities with a high percentage of low-income students did see the need for new facilities and property tax abatement. They ended up supporting the CSFT campaign and voted “yes” on Election Day. Unfortunately, their neighbors with new schools did not see the need that other communities had. The neighbors may have voted against the CSFT because their children already had new schools, and they did not want to help children in neighboring school districts. Whether intentionally being inconsiderate of neighboring districts by voting against the CSFT or voting without understanding that it would hurt others could not be determined through this case study, but a lack of consideration of others was evident.

Social Exchange Theory (Homans 1958) suggests that human relationships are formed by the use of a cost-benefit analysis. The economic roots of this theory play into the role of why humans, voters, chose to support or oppose the CSFT. The idea that Mary County voters weighed the benefits and cost of the CSFT to make their decision is the basis for the themes found through this case study research. The idea of voters in wealthier areas of Mary County not seeing a need for the money and then voting against the initiative is disheartening but makes sense when taking the “social exchange theory” (Homans, 1958) into account. Seeing that all school leaders could not come together with a clear plan to help all kids in Mary County is also disheartening, but again, it makes sense when taking the” social exchange theory” (Homans, 1958) into account. The idea of providing nice schools for all children in Mary County was never mentioned by interview subjects, media, pro-CSFT or anti-CSFT campaign material. But in the political and economic climate of the time of this election, it may have been a liability to do so. After all, school leaders of any given school district represent the interests of their particular school district. They do not represent the interests of all children.

School leaders did not do an adequate job providing community members with input on what should be done with the money. In order to better understand this theme in relation to the “social exchange theory” (Homans, 1958), I relate the “costs” that Homans describes with the sales tax and the desire for input as the “benefit.” Without the benefit of school leaders providing their communities with input, they did not see a benefit to supporting the initiative. Therefore, they voted against the CSFT.

Many of the interview subjects indicated during this case study that they questioned the sales tax process, that the did not trust the fact that the CSFT money would end up where it belonged, and that they were possibly influenced by the negative messages sent by the wealthy and powerful special interest groups working behind the scenes to oppose the CSFT initiatives. Although a theme about wealthy and powerful special interest groups did not emerge, it seems an important point to mention that
Informants and Elites did mention this idea as a possible reason for school referendum having such a difficult time passing in Illinois. One Informant stated that,

Groups like the Tea Party and Americans For Prosperity are far from being grassroots movements. They are funded by super conservative right-wingers like the Koch brothers…. They claim to help educate people on economic policy, but they do nothing more than promote distrust of government and tell their followers how to fight against all taxes. What they don’t realize is that without taxes, services are not provided. (Interview with Informant)

Distrust of government officials in the national media has resulted in distrust of local government officials. Distrust of local government officials has resulted in distrust of school officials. The combination of a new sales tax, distrust of the sales tax process, and distrust of public officials so openly reported in the media, led to the failure of the CSFT. Homans defines “cohesiveness as anything that attracts people to take part in a group” (Homans, 1958, p. 599). We maintain that even though voters closed the curtain and voted by themselves on election day, the media headlines about government corruption, massive distrust of public officials around money, and the questions about whether or not schools were actually going to end up with the money “attracted people to take part in a group” (Homans, 1958) to vote against the CSFT.

Implications

Throughout the history of the United States, the state and federal governments have become increasingly involved in the control and funding of American public schools. With this, why was it that elected officials did not step in and help run the campaign to support the schools? Local school leaders, local political leaders, local community organizations, and local business owners do not always look at what is best for all kids. They often look only at what is best for their local kids.

One of the greatest strengths in Illinois is the local control we have over our schools. But, this is probably our greatest weakness when dealing with trying to pass a County School Facility Tax issue. Unfortunately, on any type of collaborative initiative, the idea of local control works against school leaders. Many examples of this philosophy were seen in this case. Hosting a meeting with school leaders representing each district in Mary County seems like an easy task. Imagine hosting a meeting with the same 14-18 school leaders and asking them all to walk out the door and follow a plan that deals with raising taxes. Imagine further, that while trying to pass this tax, unemployment levels were on the rise and wealthy political activists groups worked behind the scenes against the plan.

Voters in one community in Mary County did not see the need for the tax due to their new facilities, while voters in another part of the County desperately needed the money to repair or rebuild their facilities. Elected officials and school officials either chose not to support, supported with mixed messages, or remained on the sidelines; these mixed responses were likely confusing to voters. But, school leaders are not trained to be politicians. Playing the political game of “you scratch my back and I will scratch your
back” is likely not what makes most educators tick. Most educators thrive on providing children with opportunities to learn and grow. Politicians thrive on making political deals. As school leaders are sucked further and further and further into the world of politics, we must learn to collaborate with the politicians and educate them on how legislation drastically affects the day-to-day operations of our schools.

If we are to provide an adequate and equitable education for all children, we, as school leaders, must step up and take a stance for all children. Even if this stance does not provide an immediate reward for the children in our home district, we must see the big picture and understand that other children would benefit. Even if this stance is not popular with our own board of education, a stance must be taken. We must overcome our differences and unite for the good of all children. Whether trying to pass a sales tax initiative or taking a position on school pension reform, we must provide our communities with a clear understanding of what we stand for as professionals. We, as professional educators, must be considerate of others in our neighboring communities and figure out ways to help one another. We cannot do this alone. We must identify our stakeholders, have a better understanding of why they choose to support or oppose certain issues and provide them with input as we make plans for the future of our children. If we, as school leaders, are to bring a higher level of trust and respect to our profession, we must distance ourselves from those government officials either perceived as corrupt or charged with corruption. If this can happen, coffee shop gossip, Friday night fish fry conversation, and local media will no longer question our integrity. Soon after, Springfield politicians will stop producing unnecessary and unfunded mandates that force more accountability on schools. Special interest groups will no longer have a reason to work behind the scenes to fight against our clear mission of providing all children with an adequate and equitable education.

The burden of funding local school districts, especially in Illinois, has continued to fall more and more on local communities. As alternative funding measures like the CSFT present themselves, school leaders must figure out a way to work collaboratively, share resources, and provide the public with consistent and clear messages. School leaders must partner with higher education, state associations, elected officials, media, brokerage and investment firms, consultants, community organizations, business owners, those opposing offer them opportunities for input and collaboratively design plans on how to use the CSFT revenue. This type of unified collaboration will help build trust and encourage community members to organize real, grassroots efforts to support alternative school funding issues that help all children.
References


Native Americans with Disabilities: Postsecondary Education Outcomes

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration (NCPEA) as a significant contribution to the scholarship and practice of school administration and K-12 education.

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This correlation study examined relationships between special education and standardized testing variables of 100 Arizona secondary school districts with Native American populations, and the archival records for postsecondary outcomes between 2012 and 2014 of students with disabilities, using archival data collected by the Arizona Department of Education. Logistic Regression analysis results indicated no statistically significant relationships between Arizona Instrument to Measure Success test scores and special education services funding in relationship to districts that participated in compliance reviews for state performance plan Indicators 13 and 14, detailed in the article. Recommendations included establishing time-lines for disaggregated data collection, Local Education Agencies should increase practicing student outcome improvement strategies, and more targeted and specific research using similar variables with disaggregated data sets.
Introduction and Background

Under the Individuals with Disabilities Education Act (IDEA) 2004 the transition from secondary education into postsecondary education or training must be included in an individualized education plan (IEP) for eligible students with a disability by age 16 (Wright, 2004). Additionally, in Arizona, IEPs that included a transition plan had to document graduation requirements for standardized testing results of the Arizona Instrument to Measure Success (AIMS) or AIMS-A (alternative). At the time in 2004, money was allocated to local education agencies (LEAs) as special education service funds (SESF) to assist with financing the special education services provided to students through their IEPs (Wright, 2004). Other federal requirements included all states develop and submit a State Performance Plan (SPP) to be reported on annually to the Office of Special Education Programs (OSEP). Currently, there continues to be 20 SPP Indicators. State Performance Plan Indicator 13 measures whether or not a student’s IEP transition plan has appropriate postsecondary goals, services, and course of study to reasonably allow the student to meet his/her postsecondary IEP goals. The SPP Indicator 14 measures the outcomes of a student’s engagement in postsecondary education, training, and employment one year after they left high school (State of Arizona, 2012). Up until 2014, every special education student in Arizona was measured under these federal guidelines, including Native American students (State of Arizona, 2016).

In 2012, the state of Arizona had the third highest population of Native Americans in the nation (353,386), which represented 5.6% of the population in Arizona as well as 1.2% of the U.S. population (U.S. Department of Commerce, 2013). Nationwide, more than 60% of the Native American population is identified as cognitively impaired and are twice as likely to be identified as having a specific learning disability (Snyder & Dillow, 2010). This population had the highest disproportion rates for special education in the nation, and (even with such high rates of disabilities) there is little literature on these student’s and their postsecondary outcomes due to comparatively small population sizes (Adelman, Taylor, & Nelson, 2013). The Arizona Department of Education (ADE) has, however, attempted to measure outcomes of Native American students with disabilities under the guidelines of both IDEA (2004) and No Child Left Behind (NCLB) 2001 (State of Arizona, 2012).

In the U.S., NCLB (2001) stipulated the implementation of statewide test-based accountability systems for public education, including special education. Since its implementation, this accountability system has been the main approach for states to measure student outcomes, including students with disabilities (Alexander, 2011; William, 2010). According to NCLB mandates, each school must test five specific racial groups: a) African American, b) Native American, c) Asian or Pacific Islander, d) Hispanic, and e) White. Three different categories of students are also to be tested: a) students with disabilities, b) students with limited English proficiency, and c) economically disadvantaged students (Kreig, 2011). Kreig, (2011) also indicated that schools that have fewer than 30 students in a particular demographic group automatically receive a score of meeting for the Annual Yearly Progress (AYP) for that group. This could partly explain why Native Americans, and especially Native Americans with disabilities, are often purposely not included in school wide data counts. Because of strict federal guidelines, the targeted achievement goals in Arizona set in place over a decade ago for AIMS under NCLB was designed to ensure all students were academically proficient by 2014; a standard that was not met (Garcia & Ryan,
These targeted goals required Arizona students with disabilities to be measured specifically through AIMS scores and IDEA 2004 postsecondary outcomes. The SPP Indicators 13 and 14 allow Arizona to continue to meet IDEA postsecondary measurement requirements (State of Arizona, 2016).

State Performance Plan Indicator 13 measures the number of adolescents, aged 16 and above, with an IEP that contain: a) relevant measurable postsecondary goals, b) annual updates, c) developed from age appropriate transition assessments, d) transition services, e) outlined courses of study that allowed the student to meet postsecondary goals, and f) provide annual IEP goals related to the student’s transition service needs. To meet compliance, there must also be evidence the student was invited to the IEP meeting, transition services were discussed, and relevant representatives were properly invited to the meeting. Additionally, SPP Indicator 14 keeps track of the percentage of adolescents no longer in secondary school that also had IEPs in effect at the time they left secondary school (Erickson, Noonan, Brussow, & Giplin, 2013; State of Arizona, 2012). It measures the participation in postsecondary settings one year after a student left or graduated from high school. These particular IDEA reauthorizations made the ultimate purpose of special education to be the preparation of children with disabilities for adulthood. However, some Native American cultures might continue to struggle with this process because of practices that place value on independent living, work environments, and consumerism. This has created disconnect and is still one of the major sources of postsecondary transition failure in the U.S. (Leake, Burgstahler, & Izzo, 2014; Smith & Routel, 2010).

The National Advisory Council on Indian Education's Annual Report to Congress (2013) stated that despite the likelihood of existing examples of student success, it was nearly impossible to prove their outcomes with limited to no available data, and as a result, best practices developed at some schools are not being replicated in others. Additionally, Adelman et al., (2013) pointed out that poor public school systems on Native American reservation land and lack of academic preparation for Native American students at the K12 level continue to be severe barriers to college readiness and postsecondary accomplishments. However, creating opportunities for students to maintain their cultural identity is an example of what does increase investment in their education and future postsecondary success (Adelman et al., 2013; Flynn, Duncan, & Jorgensen, 2012).

Because Native American students continue to “fall below the national norms for educational attainment,” creating a new “data set that will count in quantitative discussions of educational attainment” could contribute to the “sparse research literature” (Akee & Yazzie-Mintz, 2011, p. 120). Further research that carefully represents Native American students is clearly needed to improve the quality of available data and allows for additional statistical analysis of the target population (Akee & Yazzie-Mintz, 2011).

**Purpose of the Study**

The purpose of this study was to assess whether relationships existed between SPP Indicator 14, AIMS test scores, and SESF from Arizona Local Education Agency’s (LEAs) that participated in state compliance reviews for SPP Indicator 13 for Arizona Native American secondary students with disabilities. The findings of this study may provide results to inform the demand for the “results oriented education” that was to be provided through both the transition provisions of IDEA and through the measurement of a student’s progress and
achievement in various assessments (Erickson et al., 2013, p. 2). Additionally, findings may be used to support whether the fulfillment of compliance reviews of SPP Indicator 13 IEPs, AIMS achievement, and SESF close the Native American student achievement gaps and most specifically for students with disabilities (Adelman et al., 2013; Akee & Yazzie-Mintz, 2011; Erickson et al., 2013; Flynn et al., 2012).

Theoretical Framework

Productivity theory emerged from the idea of productivity in the field of economics in 1928 by Cobb and Douglas (Pullen, 2009; Walberg & Tsai, 1983). It has been defined as “achieving the maximum output of a process with the use of minimum inputs” (Duyar, 2006, p. 1). Duyar, McNeal, and Kara (2006) stated that productivity theory could be applied to education and be used to analyze relationships between inputs and outputs in the same way economists analyze these same relationships. Harris (2007) discussed how too much input decreases efficiency, which decreases the production (outputs), which was the main concept behind productivity theory as designed by Cobb and Douglas (1928).

Productivity theory offers a framework to view the educational inputs and outputs of Arizona Native American students with disabilities in order to consider the “inconclusive policy implications” implemented at the primary and secondary school levels such as “scrupulous testing and accountability systems” associated with education productivity research (Duyar, 2006, p. 10). By placing school inputs or any major correlates of education into the formulation of productivity theory, research can demonstrate that if any factor is at a zero point then learning multiplied by zero yields zero, nullifying those factors, and if certain factors are fixed then adding more of a factor will lead to diminished returns to the factor if its exponent is less than one (Walberg & Tsai, 1983).

Literature Review

Standardized Assessment and Native American Education

Chakrabarti (2014) found that special education students and economically disadvantaged students showed lower performance in both high- and low-stakes subjects even when schools placed attention on areas that would cause reprimands from the government under NCLB; rather, this group of students showed decreased performance in all subject areas. In Arizona, public school math proficiency levels are the lowest for Native Americans students with disabilities. Additionally, charter school results indicate Native Americans are the lowest performing cohorts in both reading and math (Crane, Huang, and Barrat, 2011). Krieg’s (2011) secondary quantitative regression analysis of state standardized math test scores found that the redirection of resources to specific racial groups caused decreased performance of students that were part of successful racial cohorts. Overall, schools with greater minority populations do not appear to be fairly ranked in test results and using a school’s demographic profile has little predictive power in identifying gains in student achievement (Grissmer, Ober, and Beekman’s, 2014).

Pressure to demonstrate student success on standardized testing for all racial groups has led to professional misconduct for teachers as well. A study conducted by Amrein-Beardsley, Berliner, and Rideau (2010) provided insight into cheating that occurs during

53
these standardized tests. In Arizona, more than 50% of respondents reported knowing a colleague who had cheated on AIMS, and more than 50% reported that they themselves engaged in cheating. Although achievement gaps insignificantly changed and students were unfairly measured as a result of the policies originating from NCLB, achievement test scores (such as AIMS) continued to be the current quantitative measure used in educational policy discussions by educators, politicians, the media, and the public (Nichols, Glass, & Berliner, 2012).

Native American Representation and Experiences in Special Education

Nakano and Watkins (2013) conducted a quantitative confirmatory factor analysis on one individual assessment instrument used nationwide, the Wechsler Intelligence Scale for Children -Fourth Edition (WISC-IV), because it was commonly used to identify Native American students eligible for special education services. Although subtest scores for the sample group were lower and less variable than the testing group used to norm the WISC-IV, the standard deviations of the sample group were able to demonstrate the appropriateness of this test to be used when identifying Native American students for special education services. However, racial-minority students are the greatest risk across all categories for special education identification (Sullivan & Bal, 2013).

Because concerns of overrepresentation of Native American students in special education, and minorities in general, is still at the fore-front of special education research, Zhang, Katsiyannis, Ju, and Roberts (2014) conducted a multilevel model quantitative study and found that rates of overrepresentation in special education has remained relatively unchanged over the past 10 years. And, Native Americans total special education population percentage rates have increased the most. In addition to high numbers of special education placements, these researchers found a large portion of these students were not staying in school long enough to determine the effects of their special education placement and transition services.

Of all groups, Native American students are most severely overrepresented in discipline referrals and removal to alternative education settings. However, expulsions of students with disabilities were rare events and were highly unequally distributed across racial/ethnic categories in the Vincent, Sprague, and Tobin (2012) descriptive analysis quantitative study. The study determined that Hispanic students were overrepresented in exclusionary discipline actions such as in-school suspensions and out-of-school suspensions, whereas Native American students had the highest overrepresentation in removal to alternative education settings. A comprehensive analysis of the data determined that Native American students lost twice as many days of classroom time as compared to White students. The combination of high overrepresentation in special education, high dropout rates, and lost classroom time due to disciplinary actions had a profound and negative effect on the postsecondary outcomes of this population of students with no indication of improvement under current special education practices (Gritzmacher & Gritzmacher, 2010; Logan, Minca, &Adar, 2012; Vincent et al., 2012; Zhang et al., 2014).

Another similar quantitative study (Erickson et al., 2013) used bivariate linear regression to explore the relationship between compliance of SPP Indicator 13 in relation to SPP Indicator 14 at the LEA level. Results indicated the average rate of LEA compliance was 82% out of 100%. Ultimately, this study suggested SPP Indicator 13 compliance did not
guarantee a positive postsecondary outcome (SPP Indicator 14). However, it did improve a student’s ability to identify appropriate postsecondary education options based on their skills and interests.

**Native American Transition to and Retention in Postsecondary Settings**

As of 2012, less than 1% of all students enrolled at postsecondary institutions were Native American, and only about half of these students who did enroll into a major college or university made it past the first year, compared to the general population, which had a 70% first year completion success rate (Flynn et al., 2012). Flynn et al. (2012) conducted a first of its kind qualitative emergent phenomenon study that explained Native American postsecondary transition and retention. This analysis revealed multiple barriers that continue to stand as roadblocks for college retention for these students. Some of the most prominent issues are interpersonal, financial, racism, discrimination, and inequality extending from historical trauma suffered by many generations of Native Americans at the hands of White settlers. This researcher also discovered students had feelings of inadequacy because of living on a reservation with the absence of student mentorships, which led to feelings of inferiority that reduced independence and caused feelings of isolation. This eventually evoked the inability to effectively take risks, which caused a total failure of students to identify themselves as even having a disability and getting services afforded to them. In contrast, Pellegrino, Sermons, and Shaver (2011) conducted a non-experimental quantitative study to assess the disproportionate number of students enrolled in universities and revealed Native Americans were proportionately represented despite having high national rates of special education services in secondary school settings. Studies reveal Native Americans do experience postsecondary success. However, understanding how these accomplishments are being achieved requires further research (Adelman et al., 2013).

Examples of studies outlining Native American success indicate that parent expectations show the biggest relationship to positive student outcomes. For example, Doren, Gau, and Lindstrom (2012) conducted a secondary analysis quantitative linear logistic regression to measure these motivations. A student’s likelihood of graduating with a diploma, attending postsecondary education facilities, and obtaining a paid job were all significantly and positively related to parent expectations. Schmidt and Akande (2011) used a qualitative phenomenological research design and found that key findings for student success included having other college programs available such as Native languages, Native artwork, and cultural events that were in place more often than on traditional university campuses. Counseling and tutoring occurred more often on these tribal campuses and were successful in providing identity building and community. Having positive support systems better prepares Native Americans for postsecondary college success (Andrade, 2014). Native American students who do not have systems of support are typically left on their own to seek services and do not fare as well (Applequist, Keegan, Benitez, Schwalbach, 2012).

**Research Methods**

A quantitative correlational design was used to retrospectively examine archival data through non-experimental correlation in order to determine natural relationships of select variables for Arizona Native American students with disabilities (Field, 2009; Seber & Lee, 2012).
The data that was collected for each variable was a result of policy and procedures that had already taken place in Arizona for Native American students with disabilities between the 2012 and 2014 school years (State of Arizona, 2012). The following research questions guided this study:

**Q1.** What relationships exist between AIMS scores, SESF, and SPP Indicator 14 outcomes?

**Q2.** Do SESF and AIMS scores predict SPP Indicator 14 outcomes?

**Hypotheses**

**H1<sub>0</sub>**. No significant relationships exist between AIMS scores, SESF, and SPP Indicator 14 outcomes.

**H1<sub>a</sub>**. Significant relationships exist between AIMS scores, SESF, and SPP Indicator 14 outcomes.

**H2<sub>0</sub>**. SESF and AIMS scores do not predict SPP Indicator 14 outcomes.

**H2<sub>a</sub>**. SESF and AIMS scores significantly predict SPP Indicator 14 outcomes.

The study variables that were representative of programs and policies included two predictor variables from LEAs that participated in compliance reviews for SPP Indicator 13, and provided data for students AIMS test scores and SESF (Erickson et al., 2012; State of Arizona, 2012). The criterion variable, SPP Indicator 14, provided representation of what students various outcomes were one year after they left secondary school and had subsequently been contained by these programs and policies while in attendance at an Arizona LEA (State of Arizona, 2012).

**Population and Sampling**

The sampling frame came from Arizona school districts that were required by ADE to participate in SPP Indicator 13 compliance reviews. The target population was derived from approximately 55,312 Native American K12 students in Arizona, and four thousand eight hundred and twenty-eight or 10.1% of these students were enrolled in special education (ADE, 2015a). All LEAs with K12 Arizona Native American students with disabilities that received SESF, participated in state compliance reviews for SPP Indicator 13, had recorded AIMS assessment scores, and sent out requests for replies to former students SPP Indicator 14 surveys one year after leaving secondary school between 2012 and 2014 were included in the sampling frame. The LEA public data records selected for the study represented schools in all three types of school districts in Arizona; rural, urban, and reservation land. Because the main goal of this study is to focus on particular characteristics of a population a purposive homogenous sampling was used to select the LEAs needed for a statistically significant research sample and who meet the criteria of the sample frame. A random selection sampling could not occur due to the limited number of districts that met the study qualifications. The G* power 3.1 software was used to conduct a priori sample size for regression (medium effect size =.15; power of .95; alpha of .05), which indicated that a minimum sample of 107 LEAs was adequate for rigorous statistical analysis (Field, 2009). However, only 100 districts in Arizona met these qualifications.

**Operational Definitions of Variables**

The criterion variable used for this study was SPP Indicator 14. Because the ADE did not have disaggregated student data sets data had to be collected then coded to run a proper
statistical analysis. This ratio variable represented the range (0-100) of special education students that responded to the post school outcome (PSO) survey sent out by ADE to document SPP Indicator 14 outcomes one year after a student left high school between 2012 and 2014 school years. The first predictor variable was the student AIMS scores. The AIMS test score data represented an interval-level scale based on the reported scaled score for reading (500-900), writing (300-700), and math (300-700) (ADE, 2015c). The second predictor variable was SESF. This study measured SESF in terms of total dollars allocated per year per LEA as an interval-level variable (1-10 million). Indicator 13 compliance reviews were used as a qualifier for the study variables only. Individual Indicator 13 results could not be included due to there was no numerical data recorded at the state level at this point in time.

Data Source, Procedure, and Analysis

Archival data were collected from ADE for LEAs with Native American students identified as having had an IEP the year they exited high school during the 2012 through 2014 school years. These variables came from a sample of LEAs selected for compliance reviews of SPP Indicator 13. This data was publicly available on the ADE main website. However, at the time, ADE did not have a system in place to attach the results of this monitoring to any individual student accountability information system number. This data was stored at local LEAs, which were not required to keep this data on file, making the process of locating the actual results a burden to school districts at the time (A. Trollinger, personal communication, June 23, 2015; R. Hagstrom, personal communication, August 5, 2015).

A final purposeful sample of 100 LEAs were selected for this study determined by the size of the Native American student populations that resided within a school district and data that were available for these districts. This sample size, 100, was seven districts below the required sample size, 107, from the power analysis, but rigorous enough to conduct hypothesis testing (Field, 2009). The data collected from ADE public websites was imported into SPSS for analysis. The SPP Indicator 14 outcomes reported for selected LEAs were confirmed to include resident Native American populations from 2012-2014 (ADE 2015a, ProximityOne, 2015), and the criterion variable, SPP Indicator 14 was coded for ordinal regression categorization for three values (1= less than 73%, 2= 73%, and 3= above 73%).

After data collections, SPP Indicator 14 variables had to be dummy coded, which allowed for data to be changed into numerical values that could be used in regression models for initial parametric analysis. The number one was used with a separate column apart from its own reference category using zero: (1) competitive employment (youth who have worked for pay at or above minimum wage with others who are nondisabled for a period of 20 hours a week for at least 90 days any time in the year since leaving high school), (0) non-competitive employment, (1) higher education (youth who have been enrolled full or part time in a community college, or a college/university for at least one complete term, at any time in the year since leaving high school), (0) no higher education, (1) some other employment (youth who have worked for pay or been self-employed for a period of at least 90 days at any time in the year since leaving high school), (0) no other employment, (1) other postsecondary education or training (youth enrolled full or part time at least one complete term at any time in the year since leaving high school in an education training program), (0) no other postsecondary education or training, and (1) other, (0) no other (youth that do not
meet any ADE post secondary requirements).

The AIMS test scores and SESF archival data were retrieved from ADE public data sets. The amount of SESF an LEA received was determined by the population of students with disabilities at each LEA and documented within the ADE auditor’s office (State of Arizona, 2012). Initially, Histograms and Q-Q plots were visually inspected for linearity and normality, which were confirmed by a Shapiro-Wilk analysis. Additionally, a Durbin-Watson analysis and Variance Inflation Factors were used. These tests revealed that the assumptions for parametric methods were not met therefore nonparametric methods were required for hypothesis testing (Field, 2009).

Assumptions

The first study assumption was that LEAs followed all of the NSTTAC checklist compliance requirements of SPP Indicator 13 when creating postsecondary transition plans for Native American students with disabilities. At the time, there was no link to LEAs and student accountability information system number numbers to verify compliance requirements were met. A second assumption was that LEAs who received SESF had Native American students with disabilities that actually took the AIMS test. Although this was a state requirement, a student may not have been available to take the test for any given reason. A third assumption was that students returned and/or completed and returned all sections of their SPP Indicator 14 survey after it was received from their former high school. A final assumption was that LEAs kept appropriate special education records for ESS monitoring and ADE was able to accurately collect this data and archive it.

Limitations

The first limitation of this study is that it only represented Arizona LEAs with Native American students with disabilities that had participated in secondary special education programs. The second limitation was that this study did not address all possible combinations of special education policies and practices implemented for Arizona Native American students, nor was it reflective of Native American students participating in other state’s special education programs. A third limitation is that data collection needed for each research variable was dependent upon an LEAs ability to have followed proper procedures for ADE special education documentation, which may have limited the sample of LEAs examined and possibly excluded schools that may have made a statistical impact on results. A fourth limitation was that results could not be generalized to all students in Arizona secondary special education programs (regardless if they were held to the same standards) even though outcomes may in fact have been similar for other racial cohorts. The final limitation was that the state of Arizona did not have disaggregated data sets to determine individualized results for the variables used in this study.

Delimitations

Archival data were delimited to student records for LEAs with Native American secondary student populations with disabilities stored at ADE and who attended LEAs between 2012 and 2014. The data were also delimited to the state of Arizona, which included 230 school
districts, 406 charter schools, and 13 joint technological education districts (ADE, 2015b). Additionally, the data sets were not reported by race by ADE and it was not possible to distinguish the measure of school district data into racial cohorts (only by school districts that had Native American student populations), which ranged from .10% to 99%. The last delimitation included archived data that came from each LEA that participated in compliance reviews for SPP Indicator 13 IEPs. The ADE had on record the results of AIMS test scores, the amount of SESF LEAs received, and the results of each LEAs SPP Indicator 14 survey results.

Results

A final purposeful sample of 100 LEAs were selected for this study determined by the size of the Native American student populations that resided with in a school district and data that were available for these districts. This sample size, 100, was seven districts below the required sample size, 107, from the power analysis, but rigorous enough to conduct hypothesis testing (Field, 2009). The data collected from ADE public websites was imported into SPSS for analysis. The SPP Indicator 14 outcomes reported for selected LEAs were confirmed to include resident Native American populations from 2012-2014 (ADE, 2016; ProximityOne, 2015), and the criterion variable, SPP Indicator 14 was coded for ordinal regression categorization for three values (1= less than 73%, 2= 73%, and 3= above 73%).

Data assumptions

Histograms and Q-Q plots were visually inspected for linearity and normality were found to be nonlinear and not normally distributed, which was also confirmed by a Shapiro-Wilk analysis ($p = .000$). Therefore, assumptions for normality and linearity were violated (Field, 2009). Additionally, a Durbin-Watson analysis (.963) confirmed independence of errors was not met. Variance Inflation Factors were less than five (1.009), so it was determined that multicollinearity existed between the two predictor variables. Therefore, as the assumptions for parametric methods were not met, nonparametric methods, such as logistic ordinal regression, were required for hypothesis testing.

Spearman’s Rho correlation, nonparametric analysis resulted in no statistically significant relationships between the two predictor variables, AIMS scores and SESF, and the criterion variable; SPP Indicator 14 outcomes (see Table 1). Therefore, H10 could not be rejected and no support existed for the alternate hypothesis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>PV1 AIMS scores</th>
<th>PV2 SESF</th>
<th>CV State Performance Plan Indicator (SPP) 14 outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV1</td>
<td>-</td>
<td></td>
<td>.920</td>
</tr>
<tr>
<td>PV2</td>
<td>-</td>
<td>.456</td>
<td></td>
</tr>
<tr>
<td>CV</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>SE</th>
<th>Wald</th>
<th>Sig.</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPP14 = 1</td>
<td>-3.992</td>
<td>3.651</td>
<td>1.196</td>
<td>.274</td>
<td>-11.148</td>
</tr>
<tr>
<td>SPP14 = 2</td>
<td>.444</td>
<td>3.607</td>
<td>.015</td>
<td>.902</td>
<td>-6.625</td>
</tr>
<tr>
<td>AIMS</td>
<td>-.003</td>
<td>.007</td>
<td>.208</td>
<td>.648</td>
<td>-.017</td>
</tr>
</tbody>
</table>

\[ R^2_N = .012 \]

Evaluation of Findings

The results of hypothesis 1 indicated there were no statistically significant correlations between the variables. These findings indicated that special education students AIMS test scores and the amount of SESF provided to Arizona school districts were not statistically related to the SPP Indicator 14 postsecondary outcomes of special education students one year after they left high school. Additionally, the results of hypothesis 2 indicated that special education students AIMS test scores and the amount of SESF provided to a school district did not account for SPP Indicator 14 outcomes for students one year after they left high school.

**Hypothesis 1.** No significant relationships were found among AIMS, SESF, and SPP Indicator 14 outcomes. Similarly, this hypothesis outcome reflected findings from other researchers such as Chakrabarti (2014), who also found that regardless of school attention on areas of performance of special education (and schools overall), there were no demonstrated improvements in outcomes for students with disabilities. Additionally comparable, Logan et al. (2012) and Nichols et al. (2012) reported Native American students continued to fall into public data sets blended with other racial cohorts and data for that study were not disaggregated to determine usable results for targeted improvement. Likewise, Robinson-Zanartu et al., (2011) also found Native American sample sizes were too small to conduct analysis in relation to special education policies for Native American students. Moreover, Zhang et al. (2014) found no relationships between special education services and achievement of Native American students as similar to this hypothesis.

Researches who were able to disaggregate data, such as Yazzie-Mintz (2011), found that there were influential relationships between the input of Native American educators
(which included special education) and the performance outcomes of Native American students on secondary national standardized test measures. Additionally, using different variables and disaggregated data, Crane, Huang, Barrat, & Regional Education Laboratory West, (2011) discovered significant relationships between AIMS, special education services, and outcomes for Native American students that the ADE could use as improvement strategies that close achievement gaps. Finally, Krieg (2011), again using disaggregated data, also established that redirecting special education resources to specific racial groups decreased performance for students that were already part of racial cohorts with documented improvements. Therefore, because the current study found no relationships between special education variables and student outcomes and these aforementioned did find results, more targeted and specific research using like variables with disaggregated data sets is desperately needed.

**Hypothesis 2.** Using disaggregated data sets in the current study, SESF and AIMS scores did not predict SPP Indicator 14 outcomes, which was similar to Sullivan and Bal’s (2013) findings. These researchers found no predictive measures due to limited data for individual Native American students. The population was too small therefore this group was excluded from analysis. Furthermore, the hypothesis 2 outcome determined no predictive values for Native American students with disabilities and their outcomes because they were excluded from disaggregated public data sets, and no statistically significant outcomes could be determined. This was similar to Grissmer et al. (2014) who determined short-term achievement gains were less reliable but predictive when analyzing student achievement gains due to the inability to properly identify specific racial group outcomes from available data sets. Likewise, Cabrera et al. (2012) also determined there were predictive values between minority special education student AIMS scores and student outcomes. However, the authors of that study found inconsistencies in data and could not include Native American students, which was similar to the hypothesis 2 outcome. In addition, the hypothesis 2 outcome was reflective of the study conducted by Grissmer et al., (2014) where there were no predictive values of the outcomes for students with disabilities when analyzing statewide achievement data. Finally, in this current study, running tests using more schools to gain more significance in predictive values was not possible due to the fact only 100 LEAs reported enough data to ADE.

In contrast to hypothesis 2 findings in the current study, other researchers were able to use disaggregated data and other variables to find some statistical relationships. Leake et al. (2011) found significant statistical values in unknown predictors of why students with disabilities were less likely to enroll in postsecondary education and employment opportunities. Andrade (2014) found that good mentoring relationships were able to partially predict outcomes of Native American student achievement, but could not define what other factors did; however, Schmidt and Akande (2011) discovered specific individual predictors such as resiliency, school counselor support, and positive sociocultural support led to positive postsecondary outcomes for Native Americans. Gritzmacher and Gritzmacher (2010), Logan et al. (2012), and Vincent et al., (2012) were also able to identify profound predictors of outcomes for Native Americans in special educations. Although not favorable, factors included high representations in special education, high dropout rates, and lost classroom time due to disciplinary action.

Two final contrast studies came from Erickson et al. (2013) and Landmark and Zhang (2014), to which SPP Indicator 13 transition requirements were significantly predictive of
failed benefits to students with disabilities. Finally, Sullivan and Bal (2013) found predictive factors in special education practices that led to negative outcomes for Native Americans. Because these studies were able to use disaggregated data and other variables to find some relationships, whereas hypothesis 2 findings in the current study indicated no relationships, again, future targeted and specific research using like variables with disaggregated data sets is necessary.

**Implications**

Current legislation for special education requires states and their LEAs provide “results orientated education” through both transition provisions of the IDEA as well as through measures of student progress and achievement in various assessments (Erickson et al., 2013, p. 2). The results of the study were able to provide insight into available data sets for Native Americans with disabilities.

**Hypothesis 1.** The first implication suggests that when the state of Arizona followed legislative procedures under federal law for IDEA and NCLB, there were no significant statistical relationships for Native American students with disabilities one year after they transitioned out of high school (Erickson et al., 2013; Landmark & Zhang, 2014). This implies that the outcomes of Native American students with disabilities, once they exited Arizona public high schools, are not related to the amount of inputs of the current special educational system (Sullivan & Bal, 2013). One possible implication is that other factors affected these outcomes for Native American students with disabilities one year after they left high school such as family, cultural connections, and support (Akee & Yazzie-Mints, 2011; Flynn et al., 2012; Krieg, 2011; Landmark & Zhang, 2014; Yazzie-Mintz, 2011; Zhang et al., 2014). Separate from the testing and postsecondary federal mandates imposed on states, a second implication is that the amount of funding provided to an LEA for special education services was not related to outcomes of Native American students with disabilities. It was likely other financial factors were related to student outcomes. Flynn et al. (2012) stated that budget cuts, underrepresentation, inappropriate multirole tasking, and lack of formal education for professional roles negatively impacted student outcomes. However, Flynn et al. (2012) further showed that despite high rates of special education numbers on a national level, Native Americans were proportionately represented in postsecondary school settings, so likely other factors were involved in Native American student transitions to higher education.

**Hypothesis 2.** Study results implicated there was a lack of disaggregated data sets for Native American students with disabilities and it could not be determined if there was an impact from AIMS testing and SESF in the state of Arizona. As noted by Akee and Yazzie-Mintz (2011) and Erickson et al. (2013), it is likely a better system of data collection would allow LEAs to improve analysis of underrepresented populations. Native American student populations were blended into larger data sets of school and state populations, which demonstrates how limited research for this target population was once they exit high school, making it difficult to know which special education and school inputs made an impact on Native American student outcomes (Akee & Yazzie-Mintz, 2011). Because of these implications, it is likely that other factors predicted both the negative and positive outcomes of Native Americans with disabilities, and factors such as truancy, low socioeconomic status, and low academic achievement could not be eliminated (Akee & Yazzie-Mints, 2011; Flynn...
et al., 2012; Krieg, 2011; Landmark & Zhang, 2014; Yazzie-Mintz, 2011; Zhang et al., 2014).

**Recommendations and Future Research**

Multiple recommendations from previous research, and this study, call for more data sets and research for Native American students (Akee & Yazzie-Mintz, 2011; Trainor, Morningstar, Murray, & Hyejung, 2013). One recommendation for practitioners is that Arizona special educators and administrator set policy at the LEA level and document and share information about student outcomes with their communities, and not solely report this data to the ADE. Arizona should provide disaggregated public data as well as set a timeline to create a data collection system for SPP Indicators 13 and 14 that can specifically track Native American students with disabilities outcomes under the IDEA postsecondary transition requirements.

Future research should include a quantitative correlation study to identify specific transition practices directly related to or to predict individual categories of student outcomes for Native American students with disabilities as a distinct target population. This study may provide results-orientated data aligned with the requirements of IDEA under OSEP and the 2001 President’s Commission on Excellence in Special Education, which initially called for changes from process-driven to outcome-driven results (Erickson et al., 2013).

Expansions of this study could conduct a quantitative study using logistical regression to predict the outcomes of AIMS, SESF, and SPP Indicator 14 for Native American students with disabilities separate from other racial cohorts once state data are disaggregated. There have been graduation requirements attached to AIMS testing since the early 2000s and a 100% compliance mandate on SPP Indicator 13 since 2010, yet neither of these special education provisions could be statistically measured in relationship to each other for its usefulness under SPP Indicator 14. Meanwhile, Native American educational attainment rates continued to be one of the worst in Arizona and the country (Adelman et al., 2013; Akee & Yazzie-Mintz, 2011; Flynn et al., 2012).

**Conclusions**

Findings from this study implied other positive factors (e.g. family and cultural support) may be responsible for Native American students with disabilities outcomes because Native Americans, overall, were proportionately represented in postsecondary settings (Flynn et al., 2012). Negative aspects (e.g. truancy and low socio economic status) could not be eliminated as factors for student outcomes (Akee & Yazzie-Mintz, 2011; Flynn et al., 2012; Krieg, 2011; Landmark & Zhang, 2014; Yazzie-Mintz, 2011; Zhang et al., 2014). It is further implied that the likelihood of better data collection systems would provide better opportunities for analysis of key components in special education programming in Arizona.

Recommendations for practice call for the implementation of policy at the LEA level and to construct support systems that could possibly allow Native American children to achieve better outcomes without having to rely on the state. The state level recommendation indicated the need for a better system and timeline for data collection of SPP Indicators 13 and 14 to better track student outcomes. Final recommendations of this study is the need for quantitative studies that could analyze the data directly attached to SPP Indicators 13 and 14, and another to build on the foundation of this research to measure AIMS, SESF, and SPP
Indicator 14 once there are improved disaggregated data sets at ADE. Both AIMS testing and SPP Indicator 13 have been mandated as part of data collection initiatives for over six years, yet neither of these performance measures could be statistically linked to SPP Indicator 14 outcomes. Additionally, they could not be used to support measures that work to close the achievement gaps of Native American students with disabilities in Arizona and further research is required (Adelman et al., 2013; Akee & Yazzie-Mintz, 2011; Flynn et al., 2012; Trainor et al., 2013).
References


School Climate, Connectedness and Academic Achievement: Examining Positive Impacts from High School Mentoring Services

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration (NCPEA) as a significant contribution to the scholarship and practice of school administration and K-12 education.

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Schools regularly implement numerous programs to satisfy widespread expectations. Often, implementation is carried out with little follow-up examining data that could help refine or determine the ultimate worth of the intervention. Through utilization of both descriptive and empirical methods, this study delved into the long-term effectiveness of a locally developed mentoring program implemented within a large Southwest Urban School District. Findings from the study support the success of the local efforts. Additionally, they reveal several factors that could help guide future research while also contributing to the success of mentoring efforts being implemented within our nation’s schools.
According to the U.S. Department of Education (USDoE), graduation rates for American public schools have been in decline for the past 40 years (USDoE, 2012). During this period of decline, Berv (2002) reported student interests and self-perceived needs are rarely considered or weighed into decision making about potential school reforms. Instead of acknowledging unique attitudes and learner needs, schools are continuously engineered to satisfy demands put in place by a society increasingly inclined to dictate more highly uniform target outcomes. Of little surprise then, considering these conditions, the USDoE confirmed that minimal sustained effort has been directed toward discovering reasons students themselves would give for their decision not to finish school (USDoE, 2012).

Acknowledging the contributions of Fullan (2005) and later Dynarski, Clarke, Cobb, Finn, Rumberger and Smink (2008), who speak to continued concerns over student disengagement, this study sought to delve more deeply into student perceptions and attitudes related to the declining graduation rates just cited. Building on the work of Bridgeland, Dilulio, and Morison (2006) who did actually directly investigate student attitudes, this study aimed to uncover and examine key factors and attitudes that could well prove beneficial for efforts to keep students more thoroughly engaged in completing their education as result of locally developed mentoring programming.

Focus and Significance of the Study

Schools are constantly scrutinized and regularly subjected to recommended fixes of all types and design. Bridgeland et al. (2006) spoke to the perceived benefits of many improvements, including enhancing the connection between school and work, increasing relevance, along with providing real-world learning experiences. This “getting real” point of view has been supported by others including Voight, Austin and Hanson (2013) as well as Washor and Mojkowski (2014) who find schools rarely attempt to adapt to student needs and future ambitions, let alone attempt to learn what students even want. Tying into these proactive strategies, and even more specifically into mentoring efforts represented by Sparks (2002), this investigation focused on the impacts locally developed mentoring efforts had in three very specific areas. These areas, all believed critical to student success were school climate, school connectedness, and finally academics.

Mentoring in some fashion has been utilized since the start of recorded time (Hughes and Mouw, 2016) and the broad overarching impact of mentoring programs designed to encourage students to complete high school has been well supported (Child Trends, 2013). This investigation targeted the personal perceptions of students who had participated in a locally developed program known as the Advisory Mentoring Program (AMP), which is in operation in several schools within an Urban High School District in the Southwest United States. This study was designed to explore student perceptions and to determine whether or not there were statistically significant contributions linked between the AMP intervention being utilized, and positive feelings toward school climate, school connectedness in addition to any indicators of academic success.

While local demographics certainly factor into the ability to generalize findings (Voight et al., 2013), information derived from this study can be considered unique and should be considered significant as it provides insights into student viewpoints on the effectiveness of a fairly popular intervention practice. In all, the findings from the study revealed both expected and unexpected insights that touch directly upon educational practice,
program assessment efforts, and even upon continued research efforts in this area. It is believed that students who participated in this study did so willingly, and honestly. As such, allowing their voices to be heard is also a significant outcome from this study, since increased attention clearly need be directed toward the viewpoints of these direct consumers of educational services. Without a doubt, educational mentoring stands out as one of the most important and highly recognized services being utilized across the nation. Additional information on this highly successful approach follows.

**Educational Mentoring Programs**

While mentoring originally received greater initial notoriety for contributions in the business community, the practice also includes applications in the educational arena. Peer mentoring was promoted from the 1960s forward, and eventually the focus of mentoring activities evolved to include students along with adults. Most formal one-on-one mentoring programs considered in the educational literature are either community-based or school-based (Herrera, Vang and Gale, 2002). Community-based programs typically focus on social behaviors, while school-based programs have a greater emphasis on academics. Often, youth in community-based programs have greater contact with their mentors and form stronger relationships according to Herrera et al. (2002). Group mentoring programs, which are often conducted by schools or youth service organizations, can serve a larger number of youth, and often at a lower expense, but often do so at the cost of less individual contact between mentors and mentees (Herrera et al., 2002). There are several models to choose from across the nation, and a few of the popular and more successful options are considered next.

**Big Brothers Big Sisters**

Founded in 1904, Big Brothers Big Sisters (BBBS) is the oldest and largest youth focused mentoring organization in the United States. BBBS serves over 5,000 communities across all 50 states, and has been studied perhaps more than any other mentoring focused undertaking in the business (BBBS of New York, 2015). Public/Private Ventures, an independent Philadelphia-based national research organization, compared children who received community centered services with those who were without services. After surveying the children at the beginning of the study, and again after 18 months, the researchers found that the Little Brothers and Little Sisters, when compared with those children not in the program were: 46% less likely to begin using illegal drugs, 27% less likely to begin using alcohol, 52% less likely to skip school, 37% less likely to skip a class, and 33% less likely to hit someone. They also confirmed that the Little Brothers and Little Sisters were more confident of their performance in schoolwork and got along better with their families (BBBS of New York, 2015).

Public/Private Ventures conducted another study in 2011 that next targeted the school-based BBBS Program. Unlike the conventional community-based BBBS in which Bigs and Littles can engage in their activities in any setting, some BBBS agencies offer opportunities for school-based mentoring. In this type of mentoring, the Bigs meet with their Littles at their schools – whether in the classroom or on the playground (BBBS of America, 2015). The outcomes that the researchers measured fell into three broad categories: school-related performance and attitudes, problem behaviors, and social and personal well-being. At the end
of the first school year, Herrera, Grossman, Kauh and McMaken (2011) noted, that, when compared to the control group, the youth who received mentoring performed better academically, had more positive perceptions of their own academic abilities, and were more likely to report having a “special adult” in their lives.

**Juvenile Mentoring Program**

JUMP has been in operation for in excess of 20 years having originated in 1992. Since its inception, JUMP has been developing a valuable database from over 200 projects to support youth on probation, first-time juvenile offenders, court involved youth, immigrants, disabled youth, children of incarcerated parents, abused and neglected youth, and youth in detention facilities (Office of Juvenile Justice and Delinquency Prevention, 2000). The Office of Juvenile Justice and Delinquency Prevention (OJJDP) implemented several BBBS strategies in order to streamline the implementation of JUMP. JUMP is a one-on-one mentoring program between an adult and a juvenile, that is designed and intended to reduce juvenile delinquency and gang participation, improve academic performance, and reduce school dropout rates. Some of the 200 cataloged programs in existence also emphasize tutoring and academic assistance, while others stress vocational counseling and training.

Public/Private Ventures undertook another study in 1995 where results were examined and actually prompted OJJDP to modify the project design guidelines in its 1996 JUMP solicitation to reflect the latest knowledge about successful mentoring. Based upon the study, OJJDP expanded the guideline on mentor support and training, emphasizing that the program coordinator should have frequent contact with parents or guardians, volunteers, and youth. Further it was noted that assistance needed to be provided more promptly when requested or when problems would arise. OJJDP inserted a guideline on the role of the mentor. The office also added a caution about time limitations that might interfere with the effectiveness of college undergraduate or graduate students as mentors. Finally, it was suggested that parents should have a say in the selection of mentors, they called for screening mechanisms to weed out noncommittal volunteers, and ultimately established minimum expectations for the time mentors should spend with youth (OJJDP, 2000).

**Coca-Cola Valued Youth Program**

The Coca-Cola Valued Youth Program is designed to offer secondary school students, who are themselves considered at risk of dropping out, the rare mentoring opportunity to serve as tutors in elementary schools. By having these at-risk students serve as tutors, the program aims to improve both their basic academic skills and self-esteem, with the ultimate goal of helping to keep them enrolled in school so they may successfully complete their education. Participants tutor elementary school students four days a week during regular school hours. During the 2003 program year, records indicate that the Coca-Cola Valued Youth Program was in 96 middle and elementary schools across the United States. In the combined states of Arizona, California, Florida, Michigan, Oregon and Texas, the overall dropout rate for Valued Youth tutors was reported to be 2.5%. For the program year 2006, the overall dropout rate was down to 0.8% (Montecel, Cortez, and Cortez, 2002).

**Common Features Among Programs**
The three programs just detailed represent only a few of the numerous well intended and successful community-based and school-based mentoring models available for use in schools. Instead of delving in to a comparative study of numerous approaches, they were selected for review as they are representative resources that demonstrate the unique capability mentoring programs have to positively influence the nation’s youth both personally and academically. Programs like these have regularly been shown to discourage at-risk behaviors such as violence, drug abuse, and gang affiliation, while at the same time, encouraging youth to remain in school and find non-violent solutions to their problems. As such, they help set the standard for what a successful mentoring intervention should be about. They also, in combination, contain some of the very same programming targets sought out through the AMP, which is to be detailed next.

**Development of the Advisory Mentoring Program**

With the general needs of students, and a cross-section of successful mentoring programs already described, the impetus behind the AMP initiative will be addressed next. At the time of its development, local conditions and concerns were largely consistent with national issues, expectations, and perceived opportunities for change. No evidence suggests anyone approached students to learn why they were not succeeding. Further, there is no evidence supporting there ever having been any research at all to frame the need for or the subsequent direction taken in development of the AMP program. Still, those involved with the undertaking made significant investment into their project, and identified both necessary and ambitious objectives for the AMP. Targeted features for AMP can be found in Table 1, and will be detailed next.

**Table 1**

**Advisory Mentoring Program Targeted Features**

| Provide a place for students to grow academically, emotionally, and socially through sustained and meaningful relationships with adults and peers | Personalize the school so that every student is well known through supportive adult-student and peer-to-peer connections |
| Increase academic achievement in career and college-readiness standards | Build a strong sense of civic-mindedness, personal responsibility, and self-confidence |
| Provide daily connection/sharing activities with weekly status check-in on grades and attendance | Provide in-room tutoring or travel to receive tutoring from a different highly qualified adult in a specific content |
| Teachers advocate for the students | Teachers encourage students in |
Advisory Mentoring Program Features

Typically, mentoring programs are developed in a one-on-one format as described early with the historical overview of BBBS (BBBS of New York, 2015), JUMP (OJJDP, 2000), and the Coca-Cola Valued Program (Montecel, Cortez, and Cortez, 2002). The AMP, in contrast, is a cohort mentoring program that is school-based and also locally designed. This school-based mentoring program is quite possibly a more manageable structure for large urban schools. It allows for one mentor (advisor) to work in a blended environment of ninth through twelfth graders over a four-year span. The upperclassmen use their past experiences to mentor the lower classmen. At the end of each year the accomplishments of graduating seniors are celebrated, much the same way freshman are welcomed at the start of the year, into a blended cohort of students in order to help them navigate the newness of high school. The AMP also allows for Advisory cohorts to attain additional goals set by the school sites’ continuous improvement plans.

As Table 1 shows, relationship building is a highly-emphasized component of AMP efforts. The interactions that initiate the relationships are both formal and informal, though all are established intentionally. Students are encouraged to invest in themselves and each other, and to at least attempt to become involved in outside school activities. Instead of establishing a check-in process that is accountability oriented, the AMP approach is to champion student success and have faculty serve as advocates. Without singling out any one aspect of the AMP, it is believed that the advocacy angle established through this endeavor is a difference-maker, and is one that opens the door to developing critical dispositions like personal responsibility and self-confidence.

Student participants involved with the program earn a half credit for the year’s participation in the AMP. The grade is a proficient/not proficient grade determined by the student’s completion of the goals outlined in a student planner. The attainment of that pass/no pass grade has provided the bulk of the scant assessment data for this program to this point. Unfortunately, it merely assesses student compliance and completion of elements of the program, and does not relate to the impact of the program itself. Similarly, without benefit of follow-up evaluation to guide efforts, staff members at schools using the program go through yearly initial training and refresher work on AMP. This training promotes the broader understanding of all staff, and promotes transparency of the program for all stakeholders, whether they are an Advisor (mentor) in AMP or not. The staff member who serves as an Advisor (mentor) in AMP experiences more in-depth training to better be prepared for the many experiences that take place in the AMP during the course of an entire school year. This all occurs through mandatory professional development that takes place during the scheduled contacted professional day (SUHSDPP, 2015).
Critical Mentoring Components

Having introduced many of the general needs widely responsible for prompting implementation of mentoring programs across the country, and having represented a sampling of both national and local responses to this calling, it is time to focus results. As was reported already, the national programs just summarized each collected extensive performance data. This data was used not only to report successes, but also utilized to make program improvements. What follows are the descriptors of the primary components of the program targeted in this study. Understanding of these concepts leads the way to discussion of the results of this study.

Focus on Climate

School Climate has been recognized as a vital component for student achievement (Voight et al., 2013) and is the first critical mentoring focus being detailed. According to Simons-Morton and Crump (2003), from a student perspective, the school climate refers to the extent to which students feel that teachers will help them, that school rules are fairly enforced, and that teachers are supportive. Voight, Austin and Hanson (2013) include safety and school connectedness as a recurring theme as well. While they indicate there is no universally agreed upon definition, Child Trends (2013) suggested mentoring programs work to improve school climate in a variety of ways. Much of this can result from nurturing personal qualities such as creativity, critical thinking and problem solving skills, as well as communication and collaborative skills. These skills, along with dispositions such as flexibility and adaptability, initiative, productivity and accountability are all perceived as potential program outcomes that could clearly benefit a positive school climate.

In contrast to a positive setting, a negative school climate has been shown to create resistance in students and elicit difficulties for student interaction. Examples of negative climates include teacher-centered classrooms and settings where student discrimination, harassment and even racism are experienced. These difficulties can limit advancement in education and often contribute to a discouraging state of learned helplessness where a feeling of perpetual failure ensues, and consequently many students will dropout (MENTOR, 2006). Clearly, a positive school climate is far more desirable and more highly indicative of a successful school.

Focus on Connectedness

School Connectedness makes more specific reference to an academic environment in which students believe that adults in the school care about their learning and about them as individuals (Goodenow, 1993). Connectedness represents the students’ sense of belonging in the school or classroom, or the extent to which they feel personally accepted, respected, included, and supported by others in the school climate, particularly teachers and other adults (Goodenow, 1993). In addition, students who are connected to school often reveal greater respect and trust for teachers, more thoroughly enjoy the learning process, show a deeper concern for others, and are more likely to employ the techniques of conflict resolution (Blum, McNeely, & Rinehart, 2005). Connectedness and resulting engagement are also highly critical in reducing alienation according to Blondal and Adalbjarnardottir (2012).

For decades, research has demonstrated that students who report feeling a sense of connectedness in school also exhibit fewer at-risk behaviors (Catalano, Haggerty, Oesterle,
Fleming, and Hawkins, 2004). For modern students, this means a decreased probability to: experiment with illegal substances, carry or use a weapon, smoke cigarettes, experience emotional distress, drink to the point of getting drunk, consider or attempt suicide, or engage in early-age sexual intercourse, among other behaviors (Catalano et al., 2004; Watson, Battistich, and Solomon, 2000). Research also demonstrates that connectedness essentially promotes positive social interaction, which in themselves are incompatible with aforementioned problem areas.

Several schools have implemented strategies to combat low student connectedness and promote a respectful and caring school environment. These strategies include changing school structures, hiring effective teachers, and empowering family and community members (MENTOR, 2006). In changing school structures to increase student connectedness, some schools have created small learning groups with a low student-to-teacher ratio to enhance interaction. Others have implemented block scheduling with longer classes that also attempt to encourage better interaction, or they have looped teachers with the same group of students for more than a year. These strategies are among those believed to enable the students to build and develop emotional and social competencies, self-management, self-awareness, social awareness, decision making, and relationship skills (Osterman, 2004). These skills, then in turn, are thought to advance the ability of a child to learn and solve problems without violence (Blum, 2005).

**Focus on Academics**

Academic achievement should be a commonly understood concept, but for purposes of this comparison, it will be operationally be defined as good grades (e.g., mostly As and Bs), planning to graduate from high school, and for many even the pursuit of a post-secondary education. This more end-result oriented construct addresses the extent to which students are motivated to learn and do well in school more so than focus on specific data points like standardized test scores.

Research findings directly linking academic achievement and mentoring programs were scarce until 1999. Earlier studies in the literature reported that “there was only limited evidence of increased academic achievement for mentees” (Westerman, 2002, p. 3). According to Aiello and Gatewood (1989), increasing academic achievement is critical for at least two reasons: (a) school performance is an increasingly important predictor of students’ self-concepts as they get older (Harter, 1985) and (b) poor academic performance, especially grades, has been consistently associated with students’ dropping out of school (Ekstrom, Goetz, Pollack, & Rock, 1986). Blum et al. (2005) added that social problems, such as a lack of parental encouragement or an increased participation in crime, negatively affect students and their potential achievement. As Catalano, et al. (2004) conclude, students in urban schools who have to focus mainly on their basic needs begin their academic career with a significant disadvantage. Information such as this perhaps explains why suburban students, who attend schools in safer surroundings and who are allowed to make learning their priority, tend to out-achieve students in an urban school environment where students are often forced to focus on their immediate needs.

**Problem**

As has already been advanced, mentoring is a widely-utilized and highly regarded approach to nurturing students in a variety of settings. There is growing interest in best practices for keeping students connected to schools, and mentoring appears to be a viable approach to doing just this.
The problem under investigation in this study centers on determining the tangible benefits of AMP, which is more of an “advisory-based” locally developed approach to promoting student success through mentoring.

**Purpose and Research Questions**

The purpose of this study was to document the benefits of the AMP by comparing responses of students with and without mentoring. To this end, three research questions were examined. Each research question focused on the perceptions of the AMP students, as reported directly by these students themselves. The first question (RQ 1) examined whether there was a statistically significant difference in the perceptions on improved school climate between students attending a school with the Advisory Mentoring Program and those attending a demographically similar school without any large-scale mentoring services. Following this pattern, the second research question (RQ 2) again statistically examined the significance of perceptions the AMP students had on improving school connectedness in comparison to the control group. Finally, the third question (RQ 3) examined whether there was a statistically significant difference in perceptions on academic achievement between students attending a school with the Advisory Mentoring Program and those attending a school without AMP or any other type of mentoring intervention.

**Methodology**

**Survey Construction**

This quantitative research study used selected sections of a survey instrument originally developed Dr. Donna DiCanno (Urban Public Schools, 2006). This subset of questions was utilized to garner information from students in both the AMP group and the control group receiving no mentoring services. Standard questions concerning demographics, behaviors and general attitudes were retained. Decisions on remaining questions were based on their ability to evaluate the significance of student’s perceptions of school climate, school connectedness, and academic achievement within one school having four years’ experience utilizing AMP, and one school that had not implemented any type of mentoring program at all. Focuses for the survey that were adapted from DiCianno (Urban Public Schools, 2006) are shown in Tables 2, 3 and 4.

Table 2

**School Climate Related Focuses**

<table>
<thead>
<tr>
<th>I feel safe in school</th>
<th>School is fun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students who break the rules get in trouble</td>
<td>My high school is neat and clean</td>
</tr>
<tr>
<td>The student union is a safe environment</td>
<td>I feel protected from harassment</td>
</tr>
<tr>
<td>I feel protected from intimidation</td>
<td>I feel protected from discrimination at my school</td>
</tr>
</tbody>
</table>
The school promotes understanding among students from different backgrounds

The school rules are fair

Table 3

_School Connectedness Related Focuses_

<table>
<thead>
<tr>
<th>My teachers listen to me when I have a problem</th>
<th>Teachers care about me</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel like I am part of my school</td>
<td>I do not fit in with most of the students in my high school</td>
</tr>
<tr>
<td>I participate in a lot of activities in my high school</td>
<td>If I had to leave I would miss my school</td>
</tr>
<tr>
<td>Other students treat me with respect</td>
<td>Attendance to school is important to me</td>
</tr>
<tr>
<td>Going to class is important to me</td>
<td></td>
</tr>
</tbody>
</table>

Table 4

_Achievement Related Focuses_

<table>
<thead>
<tr>
<th>Getting good grades in school is important to me</th>
<th>I plan to graduate from high school</th>
</tr>
</thead>
<tbody>
<tr>
<td>I plan to drop out of high school</td>
<td>I am aware of the mission and vision of my high school</td>
</tr>
<tr>
<td>The work at school is challenging</td>
<td>I get good grades</td>
</tr>
<tr>
<td>I don’t understand my school work</td>
<td>I do my school work to get better grades</td>
</tr>
<tr>
<td>I do my school work bit I do not turn it in</td>
<td>I do my school work and turn it in</td>
</tr>
</tbody>
</table>

Although all of the original questions were initially considered and reviewed, ultimately 29 of the original 46 questions developed by Dr. DiCianno were determined to sufficiently relate to one of the three focus areas pertaining to climate, connectedness or achievement. Each question that was retained for the AMP survey was then linked to a 5-point Likert scale question with possible responses ranging from 1 (strongly disagree) to 5 (strongly agree).
Sample and Data Collection

One Southwestern Urban High School District in Arizona that had been utilizing the AMP for the past four years in twelve of their sixteen high schools was utilized for this study. The study was completed in order to investigate the differences in responses between students who participated in the AMP and students who did not participate in an AMP or any other structured mentoring program. Two schools were identified, using district data to identify similar free and reduced lunch percentages and like demographics. Both high schools were designated Title I schools based on their free and reduced lunch participation rate, and had similar gender and ethnicity makeups, both having high Hispanic counts. Within the two selected schools, members of the Junior Class were contacted and sought for response. In total, 74 Juniors from the AMP school completed the survey, and 140 students from 11th grade in the school without AMP or any type of mentoring services responded to their invitation to participate.

After securing permission from the university IRB and receiving authorization from the cooperating school district, explanatory information was sent to parents and students. Participation in the survey was voluntary, and anonymity was ensured by coding procedures that were spelled out to prospective participants. One week after the “permission” period was completed, students were provided with a paper-based copy of the survey which was administered and subsequently completed in the same English class required of all Juniors.

Data Analysis Procedures

Preliminary analyses for outliers and nonlinearity included the Levine’s test of equality of variances and homogeneity of variance testing. The data fit into the guidelines of running parametric tests. The ANOVA, a one-way analysis of variance, was run for each outcome variable to determine whether there were any significant differences between the means of the AMP school and the control school. The ANOVA was chosen over the parametric version of the unpaired (independent) t-test due to the fact that it allows for multiple outcome variables to be tested within the same test, whereas each time a t-test is conducted there is a chance that a Type 1 error will occur. The parametric version of the unpaired t-test error causes a 5% error rate. Running three parametric versions of the unpaired t-test would cause an unacceptable error rate of 14.3% (Cronbach, 1951). An ANOVA controls for these errors so that the chance for a Type 1 error remains at 5% and any significant result found is not due to chance.

Prior to running the ANOVA, potential effects of ethnicity, race, and gender on the three scales were examined to identify possible co-variates. No significant effects were discovered for ethnicity and race; thus, these variables were not included in further analyses. However, significant effects of gender were found for student’s perceptions of academic achievement. Thus, gender was included in the MANCOVA model. When accounting for gender, a co-variate, the data were analyzed using MANCOVA, a multivariate analysis of co-variance, in order to control for family wise Type I error.

Research Findings

Analysis of question one (RQ 1) found a statistically significant difference ($p = .002$) in student’s perceptions of school climate between the students who participated in the AMP mentoring program and those who did not. The effect size ($r^2 = .52$) indicated the differences between the
groups were moderate. The students who were mentored were more likely than the students who were not mentored to feel that the school climate was safe, supportive, encouraging, and conductive to their overall well-being. This information is found in Table 5.

Table 5

ANOVA Analysis on School Climate between Mentored and Non-Mentored Students

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>η2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>29.918</td>
<td>1</td>
<td>29.918</td>
<td>0.3044b</td>
<td>.582</td>
<td>.001</td>
</tr>
<tr>
<td>School</td>
<td>988.807</td>
<td>1</td>
<td>988.807</td>
<td>10.037b</td>
<td>.002</td>
<td>.046</td>
</tr>
<tr>
<td>Error</td>
<td>20490.663</td>
<td>208</td>
<td>98.513</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. b – Exact statistic.

Research question two (RQ 2) compared responses from junior students at the AMP school with responses of junior students at the control school in reference to perceptions of school connectedness. Analysis of RQ 2 resulted in a significant difference (p = .005) in student’s perceptions of school connectedness between the mentored and non-mentored students. The effect size (r² = .39) indicated the differences between the groups was small, though the students who were mentored still indicated they felt more connected to school when compared to control students who were not mentored. These results are represented in Table 6.

Table 6

ANOVA Analysis on Connectedness between Mentored and Non-Mentored Students

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>η2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.584</td>
<td>1</td>
<td>0.584</td>
<td>0.008b</td>
<td>.930</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>School</td>
<td>596.111</td>
<td>1</td>
<td>596.111</td>
<td>7.974b</td>
<td>.005</td>
<td>.037</td>
</tr>
<tr>
<td>Error</td>
<td>15549.142</td>
<td>208</td>
<td>74.755</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. b – Exact statistic.

In research question three (RQ 3), responses relating to academic achievement were compared from junior students at the AMP school with responses of junior students at the control school. For RQ 3, a significant difference (p = .002) in student’s perceptions of academic achievement was found between the mentored and non-mentored students’ responses. The effect size (r² = .76) indicated the differences between the groups was moderate. The students who were mentored
felt more confident in their academic success than the non-mentored students, as is shown in Table 7. Additionally, it is noteworthy that female students felt more confident in being academically successful as compared to male students.

Table 7

ANOVA Analysis on Achievement between Mentored and Non-Mentored Students

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>η2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>316.206</td>
<td>1</td>
<td>316.206</td>
<td>5.689</td>
<td>.018</td>
<td>.027</td>
</tr>
<tr>
<td>School</td>
<td>560.467</td>
<td>1</td>
<td>560.467</td>
<td>10.084</td>
<td>.002</td>
<td>.046</td>
</tr>
<tr>
<td>Error</td>
<td>11561.151</td>
<td>208</td>
<td>55.582</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* $b$ – Exact statistic.

Discussion

Results from the surveys indicate that the AMP approach was successful in achieving its intended outcomes. Students receiving the program were consistently and “significantly” more positive about school climate, connectedness and were more focused on achievement than their non-mentored counterparts. This response was most pronounced with respect to RQ 1 and RQ 3 which related to school climate and achievement respectively. These outcomes are viewed as a testament to the overall initiative that resulted in development and implementation of the AMP and its resulting effectiveness. Less directly, results also appear to provide at least some initial confirmation that locally developed interventions can also be successful in meeting large groups of student needs, and that cohort approaches to mentoring are an effective option in place of one-to-one methods. All of this information was shared with the administration responsible for overseeing the student services in the district allowing the study to take place.

Implications for Practice

1. For any school, but certainly for those schools struggling with student attendance, the implementation of an effective mentoring program that addresses student connectedness could prove far more viable than phone calls home and home visits in preventing student drop-outs.
2. Schools would do well to first develop an understanding of the local condition of the school and its surrounding community, prior to developing a large-scale intervention such as the AMP.
3. Greater attention to the initial steps of adopting and implementing a mentoring program, including initial data collection, would make a strong contribution to effective decision-making and likely lead to more productive evaluation and modification of the program following initial implementation.
4. While the literature does not draw particularly strong attention to this next point, it needs to be made here for the benefit of implementation implications, and actually for
future research considerations as well. The AMP model is essentially a “cohort” approach as opposed to one of the traditional 1:1 or small group approaches typically addressed in the literature. It has proven to be adaptable and beneficial, succeeding in the eyes of the students the program serves.

**Recommendations for Further Research**

1. It is recommended that district and school leadership teams, teachers, and parents investigate opportunities for the voices of the students to be heard during the development of academic interventions. Surveys are but one manner through which to access these voices. To take deeper steps into the investigation, it would be worthwhile to explore additional qualitative research methods that perhaps delve more deeply into the personal nature of this question as one possible next step that could expand on the work that was started here.

2. It is recommended to replicate this study, focusing instead on teachers’ perceptions of school climate, school connectedness of the students, and potential academic achievement of their students. Utilizing a mixed methodology, potential researchers may choose to include rating sheets, Likert-scaled surveys, and personal open-ended interviews to document the teachers’ perceptions.

3. It is recommended to replicate this study, focusing instead on the parents’ perceptions of school climate and school connectedness related to their children’s academic achievement. Utilizing a mixed methodology, potential researchers may choose to include rating sheets, Likert-scaled surveys, and personal open-ended interviews to document the parents’ perceptions.

4. It is recommended to replicate this study with a specific and targeted focus on whether there is a difference in the effectiveness between traditional one-on-one mentoring programs and cohort school-based mentoring program. Instead of merely making a broad brush assessment, which could possibly generate limited comparative information, examination could be directed toward factors including gender difference or with respect to the availability of supportive resources within the school and community. Cohort models may actually prove to be more practical in situations where there is not a sufficient supply of qualified and interested parties to make a long-term commitment to establishing and maintaining a genuine and nurturing mentoring relationship.

**Concluding Statement**

This study shows the positive impact a mentoring program like the AMP can have, as results show a significant difference between two groups of students (mentored vs. non-mentored), and their perceptions of school climate, school connectedness and academic achievement. While acknowledging the generalization limitations due to the unique urban demographics represented here, findings still serve as a valuable reference point for anyone contemplating implementation of a mentoring program at their school or continued research.
References


Voight, A., Austin, G. & Hanson, T. (2013). A climate for academic success: How school climate distinguishes schools that are beating the achievement odds (Full Report) San Francisco: WestEd.

